

**A STUDY ON FINANCIAL LIBERALIZATION AND ITS  
POTENTIAL EFFECTS ON TURKEY:  
WITH SPECIFIC REFERENCE TO THE POLAND CASE**

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Finansal Liberalleşme ve Türkiye Üzerindeki Potansiyel Etkileri:  
Polonya Örneği

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## **1. INTRODUCTION**

In the last two decades, financial liberalization has become one of the most remarkable worldwide economic phenomena especially after the collapse of the socialist block and general adoption of free market based economic model of the West by ex-socialist countries. Before the old members of the Socialist Block in Eastern Europe, various developing economies with differing economic background and experiences adopted financial liberalization as a part of their transition to liberal market economy. Malaysia, Thailand, South Korea in South East Asia and Brazil, Mexico, Chile and Argentina in Latin America, Turkey, Spain and Greece in Europe, and New Zealand, Egypt and Israel in other parts of the earth adopted financial liberalization as a part of their efforts for economic development. These countries can be located in different points of a wide political and economic spectrum. Even though they have some common characteristics such as having developing economies they have also very differing characteristics such as political regimes, development level of real sectors, development level of human capital etc.

Despite of differing characteristics of countries adopting it, the process of financial liberalization has some common effects on economies, especially developing ones, implementing it. Like many other processes, financial liberalization has some favorable and unfavorable consequences. There is a bulk of literature on factors causing desirable and undesirable consequences reported after financial liberalization. Although many researchers conclude similar results on relationship between financial liberalization and certain major macroeconomic variables such as economic growth, savings, investments, consumption and so on, there are still some opposite evidence and arguments on relations of financial liberalization with these variables.

The extent of positive or negative outcomes of financial liberalization does not only depend on the process but also some other key factors of economy implementing it. The Structural strength of the financial sectors, political stability and credibility of the economy, speculations, global developments and international capital inflows or outflows, level of the

foreign exchange reserves of the host country and some other factors play a crucial role in what financial liberalization generates for an economy.

Turkey is one of the developing countries adopting financial liberalization as a dimension of its overall macroeconomic model for growth and prosperity. Beginning from the early 1980s, Turkey gradually liberalized her financial system. Before 1980 Turkey was implementing various financial repression policies such as interest ceilings and high reserve ratios, and was controlling her financial sector via large state banks such as Ziraat, Halk Bank, Emlak Bank and Vakif Bank. In that period, Turkey did not allow development of private securities sector not to allow private competitors in domestic loanable funds market. The depth of financial sector was very limited and financial intermediation business was mainly conducted by several state banks, mentioned above, and a few private banks such as Akbank.

After 1980, Turkey began to open her overall economy and her markets to international competition. The financial sector, which had been completely or partially repressed by the government till the late 1980s, was liberalized as a part of Turkey's entire efforts to liberalize her economy. The process of financial liberalization has some initial results, some were desirable and some were undesirable. But the process is going on. What costs Turkey has paid, what gains Turkey has obtained and what will be the subsequent consequences of financial liberalization in Turkey are critical questions many parties of the question seek to answer. To answer this question, insights into theoretical background and evidence obtained from experiences of other economies implementing financial liberalization are needed.

The objective of this paper was to study the concept of financial liberalization as a whole, with factors giving birth to it and its effects, and to investigate its prospective impact on Turkish economy. To estimate some potential effects on Turkey, the case of Polish financial liberalization was examined and a conclusion including estimates for Turkey was drawn.

In the Polish Case, the evolution of the financial system after liberalization is analyzed. In this respect, development of various elements of the financial system such as the Central Bank, commercial banks market, money and capital markets, and non-deposit accepting institutions (e.g. insurance companies, pension funds and investment banks) are studied. The study focuses on evolution of the money market to investigate impact of liberalization on various



credit markets with respect to treasury bills, repo, foreign exchange swaps, short-term debt issued by corporate sector and bank short-term debt instruments.

In the case of Turkey, evolution of financial liberalization in Turkey was investigated. Special attention is paid to the period between 1980 and 1990 and onwards. Fundamental acts and decrees opening the way for financial liberalization is presented briefly and legal framework is briefly described in this way. Finally, building on the experience of the Poles and drawing on the analysis of initial and succeeding experiences of the Turkish financial system with specific reference to the money markets, a number of projections for the future are suggested for further studies.

## **2.FINANCIAL LIBERALIZATION VERSUS FINANCIAL REPRESSION**

Regulations regarding to financial systems have been one of the most argumentative issues in world economies. Various (developing) economies experienced banking crises in specific and financial crises in general especially between 1990 and 2000 and these crises have resulted in debates on whether there was a correlation between financial crises (or banking crises) and financial liberalization. To argue against or for the notion of *financial liberalization* one needs to have insights into its very nature and the counter model, so called *financial repression*.

Financial repression is not a new model. Before the 1980's, many developing countries have implemented policies of financial repression for various reasons. One of the most common reasons for repressing the financial system is to allocate resources for public sector. Most of financial repression-related policies can be grouped under two main categories; interest rate controls and restrictions of capital movements. Parallel to these policies, many developing countries repressed the interest rates and exchange rates in their monetary and capital markets. As a result, a significant proportion of these economies suffered overvalued national currency and very low interest rates (even negative ones in case of presence of inflation). Contrary to the general objective of financial policies aiming at utilizing the repressed financial system as a means of macroeconomic stability, such repression policies became a source of economic instability. As a conclusion policies apt to financial liberalization have gained popularity in the early 1980's. Studying the concept of *financial repression* may help in understanding the theoretical and practical background of *financial liberalization*.

### **2.1 Financial Repression**

In a broad sense, financial repression indicates the non-existence of depth of financial intermediation. The term financial repression was originally used by economists of developing countries. Mc.Kinnon (1973) and Shaw (1973) were the first to argue for the term *financial repression*. According to Mc.Kinnon (1973) and Shaw (1973), *financial repression* refers to the set of government legal restrictions preventing the financial intermediaries in the economy from functioning at their full capacity level.

In general, financial restrictions are based on three applications. First, the banking system is supported and protected because it provides the government with the opportunity of financing budget deficits at a low or zero cost, “taxing” the banking system with mandatory holdings of government bonds and money via the requirements of high reserve and liquidity ratio requirements. Second, the evolution of private bond and equity markets is repressed because government revenue cannot be obtained so easily from private securities. Finally, interest rate ceilings are imposed on the banking system to prevent competition with public, and to encourage low-cost investment (Gupta and Karapatakis, 2005).

In a financially repressed system, interest bearing bank deposits, unproductive assets, and low real deposit rates result in a reallocation in household portfolios in favor of unproductive assets at the expense of deposits. Since deposits are the main source of funds to financial institutions, the low level of deposits decreases the supply of bank credit to finance the firms’ fixed and working capital requirements. Investments decline and, as a result, total output and economic growth decrease. Furthermore, the low volume of deposits leads to a continuous excess demand for credit because virtually all investment opportunities seem profitable with low and sometimes negative real interest rates. When ceilings are binding and effective, risk premia cannot be charged and credit is allocated based on criteria such as the perceived risk of default, the quality of collateral, the name of the borrower, and so on. The expected productivity and return of the investment project have relatively very limited effects on allocation of financial resources. This approach causes an inefficient allocation of resources and investments that yield returns slightly above the ceiling-lending rate are financed. As a consequence, the efficiency of investment is decreased and this leads to slower economic growth (Gupta and Karapatakis, 2005).

Many researches have been conducted on governments’ reasons for repressing the financial system. One needs to understand the financial structure of economies repressing their financial system. Commercial and specialized banks are primary financial intermediaries in countries with financial repression. In addition to these, financial intermediaries such as saving banks, loan associations and co-operative societies also play a significant role in the economies. These economies do not have markets for private bonds and equity due to insufficient legal and information structures to facilitate such functions. The logic beneath such a financial structure is the objective of governments to hold control over the process of

intermediation, to provide revenue for financing of the budget deficit, and to stimulate investment at low interest rates

Roubini and Sala-i-Martin (1995) argue that the basic reason is that the financial sector is the potential source of “easy” resources for the public budget. They also points out that policy of financial repression prevents financial sector from operating at its full potential. In their model, the source of income deriving from government intervention was designed through the inflation tax and the implication of financial development was evaluated as reducing the transaction costs of converting non-liquid assets to liquid assets, thus reducing the “need for people to carry money”. According to Roubini and Sala-i-Martin (1995) allowing financial sector to develop would result in the reduction of the inflation tax base and hence the size of seigniorage. On the other hand, repressing the financial system would simultaneously have real effects by resulting in smaller physical capital accumulation for every level of private savings and thus affect growth negatively. Moreover, allowing the possibility of a given degree of tax evasion, the rate of growth of money and the income tax rate, “the choice of financial repression has two different effects: on the one hand, it reduces income and therefore decreases the income tax base and on the other hand, it increases real money demand and therefore raises the inflation tax base.” (Roubini and Sala-i-Martin (1995)) They argue that governments subjected to large tax-evasion will “choose to increase seigniorage by repressing the financial sector and increasing the inflation rates”. This would, however, result in lower levels of investment and growth rates given the amount of savings. Thus, there is a tradeoff case. In addition to the negative impact of financial repression on growth, the model also proposes that high financial repression will be associated with high inflation rates, high seigniorage, and low economic growth (Roubini and Sala-i-Martin, 1995).

According to Basu (2001) the model of Roubini and Sala-i-Martin (1995) is quite insightful but has some limitation. Basu (2001) indicates that the study of Sala-i-Martin (1995) argued that high reserve requirement, used as source of seigniorage revenue, has distortionary effects on the economy. Even though this model is good in exploring how reserve ratio distorts the optimal asset mix of the banking sector, it fails to explain the growth creating effects that reserve augmented seigniorage revenue can have on the economy. Basu (2001) develops a monetary endogenous growth model and argues that government spends the seigniorage

revenue earned on the provision of public input. As a result the government spending has a positive contribution to production in private sector.

Effects of an increase in reserve requirement ratio have been subject to various studies. Two contradictory results have been suggested by the researchers. The first one is the usual negative effect on the asset mix of the banks which is likely to have an adverse impact on long-run economic growth. The second one is a positive supply-side effect which increases due to the externality of public spending. The net effect as a result depends on the relative strengths of these two conflicting forces, which in turn is indicated to depend on the degree of technological complementary between private capitals and publicly provided inputs. The model suggests a Laffer-Curve type relationship between growth and reserve requirement. The model shows that as the reserve-deposit ratio increases, eventually the distortionary effects on growth will occur. The model provided an alternative logic as to why the governments of less developed and developing countries might want to repress the financial sector. Furthermore, unlike the previous researches the analysis indicates that there exists an optimal reserve deposit ratio, different from zero that can maximize growth.

With respect to welfare implications of financial repression, Roubini and Sala-i-Martin (1995) proposed that even though financial repression is clearly growth-suppressing and inflationary, given the high cost of collecting alternative taxes in developing world, governments may still adopt financial repression. In this sense, the contributions of Espinosa and Yip (1996) are valuable since they are able to identify specific conditions under which a given positive deficit when financed by higher degrees of financial repression might in fact have a positive impact on welfare. Furthermore, they argued that if the size of the budget deficit is so large that it results in severe repression of the financial sector and emergence of “curb markets”, financial liberalization, even if being inflationary would always be welfare improving. Because the positive effect of economic growth would outweigh the negative impact of the inflation on welfare (Espinosa and Yip, 1996).

### **2.1.1. The Neostructuralist School**

Neostructuralist critique of financial liberalization, hypothesized by Taylor (1983), had strongly argued against financial liberalization in the presence of “competitive and agile curb

markets". In this regard, contribution of Espinosa and Yip (1996) is very valuable. They were able to articulate that financial liberalization involving a deregulation of the domestic financial sector may be stagflationary.

Bencivenga and Smith (1992) presented an additional perspective of financial liberalization and concluded that even though it is possible that financial liberalization not expand output in the presence of the curb markets, it is in fact optimal to liberalize financial markets in such a situation. They argue that this is because risk is shared more efficiently in the organized financial sector, and because such liberalizations increase the inflation tax base. In this regard, it should be noted that all the gains from organized intermediation may not just simply be considered as increased output.

Christensen (1993) argues that the informal financial sector is more appropriate than the formal sector in reducing transactions costs and default risks by the use of collateral substitutes-but only when financial transactions are confined to a limited geographic and/or social arena. But expansion of the informal financial agents quickly removes this advantage. Thus there actually exists an upper limit to the contribution of the informal sector and it may thus not be a reliable means in financing large-scale investment projects as suggested by Neostructuralists.

Nag and Mukhopadhyay (1998) argued that the Neostructuralist claim of stagflationary outcome following financial liberalization is in fact highly sensitive to (1) the choice of the exchange rate regime and (2) nature of trade orientation of a developing country. What made their theoretical analysis important was the fact that the conclusions were reached in a so called Neostructuralist context-the curb market having the dominant role in financial intermediation and financing investment requirements. They claimed that allowing for exchange rate flexibility in the current account and import penetration in the production structure severely modifies the Neostructuralist thesis of stagflation. In this case, stagflation is not an inevitable outcome. In fact, monetary stabilization and financial liberalization is observed to be successful in bringing down the inflation rate and improving the performance of the real sector.

### **2.1.2. Drawbacks of the Financial Repression**

The financial repression that existed in developing and transition countries in the 1970s and 1980s was associated with a combination of state-led development, nationalism, populism, politics, and corruption. The financial repression led the financial system to be used as an instrument of the treasury: governments allocated credit at below market interest rates, employed monetary policy instruments and state-guaranteed external borrowing to provide supplies of credit for themselves and public sector firms, and directed part of the resources that were left to sectors they prefer to support. State banks were used in directing credit allocations, as well as in decreasing dependence on foreigners. Bank supervision focused on complying with the often complicated requirements of directed credit rather than with sound regulations. Interest rates to depositors were repressed to keep the costs of loans low. In some cases, low deposit and loan rates were also populist instruments designed to change income distribution.

Financial repression acted as an implicit means of tax and subsidy system via which governments transferred resources from depositors receiving low interest rates (and from those borrowers not receiving directed credits) to borrowers paying low rates in the public sector and to favored parts of the private sector. Governments had to direct credit because they set interest rates that generated excess demand for credits. Capital controls were utilized not to protect national saving, but to limit capital outflows threatening low interest rates and macroeconomic instability, and to increase the returns from the inflation tax. In fact, capital controls were a tax on those unwilling or unable to avoid them and they led to corruption. Unfavorable consequences of repressed financial systems, high costs, and pressures from globalization have been three general reasons for increasing popularity of financial liberalization over the world. These factors were shortly studied below.

#### *Poor Results of Repressed Financial Systems*

Financial repression resulted in inefficient allocation of resources and inefficient allocation of financial resources had negative impact on economic growth (McKinnon, 1973; Shaw 1973) Low interest rates slowed the mobilization of finance, and bank deposit growth decelerated in the 1980s in many economies. Capital outflow took place despite capital controls (Dooley et al, 1986). Allocation of scarce domestic credits and external loans to government deficits and

unproductive private activities produced low returns, excluded more efficient potential users, and encouraged wasteful use of capital.

Financial repression also distorts income distribution. Subsidies on directed credits are often large, especially in periods of high inflation, and actual allocations often direct to large borrowers. The low interest rates cause corruption and lead the diversion of credits to powerful parties. Diversions tends to increase over time, particularly when inflation decreases real interest rates on credits, and rising fiscal deficits and directed credits consume more of the limited deposits.

### *High Costs of Financial Repression*

Costs of the financial repression are usually high. In a repressed financial system, government usually has a significant role in recapitalization and takeover of external debts of particularly state banks and development banks. Political pressures and corruption were common. Loan repayments were weak because loans financed inefficient activities, because loan collection efforts were insufficient, and because borrowers tended to perceive loans from the state banks simply as transfers. Typically, banks and other intermediaries postpone their nonperforming loans until a period of inflation removes depositors' claims and permitted a general default. Since intermediaries were not forced to follow reasonable prudential norms or mark their portfolios to market, the losses were nontransparent, even to the governments that often owned them. Inflation also helped to hide the problems of commercial banks through their earnings on low interest deposits. The hidden costs of the repressed systems became more apparent once financial liberalization began.

### *The Effect of Globalization*

Increasing pressure from the growth of trade, travel, and migration as well as the improvement of communications has played a substantial role in occurrence of financial liberalization. The increased access to international financial markets removed the control on capital outflows on which the supply of low-cost deposits had depended. Capital controls may be effective temporarily but over time mechanisms (such as overinvoicing imports and underinvoicing exports) develop to distort them. As goods and people became internationally more mobile such mechanisms have been more commonly used.



## 2.2 Financial Liberalization

Theoretical background of the term *financial liberalization* goes back to the studies of McKinnon (1973) and Shaw (1973), which can be regarded as a version of Neoclassical Financial Theory adapted to developing countries (Williamson & Mahar, 2002, p. 8). According to this theory, the processes of financial liberalization and financial deepening are likely to result in efficient distribution of resources among and faster economic growth in various countries. McKinnon (1973) and Shaw (1973) argue that interest rate ceilings implemented in developing countries limit volume of loans and decrease economic growth rate.

The process of financial liberalization can be regarded as diminishing or removing repressive restrictions and obligations on the financial system. In a narrower sense, the financial liberalization refers to removing controls over interest rates in loans and credits markets. In a broader sense, financial liberalization includes policies of removing limitations separating activities of different financial organizations, diminishing control over exchange rates, eliminating obstacles in front of entry of foreign financial players to domestic market, allowing domestic investors to enter foreign financial markets, decreasing tax rates on financial revenues etc (Williamson & Mahar, p. 9, 2002).

Financial liberalization policies can be categorized into two:

1. Internal Financial Liberalization
2. External Financial Liberalization

Internal financial liberalization requires eliminating controls and restrictions on domestic financial system so that nominal interest rates can be determined by banks and other financial players based on demand and supply dynamics. External financial liberalization aims at integration to international financial markets and determination of interest rates by market dynamics without any intervention. Liberalization of international capital flows is an external liberalization policy.

Contrary to the financial repression case where the government can implement many restrictive and regulatory policies ranging from determining lenders and borrowers of credits

to defining scope of financial transactions and activities of different financial institutions, in financial liberalization case the government allow financial markets to determine lenders and borrowers, lending and borrowing conditions, interest rates and many other issues. Even though various dimensions have been proposed for financial liberalization, six most commonly accepted dimensions of financial liberalization are as follows:

1. Removing controls over credits
2. Deregulation of interest rates
3. No barrier of entry to financial markets
4. Autonomy of banks
5. Private ownership of banks
6. Liberalization of international capital flows (Williamson & Mahar, 2002, p. 16)

The term *autonomy of banks* refers to freedom of banks in assigning their managers and other workers, in determining their terms of work contracts, and in choosing transactions and services to be provided for customers. This term is opposite to fierce government regulations in these fields. In this regard, banks in specific and overall financial system in general become more liberal as much as regulations and rules in this field are eliminated.

Financial liberalization policies have gained popularity among developing countries beginning from the late 1970's. Argentina, Chili and Uruguay were first countries experiencing financial liberalization. Beginning by the second half of the 1980's and the early 1990's, financial liberalization became a worldwide phenomenon. Even repressive countries such as Japan and South Korea began to implement policies in accordance with financial liberalization. Involvement and stimulation of various international financial institutions such as World Bank and International Monetary Fund (IMF) have accelerated the process of global financial liberalization.

### **2.2.1. Policy Shifts: From Repression to Liberalization**

Policy shifts of various countries from financial repression to financial liberalization showed differences in timing, scope, and pace. As a summary various groups of countries' experiences can be indicated as follows:

- African countries began to implement financial liberalization in the 1990s, often in the sphere of stabilization and reform programs supported by the International Monetary Fund (IMF) and World Bank as the costs of financial repression became explicit.
- Main East Asian countries initiated their liberalization efforts in the 1980s, although at different times and to different degrees. For instance, Indonesia, which had liberalized capital flows in 1970s, liberalized interest rates in 1984, but the Republic of Korea did not liberalize interest rates formally until 1992. In these East Asian countries, real interest rates were reasonable due to low inflation rates. On the other hand, connected lending within industrial-financial conglomerates and government pressures on credit allocation remained as outstanding characteristics of the financial systems in these countries for a period.
- In South Asia, financial repression began in the 1970s with nationalization of banks in India (1969) and Pakistan (1974). Interest rates and directed credit controls were subsequently imposed and tightened, but for much of the 1970s and 1980s real interest rates remained reasonable. Liberalization started in the early 1990s with a gradual freeing of interest rates; a reduction in reserve, liquidity and directed credit requirements; and liberalization of equity markets.
- In Latin America, initial implementations of financial liberalization took place in the 1970s but financial repression came back, continued, or even increased in the 1980s, with debt crises, high inflation, government deficits, and the growth of populism (Dornbusch and Edwards, 1991). In the 1990s, substantial financial liberalization occurred although the degree and timing varied across countries.
- In the transition economies of ex-socialist regimes of particularly the Eastern Europe, financial liberalization took place fairly rapidly in the 1990s in the context of the reaction against communism. Poland, Romania, Slovak Republic, and Bulgaria are some of the economies adopting financial liberalization in stated period.

The first policy shifts generally focused on interest rates. In many cases governments raised interest rates with very rapid actions to mobilize more of the resources needed to finance budget deficits and to enable the private sector to play a greater role in development. (Some interest rate increases, set to control capital outflow, were intended more for stabilization than for liberalization). New financial instruments were utilized that had freer rates and were subject to lower directed credit requirements. Some countries also began receiving foreign

currency deposits, to attract offshore funds and foreign currency holdings in to the financial system as well as to allow residents legal access to foreign currency assets.

Partial freeing of interest rates soon brought about pressures for more general liberalization of interest rates (although in some cases after reversals of liberalization). As borrowers directed funds into deregulated instruments and sectors, demand for low-cost loans increased and problems occurred in repayments. As a drawback, when the macroeconomic situation was unstable and interest rates were freed, very high real interest rates occurred, causing corporate and banking problems that added to the negative effects of weak credits that were brought by liberalization.

In different countries, interest rate liberalization was supported by various changes as follows:

- Central banks became more independent. They gave up their earlier developmental role to focus on limiting inflation, often in the context of stabilization programs
- Reserve requirements and directed credit were eased.
- Capital accounts were liberalized, even in countries where domestic foreign currency instruments remained repressed. Foreign investors were permitted to participate in capital markets and private corporations were allowed to increase funds offshore.
- Markets were designed for central bank debt and government debt. Equity markets were established in the transition countries and liberalized where they already existed
- In some countries, pension systems added defined contribution/defined benefits elements, often operated by private intermediaries.
- Gradually, state banks were privatized. Banking competition increased, as a result of the entry of new domestic and foreign banks and in some cases, non-bank intermediaries.

### **2.2.2. The Effects of Financial Liberalization**

The research on the results of financial liberalization is quite rich. However, there are various theses on what exactly has been the impact on various macroeconomic variables. The literature includes many studies on relationship between economic growth, interest rates, savings, allocation of credits, banking crises in specific and financial crises in general, and financial liberalization.

### **2.2.2.1. Economic Growth, Interest Rates and Reallocation of Credits**

A number of studies showed that financial development contributes positively to economic growth. Using cross-country analysis, Robert King and Ross Levine (1993) find a significant, robust and positive relationship between higher levels of financial development and faster growth, physical capital accumulation and economic efficiency. Jose De Gregorio and Pablo Guidotti (1992) find a positive relationship between credit to the private sector and growth for a sample of 98 countries, for 1960-85. However, their regressions for 12 Latin American countries for the period 1950-85 find that credit had a significantly negative correlation with growth. The correlation was not significant in the 1950s and 1960s but became strongly negative in the 1970s and 1980s.

A significant proportion of the researches on financial liberalization focused on the interest elasticity of savings and investment using a large cross section of countries. However, the evidence is not very clear and contradictory in many places. Joshua Greene and Delano Vilenueva (1991) find a negative and significant effect of real interest rates on investment. Panicos Demetriades and Michael Devereux (1992) with a sample of 63 developing countries and a data ranging from 1961 to 1990, find that the effect of higher interest rates is stronger on the cost of capital than the effect on enhanced supply of investible funds. Thus a higher interest rate went on to diminish investment.

Maxwell Fry (1995) finds that, in a sample of 14 Asian developing countries, gross national saving rate is positively affected by increases in real interest rates. However, Giovannini (1985) claims that the findings of Maxwell Fry were not robust to the changes in time or region. Fry (1995) himself argued that the effect is small and diminishes in the more recent years and is valid mostly in Asia. A large number of studies indicated that the high level of saving in Japan and other East Asian countries was not because of high interest rates but penetration of banks into rural areas and the availability of low yielding but safe deposit instrument. Alejandro Reynoso (1989) found that savings increase rapidly as real interest rates increase from sharply negative to just below zero. However, this effect disappears as the interest rates become positive and becomes negative, as real rates become highly positive.

The majority of the research on interest elasticity of savings argues that a low positive interest rate is ideal to maximize savings. The question that occurs then is: is financial liberalization likely to produce such interest rates. Many countries have abandoned negative interest rates after liberalization but some moved quickly to interest rates that were not only positive but very high in real terms. Following deregulation, Australia, Chile, Malaysia, New Zealand, Taiwan, Thailand and US, all experienced significant increases in interest rates. There were some countries where the interest rates have fallen like Israel, Italy and United Kingdom. In Hong Kong and Singapore, which have had liberalized financial sectors, real interest rates have in general been positive and moderate in real terms.

The majority of researchers arguing for a positive correlation between financial sector development and economic growth agree to the fact that the growth derives from increased efficiency in allocation of investment rather than a larger volume of investment. Theoretical studies such as that by Valerie Bencivenga and Giles Saint Paul (1992) estimate that some 75% of the positive correlation between financial intermediation and economic growth is due to increased investment efficiency rather than an increased volume of investment. Alan Gelb (1989) also finds that most of the positive relationship between real interest rates and growth derived from the efficiency effect rather than the level of investment.

Researches on particular cases of various countries generated similar results. In the case of Ecuador, Fidel Jaramillo, Fabio Schianterelli and Andrew Weiss (1992) find that, after controlling for firms other characteristics, there was an increase in the flow of credit to technologically more efficient firms after financial liberalization. It was the larger Ecuadorian firms that were more technologically efficient so the flow of credit moved from smaller to larger firms after liberalization. In the period prior to reform, the small scale firms were subsidized. The shift in credit towards large firms was therefore a case in which, credit shifted to the area that had been earlier discriminated against under the system of repression.

Studies of John Harris, Fabio Schianterelli and Miranda Siregar (1992) suggest that, after liberalization, the more technologically efficient the firm, the greater the proportion of new credit it received. Credit tended to increase for both small and large firms, whereas it decreased for medium firms. The authors found evidence that financial liberalization has improved the allocation of investment, particularly in Indonesia. Contrary to the researchers

mentioned above, Warman and Thirlwall (1994), making important distinction between financial savings and total savings, tested the hypothesis of whether increasing real interest rates leads to more saving and investment and, as a result, acts as a positive stimulus to economic growth. They chose Mexico as their country of research over a 30 year period of 1960-1990. They found that financial saving is positively correlated with real interest rates partly via the capital flows and partly via domestic asset substitution, but total saving was invariant to real interest rates. Investment was observed to be positively correlated to the supply of credit from the banking system but the net effect of interest rates on investment was negative. They argued that any favorable effect of financial liberalization and higher real interest rates on economic growth can occur via increase in the productivity of investment.

For Korea, Atiyas (1992) presents evidence that small firms gained improved access to external finance after liberalization. Credit flows moved from light industrial manufacturing to services, utilities and construction. Jacques Morisset (1993) finds that although the effect of financial liberalization on the quantity of investment was weak, the effect on quality of investment was consistently positive.

Even though a lot of studies provide evidence seems to support the argument of more efficient credit allocation after financial liberalization, it is not very widely accepted notion. Gregorio and Guidotti (1992) find that credit to the private sector was negatively related to growth in the 1970s and 1980s. They attribute this negative correlation to inefficient lending by banks in light of poor regulatory incentives.

The relationship between financial deregulation and financial deepening has also been examined by various researchers. Dimitri Margaritis, Dean Hyslop, and David Rae (1994) present evidence for New Zealand, showing that financial liberalization is positively related to the growth of M3 to GDP. The ratio of M2 to GDP showed an increase in several developing countries like Argentina, Brazil, Thailand, Indonesia, Mexico, Malaysia etc. However, it also showed a decrease following liberalization in Colombia, Venezuela, Philippines and Turkey.

The researches on relationship between financial liberalization and savings are again argumentative with contradictory evidence. Nureldin Hussain (1996) states that, in the first three years of financial liberalization, savings in Egypt increased on average by 6% of GDP

over the level that would have occurred under financial repression. On the other hand, Tamim Bayomi (1993) estimates that financial deregulation in the United Kingdom resulted in a decline in the personal saving ratio of 2.3 percentage points over the 1980s. In the United States, the savings rate has fallen steadily since deregulation in the 1980s. Uygur (1993) finds that predictions of the determinants of the ratio of private saving to disposable income in Turkey from 1971 to 1990 indicate that a negative income effect from higher interest rates eliminates or exceeds the positive substitution effect of the private savings ratio.

In addition to the evidence that saving rates might actually decrease after financial liberalization, there have been several cases where financial liberalization has led to a consumption boom. Three separate studies by Lopez-Meija, (1991), Bayomi (1993) and Darby and Ireland (1994) show that financial liberalization resulted in consumption boom in the United Kingdom in the late 1980s. Similarly Mexico and Thailand experienced large increases in consumer lending after financial liberalization. Mexican banks rapidly expanded credit-card issues and loans for mortgages and automobile purchases after privatization. Thus the evidence does not support the original McKinnon and Shaw (1973) claim that financial liberalization will lead to an increase in savings.

#### **2.2.2.2. Banking Crises and Bankruptcies**

The relationship between financial liberalization and crisis is another very argumentative issue. The fear that financial liberalization tends to result in crisis was first argued by Carlos Diaz Alejandro (1985) paper “Good Bye Financial Liberalization, Hello Financial Crash”. Williamson and Mahar (1998) utilized a panel of 34 countries both developed and developing and show that almost all the 34 economies experienced some form of systematic financial crisis between the beginning of 1980s and July 1997, and several suffered new and severe crisis later that year. It is probably true that not all crises were direct results of financial liberalization. In particular it seems likely that in a number of cases, banks had already a share of large number non-performing loans at the time liberalization occurred as a result of previous directed lending, and that liberalization simply exposed portfolio weakness that had been previously hidden. Nevertheless financial liberalization was at least a contributory factor in many cases. Certainly, Argentina (1980), Chile, Mexico (1994), Philippines, Thailand, Turkey, United States, and Venezuela are cases to consider.



Two other studies evaluate the correlation between financial sector liberalization and banking crisis. Carmen Reinhart and Graciela Kaminsky (1996) use cross country probit estimations to examine causality between banking crises, balance of payment crises, and financial liberalization. Their results indicate that, although banking crises tend to produce balance of payments crises, the reverse is not always true. Importantly, Reinhart and Kaminsky find that financial sector liberalization is positively and significantly related to subsequent banking crisis.

Asli Demirgüç-Kunt and Enrica Detragiache (1997), in a study that covers 65 countries from 1980 to 1994, use a number of macroeconomic and institutional variables to determine the probability of banking crisis. They use three separate variables, real interest rate, share of credit to private sector and growth in credit. Although all three variables are positively and significantly related to the probability of a banking crisis occurring, the study neither indicate a macroeconomic model capturing the interaction of these and other macroeconomic variable, nor attempts to incorporate the extent of prudential regulation and supervision in the financial sector into the analysis. In addition, the interest rate, credit to private sector, and growth in credit are influenced by a number of other factors than financial liberalization.

Patrick Honohan (1997) claims that the causes of banking crises spread a wide spectrum. He divides banking crises into three syndromes: -

- Macroeconomic epidemics
- Microeconomic deficiencies
- Endemic crises in a government protected system.

The last two categories indicate the underdeveloped and government managed financial system, typically found in a financially repressed economy. However, Honohan does not show either repression or liberalization as the reason for the large number of banking crises. He points out the change of regime, which altered the nature, scale, frequency and correlation pattern of shocks to the economic and financial system increasing the risk of traditional behavior, or introducing new and inexperienced players. Looking back on a number of developing country cases, Honohan identifies the types of regime changes as financial repression, financial liberalization, structural transformation, political developments,

privatization, and technological innovation and globalization in finance. Of these, financial liberalization, structural transformation, privatization and technological innovation and globalization often result from the financial reform process.

Michael Gavin and Ricardo Hausmann (1990) show the origin of banking crisis as credit boom that allows almost any borrower to service its debt by borrowing from another source. This makes the lender unable to differentiate between sound and risky borrowers. In a macroeconomic crisis, continued debt servicing becomes problematic, and many borrowers default on their loans. This has been seen following the financial liberalization in the Chile, Mexico, and Thailand. In Chile during the late 70s and early 80s, recently privatized banks expanded lending, whose situation worsened after a macroeconomic turbulence, caused a crisis. After liberalization, both Argentina and Turkey experienced widespread distress borrowing. In both countries, the corporate sector experienced a decline in earnings during the early stages of liberalization. The liberalization of interest rates created a problematic circle of unsustainably high interest rates at banks to cover growing numbers of nonperforming loans and a further distress borrowing by the corporate sector.

Gerard Caprio, Berry Wilson and Anthony Sanders (1997) found evidence that a rapid expansion of lending to consumers was a leading factor behind the collapse of banks in Mexico in 1994. A boom in lending for consumption was partly due to the repressed demand from previous financial repression and partly due to the fact that exporters had grown accustomed to other methods of financing during the years of nationalization. They also cite inadequate supervision, lack of proper incentives and existence of broad deposit insurance factors that limited the need for bankers to diversify risks in newly liberalized environment. The recent Thai crisis is also attributed to rapidly expanding and concentrated lending in the real estate and consumer sectors under conditions of weak regulation and limited transparency. These studies suggest that financial sector vulnerability frequently develops after liberalization, even though it can be argued that the root cause of the weak banks was the preceding financial repression.

Mathieson (1980) develops a macroeconomic model to argue that financial liberalization should proceed gradually to not to cause bankruptcies of financial institutions. These bankruptcies are likely to occur because at the initial stages of financial liberalization deposit

and loan rate ceilings rise dramatically. Financial institutions are exposed to the probability of bankruptcy because they have to pay the new higher interest rate on their deposits while they could charge interest on credits they extended with relatively lower rates. Mathieson (1980) also claims that higher real deposit rates reallocate household portfolios in favor of bank deposits at the expense of unproductive assets. This again raises the volume of deposits and, as a result, the volume of credit extended by financial institutions. The increased availability of credit to finance both fixed and working capital leads to a strong credit-induced supply-side effect results in higher growth and lower inflation.

Mehrez and Kaufmann (2003) also examined the impact of financial liberalization on the probability of a banking crisis for economies with poor transparency in regards to government policies. They show that a sequence of non-transparent policy leads banks to increase their credit above the optimal level. Once the banks realize their large exposure, they are not likely to declare their losses. Such a behavior postpones the crisis, but increases its magnitude. They also argued that the probability of a crisis after liberalization is higher significantly in countries with poor transparency.

As a conclusion it can be argued that financial sector liberalization, which has occurred in a wide range of countries since 1970s, has some common and some differing effects on economies of countries implementing it at similar or different degrees. The evolution of financial liberalization has varied greatly; both in terms of speed and sequencing. The researches have showed that financial liberalization has generally produced positive results in terms of greater financial depth and increased efficiency in the allocation of investment but it has not resulted in significant increases in the savings as was argued by McKinnon and Shaw. The studies also concluded that a positive, but modest, real interest rate would be most ideal to ensure a high rate of saving. This rate of saving is also an optimum from the view point of avoiding financial crisis. The danger that liberalization will result such a crisis is the most important drawback in the entire process, the other drawback being a loss of monetary control.

### **3. FINANCIAL LIBERALIZATION IN POLAND**

Poland is one of ex-socialist countries which have adopted liberal economic model after the collapse of the Socialist Block in Eastern Europe. As an integral part of economic liberalization policies a new financial infrastructure in terms of relevant liberal laws and institutions was established in the early 1990s. Privatization of a significant proportion of the financial system was treated as a must of liberalization efforts. The fast growth of the financial sector has had important contribution to overcoming the recession of the early transition stage. In 1993 the government launched a restructuring program for the banking sector that included recapitalization of the banking system.

In Poland, the financial sector reform was relied on legislation passed in the late 1980s. The Act of National Bank of Poland and the Banking Act were enacted by the Parliament in 1989. These two acts prepared the base for a banking system dominated by state owned and private banks and also allowed for the emergence of competition in banking and finance sectors. Central banking and commercial banking, the financial markets, and the development of non-depository financial intermediary institutions are three essential legs of the financial system in Poland (Andriesz et al., 2003).

#### **3.1 The Banking Sector**

The Polish banking industry is the largest of the 10 countries that have just been admitted to the EU (the EU10). At year end 2003, it represented over 30% of the total assets, loans and deposits of the banks in the new Member States. It should be added, however, that the assets of the EU10 banks accounted for only 3% of banking sector assets in the enlarged EU (the EU25).

Until 1989 the banking system in Poland was a part of a centrally planned economy. Interest rates were determined in an administrative way by the government, like the directions and the scale of banks' lending; that resulted from an annual credit and cash plan. The system lacked legal provisions regulating the operation of the banking system (inter alia, prudential standards).

### **3.1.1. The National Bank of Poland (NBP)**

By 1988 the National Bank of Poland (NBP) was the primary and only deposit accepting institution under the central planning system. In 1989 efforts to establish a competitive market economy launched and in 1990 the NBP transformed into a fully autonomous entity. The NBP's roles and the structure of the banking system are specified in Article 227 of the Constitution of the Republic of Poland, the changes that began in 1989 in central banking are summarized in the National Bank of Poland Act, passed by the Parliament on 29th of August 1997. The Act ensured the NBP independence in executing the monetary policy, and defined two new institutions responsible for monetary policy and banking supervision: the Monetary Policy Council (Rada Polityki Pienieznej –RPP) and the Banking Supervision Commission (Komisja Nadzoru Bankowego –KNB). The National Bank of Poland –the NBP has an exclusive right of issuing currency and is responsible for the financial stability of the banking system as a whole. It also has a supervisory role in the commercial banking system, mainly to ensure proper compliance with the provision of banking laws. The NBP organizes the system of monetary clearing, current interbank settlements and has a critical role in the interbank money market to ensure sufficient liquidity for the financial system. It also performs regulatory functions with respect to commercial banks, guarantees the safety of banks and deposits placed with them, and maintains liquidity in the banking sector. The NBP also acts as the lender of last resort, when banks face temporary liquidity problems. Furthermore, the NBP acts as a bank for the State budget, operates accounts of the government and other state institutions, targets State funds and the State budget entities, and executes their payment orders (NBP, 2004).

The President of the NBP is appointed by the Parliament with the proposition of the President of the Republic of Poland, for a six-year term. The President manages the Monetary Policy Council, the NBP Management Board, and the Commission for Banking Supervision. The Monetary Policy Council has nine members, three appointed by the State President, and six assigned by both houses of Parliament. The council set monetary policy guidelines and basic principles. The main duties of the NBP Management Board are the conduct of resolutions of the Monetary Policy Council, achievement of the NBP plan of activity, and implementation of a budget, approved by the MPC (Andriesz et al., 2003).

Since the beginning of the liberalization process in Poland, the basic objective of the monetary policy was to reduce inflation. The NBP applies monetary policy using a mix of instruments such as (i) reserve requirements (ii) the use of a real interest rate policy and (iii) the use of open market operations which began in 1993, and by the late 1990s became the basic means of central bank intervention.

### **3.1.2. The Commercial Banks Market**

Commercialization of the banking system was first introduced by the 1988 banking law and resulted in major changes in the 1989-92 period. Three state owned banks: Powszechna Kasa Oszczednosci Bank Panstwowy- PKO BP; Bank Handlowy SA, and PEKAO SA were separated from the NBP. The regional branches of the NBP became independent, building nine new state owned regional banks. Later they became joint stock companies owned by the Treasury. More state-owned banks were founded: Bank Rozwoju Eksportu SA – BRE, Bank Inicjatyw Gospodarczych-BIG SA Polski Bank Rozwoju – PBR SA. They were owned by the Treasury, state owned enterprises (SOEs), and government agencies. Several hundred small private banks established after liberalization of entry regulations (Andriesz et al., 2003).

The initial state of the Polish Banking system following the process of liberalization was quite risky, worsened by a recession in the early 1990s and the inevitable problems faced by many companies in the move to a more market based system. According to Tang et al (2000) Non Performing loans as a percentage of total loans rose from 16% in 1991 to a peak of 29% in 1994 and 28% in 1995 before a rapid improvement down to 10% in 1998. In 1992 Poland revised the Banking Law giving the central bank, the National Bank of Poland the authority to enforce provisioning requirements, capital adequacy and exposure limits. Poland experienced bank crises (1992-1993) due to a general insolvency in the banking sector. To deal with it prudential regulations were introduced in 1993-95, and then tightened in 1998. In 1993 the Capital Adequacy Ratio standard set by the Bank for International Settlements BIS was introduced, and in 1994 International Accounting Standard IAS were taken on board. Most of the banks were recapitalized using funds raised from the issuance of 15 year governments bonds (Andriesz et al., 2003).

Under Polish banking law, banks may have three legal forms: state banks, cooperative banks, and joint stock companies. In 1999 only two state-owned banks did not become joint stock companies: PKO BP and Bank Gospodarstwa Krajowego- BGK. Most of the banks have the form of co-operatives but their market share is relatively insignificant (4.3% of total sector net assets in 1998). Joint stock companies, with state, foreign, and domestic private capital shares, are the most important institutions within the banking sector.

Banking privatization took place in Poland in 1991. But the share of private and cooperative banks could not exceed 50% until 1998. Major state-owned banks such as BIG, BRE, Wielkopolski Bank Kredytowy –WBK, and Bank Śląski- BSK were privatized over the 1991-93. This sell-off strategy was necessary (Gorski, 2001) due to high ratios of bad loans of various banks

Thanks to efforts made to liberalize the financial system and to attract foreign capital, various foreign banks were established in the early 1990s. Tax relief (up to the amount of the contributed capital) during the initial three years of operations, as well as the possibility of contributing and holding the capital in foreign currency, and the freedom of transferring 15% of profit, were an additional factor stimulating foreign investors. In that period foreign capital investment was mainly in the form of joint-stock companies with a majority shareholding of foreign investors. Seven such institutions were established. Bank Amerykański Polsce SA /American Bank in Poland/ (today Bank Amerykański Polsce AmerBank SA) was the first foreign bank, established pursuant to the decision of the President of the NBP of December 1989, 20% Polish owned and 80% American owned. The next banks were: Raiffeisen Centrobank SA (today Raiffeisen Bank Polska SA), Citibank (Poland) SA (in 2001 merged with Bank Handlowy w Warszawie SA), IBP Bank SA (today Credit Lyonnais Bank Polska SA) with 70% foreign investment, Polsko-Kanadyjski Bank sw. Stanisława SA (today Danske Bank Polska SA), a joint venture with the participation of the Credit Union of Polish Canadians and Polsko-Amerykański Fundusz Przedsiębiorczości /Polish-American Enterprise Fund/, Bank Creditanstalt SA (later Bank Austria Creditanstalt Poland SA, in 2001 merged with Powszechny Bank Kredytowy SA) and Pierwszy Komercyjny Bank SA (NBP, 2001).

The number of commercial banks rose quickly after the ending of the state monopoly, having a record in 1993 with 87 banks. In the following period, the number of banks declined even

though new banks were established. In 1993 and 1994 the speed of increase in bank numbers was reduced as a result of a restrictive licensing policy that was applied by the central bank, faced with the weak financial standing of many banks, which was threatening the stability of the banking sector. In this period only one license was granted in each of the two years. The main objective of the National Bank of Poland at this time was the strengthening of the domestic banking sector through the restructuring of banks threatened with bankruptcy and by rehabilitation with the assistance of foreign capital.

The process of establishing new banks by foreign capital was stopped for fears of excessive increase of competition against financially weak Polish banks. At the same time there was a trend to create a level playing field for Polish and foreign banks by removing benefits resulting from the possibility of the foreign banks maintaining capital in foreign currencies.

The increase of bank numbers in the period from 1995 to 1998 was much slower. The initiative in this field was totally taken over by foreign capital, which established 10 new banks and took over control of 7 banks that needed providing additional capital (NBP, 2001).

The capital minimum necessary to obtain banking authorization, equivalent to 5 million Euro, and the competition in the banking services market, reduced the opportunities for Polish entities to enter the marketplace by employing solely Polish capital. In accordance with the obligations assumed by Poland when joining the OECD, at the beginning of 1999, formal restrictions against foreign banks in terms of establishing branches were abolished.

At the end of September 2001 the proportion of foreign capital in the equity capital of commercial banks in Poland was 57.4%. The largest amounts were provided by German capital (14.6% of the equity capital), mainly by German banks, such as e.g. Deutsche Bank AG, Commerzbank AG, Bayerische Hypo- and Vereinsbank AG and by American capital (12.2% of the equity capital), represented mainly by the Citibank Overseas Investment Corporation, the AIG Consumer Finance Group, the Bank of America National Trust and the General Electric Corporation. Relatively high contributions were provided by Dutch (8.0%), Irish (5.9%) and French (5.1%) capital among the remaining foreign investments. Assets controlled by the foreign capital as of the end of September 2001 amounted to 78.3% of the total assets of the sector (NBP, 2002).



Numerous commercial banks, established in the early period of the new market conditions (1989-1991), went bankrupt, were liquidated or lost their independence as a result of take-over by other entities. This resulted from a difficult financial situation, originating from their capital weakness, the ignorance of risk assessment methods and the shortage of skilled staff or the wrongly selected strategy.

In the later period the reduction in bank numbers resulted mainly from consolidation, initiated by Polish banks, to strengthen their market position. A model example of building a position in this way is Kredyt Bank SA, which successively consolidated by absorbing: Bank Ziemski SA, Powszechny Bank Handlowy GECOBANK SA, Bank Regionalny SA in Rybnik, Bank Depozytowo-Powierniczy GLOB SA and finally Polski Bank Inwestycyjny SA Also Bank Polska Kasa Opieki SA amalgamated in 1999 with three banks that had separated in 1989 from the NBP<sup>22</sup>.

The establishing of private banks with mixed capital resulted in an increase of private ownership in the banking sector. However, substantial changes in the ownership structure of this sector occurred as a result of the privatization of large state banks, started in 1991. The privatization was aimed at increasing bank operational efficiency by way of handing the new bank entity, the management boards, and the supervisory boards full responsibility not only for the accomplishment of the mission and of the adopted strategy, but also for the day-to-day management and restructuring.

The assumptions of the privatization programme of 'the nine' banks that were set established in 1991 forecast two stages of the process, namely: commercialization and capital privatization, i.e. making bank shares available to third parties.. The adopted privatization strategy estimate the winning for banks of foreign strategic partners, that would take over the holding of no more than 30% of the total shares issued, but (on the basis of a managerial contract) that would actively take part in bank management.

It was also planned that the State would keep approximately 30% of shares with voting rights limited to strategic decisions (with the option to dispose of this interest in the future) and the rest (about 30%) would be granted to individual investors in a public offer and to employees,

on privileged terms. These principles were used in the privatization of the first two banks (Bank Śląski SA and Wielkopolski Bank Kredytowy SA) in 1993-1994, with the participation of strategic investors, namely the Dutch ING Bank NB and the European Bank for Development and Reconstruction. In both cases the interest of foreign investors did not go above 30% (NBP, 2001).

In 1988, significant equity holdings in two state banks (the Bank Przemysłowo-Handlowy Krakowie SA and the Powszechny Bank Kredytowy SA) were sold to foreign investors, namely Bayerische Hypo- und Vereinsbank and Bank Austria AG. This led to the take-over of control over these banks by foreign institutions. The following two privatizations, those of Bank Zachodni we Wrocławiu SA and Bank Pekao SA (2nd stage), done in 1999, were connected with sale to foreign strategic investors, namely AIB European Investment Limited (Ireland), and an Italian-German consortium, UniCredito-Italiano and Allianz AG. The majority holdings were, respectively, 80% and 52.09% (NBP, 2001).

In 2002, the number of commercial banks in Poland decreased from 71 to 62, with the number conducting operating activity down from 69 to 59. This was mainly the result of consolidations, which resulted in nine banks losing their personality at law (NBP, 2003).

Minor changes took place in the ownership structure of the banks. The Treasury controlled 7 banks conducting operations (controlling 3 of them directly), and also Bank Rozwoju Budownictwa Mieszkaniowego SA.

The number of private-sector banks in operation declined from 62 to 52, while the number of these with majority Polish equity decreased from 16 to 7. The number of banks in operation controlled by foreign investors decreased by 1 (2 started operations, 2 ceased operations, and 1 lost its personality at law). The banks controlled by the Treasury accounted for 25.3% of total banking sector assets, 21.4% of loans (less provisions) to non-financial customers, 30.5% of deposits from non-financial customers, and 14.8% of total core and supplementary capital (a year earlier, the respective figures had been 23.5%, 20.5%, 28.7% and 12.5%). On the other hand, the capital funds and assets of the 45 commercial banks controlled by foreign investors represented 78.4% and 67.2%, respectively, of those of the banking sector as a whole (compared to 80.2% and 68.7% at the end of 2001). These banks had taken 62.2% of

deposits from non-financial customers (as against 63.9% at year end 2001) and extended 70.5% of loans less provisions (as against 71.3%)

In 2000, the total number of commercial banks having operations declined to 73 (compared to 77 at the end of 1999) whereas the number of banks controlled by the Treasury (directly or indirectly) remained the same (7), yet their share of the total assets of the banking sector dropped (down from 23.9% to 22.9%), as did their share of outstanding loans less provisions (down from 21.4% to 21.2%), of deposits (down from 29.3% to 28.9%), and of total core and supplementary capital (down from 16.4% to 14.3%). The Treasury had direct control of just 3 banks, involving Bank Gospodarstwa Krajowego, the sole institution with the status of a state bank (the other bank in this category, PKO Bank Panstwowy, was incorporated as a public limited company and changed its name to PKO Bank Polski SA) (NBP, 2001).

Although the number of banks with majority private-sector equity conducting operations decreased from 70 to 66, the number of banks with majority foreign equity increased from 39 to 46. At the end of December, foreign investors directly owned 16 public limited companies under 100% foreign ownership (including 3 acquired from their original Polish founders) and 21 with a majority foreign interest (3 of which had been established with the involvement of foreign parties, 9 acquired under privatizations including foreign investors, and another acquired through capital infusions), along with 2 branches of foreign banks, and also indirectly controlled a further 7 banks.

At year end, the 46 banks in operation with a majority foreign equity interest had a total capital base and total assets representing 77.5% and 69.6%, respectively, of total capital and total assets within the Polish banking sector; this led to a significant increase on the previous year (the corresponding figures at year end 1999 stood at 50.2% and 47.2%) These banks had also taken 63.5% of non-financial sector deposits and originated 70.2% of loans outstanding, less provisions (compared to 45.7% and 50.9%, respectively, of the last year).

The principal modifications seen in the ownership structure of the banks were the result of foreign investors acquiring direct or indirect control over further banks, which in the main had previously been controlled by Polish shareholders. For the period mentioned, following modifications took place in Poland:

- Citibank Overseas Investment Corporation purchased an 87.8% holding in Bank Handlowy w Warszawie SA from the previous shareholders (both Polish and foreign).
- Deutsche Bank AG indirectly acquired a controlling interest in a distressed institution, Bank Wspolpracy Regionalnej SA (BWR SA), and its subsidiary, BWR Real Bank SA (these two banks were then merged).
- Deutsche Bank AG ended seeking for control of BIG Bank Gdanski SA, disposing of the interest it had. Control over the latter bank and its subsidiary, BIG Bank SA, was taken over by Banco Comercial Portugues and Eureka BV. The equity interest held by foreign shareholders as a result rose to 62.5% (compared to 47.8% at year end 1999).
- Bank Austria AG took control over Powszechny Bank Kredytowy SA (PBK SA), and thus indirectly over its subsidiary, Gornoslaski Bank Gospodarczy SA. Following the purchase of a further 10.29% shareholding from the Treasury, the equity interest of Bank Austria AG in PBK SA became 53.7% (as against 43.5% at year end 1999), and increased to 57.1% following the incorporation of Bank Austria Creditanstalt Poland SA;
- Commerzbank AG raised its equity control in BRE Bank SA to 50% (compared to 48.7% at year end 1999) (NBP, 2001).

In addition, changes to the ownership structure of the commercial banks occurred parallel to the beginning of operations by Toyota Bank Polska SA (another bank with 100% foreign equity), by increases in the authorized capital of 24 banks (including 19 with majority foreign equity).

At year end, total foreign investment in the Polish banking sector was 4,575.1m zloty, of which 2,592.3m zloty represented the capital of 16 banks with 100% foreign equity and of 2 branches of foreign banks, 1,920.7m zloty composed the face value of majority shareholdings in 28 other banks. The largest investments in the Polish banking sector had been conducted by American, German and Dutch institutions, with these investments standing at 1,223.8m, 1,088.1m and 560.5m zloty, respectively.

Compared to the end of 1995, investments made by the USA increased dramatically (up almost 1,300%). Germany was the second largest source of foreign capital (investment from this country increased almost 800%), while Dutch investors was the third largest investors (their equity involvement rose 200%). France and Ireland were fourth and fifth giant investors

(with their investment increases by 600% and 2,200%, respectively), while Austria was the sixth (despite the capital invested from this country increasing 300%). Finally, Danish investors replaced Canadian investors.

By mid 1999, the foreign equity accounted for more than 50% of shareholders' funds of banks operating in Poland. This happened because 53% of the shares of the second largest bank in Poland – PeKaOSA were sold to UniCredito Italiano, and 80% of the equity of the tenth largest bank –Bank Zachodni to the Irish AIB plc. Between 1993 and 1999 foreign capital entered the Polish banking system in (Gorski, 2001) a significant way. The main reason behind the decisions of foreign investors to enter Polish banking was the progress performed in economic transformation and expectations for Poland's access to EU (Gorski, 2001).

In the year 2000 itself, foreign direct investment in Poland's banking sector increased slightly (by 486.0m zloty), while the share owned by foreign investors in the total authorized capital of the commercial banks (including the registered equity of state banks) increased to 0.6 points (to 56.6%). This is attributable to the fact that the assumption of control by foreign investors over a number of banks during the period under review did not involve any major inflow of foreign capital to Poland. In five cases the banks in question were acquired indirectly (via other domestic banks), while in two cases control was established by buying equity from other shareholders, mostly foreign themselves (Gorski, 2001).

In 2002, foreign direct investment in the equity capital of the Polish banking sector increased from 5,835.1m zloty to 6,742.5m zloty. The share of the total authorized capital of the banking sector controlled by foreign investors increased by 2 points to 60.5% (63.2% in relation to the commercial banks).

At the end of December, 2002, foreign investors from 14 countries were operating in the Polish banking sector. The largest investments had been made by German and US institutions (1,776.7m zloty and 1,388.2m zloty, respectively), followed by those from Holland (738.0m zloty) and Ireland (514.1m zloty).

At the end of 2004, there were 13 domestic commercial banks (out of a total of 54) with majority Polish equity. This group included 5 banks controlled by the Treasury (2 of them

directly), 3 banks affiliating cooperative banks, 4 small private-sector banks and, temporarily, one large high-street bank (following the first stage of its privatization). The remaining 41 domestic banks were controlled directly or indirectly by foreign investors. In 2004, the equity interests in domestic banks held by these investors decreased 230m zloty (to 7,086m), while their share of the authorized capital of the banking sector slipped 0.5 points (to 60.1%) (NBP, 2005).

The high proportion of foreign equity in the Polish banking industry is attributable both to privatizations and to the involvement of foreign investors in the rehabilitation of distressed private-sector banks. It is worth adding that the banks established by foreign undertakings account for no more than 10% of the sector's total assets.

As of December 2004, investors from 17 countries were doing business in the banking sector. The capital investments from Belgium, the United Kingdom and Japan increased (up 302m, 40m and 16m zloty, respectively), while that of German, French and US investors decreased (down 350m, 202m and 178m zloty, respectively) (NBP, 2005).

### **3.2 The Capital Markets**

The 1991 Acts on the commercialization and privatization of state-owned companies and the law on public trading in securities and in trust funds have played significant roles in establishment of the capital markets in Poland in the early 1990s. Especially the second law permitted the establishment of institutions necessary for the operations of a Polish capital market in Western norms. These institutions include: The Securities and Stock Exchange Commission (Komisja Papierow Wartosciowych I Gield –KPWiG), the agency responsible for whether securities can be publicly traded, including admission procedures to the Stock Exchange, granting of brokerage and investment advisor licenses, supervision of the stock market, protecting investors' interests and ensuring fair competition.

The Warsaw Stock Exchange, WSE (Warszawska Gielda Papierow Wartosciowych – WGPW), is the only stock exchange in Poland. Shares, pre-emption rights, treasury and corporate bonds, foreign exchange, and stock exchange index derivatives are bought and sold in WSE. At the end of 1997 there were 47 brokerage companies and 16 of these companies

were directly owned by banks. In 1996 an over-the-counter (OTC) market (Centralna Tabela Ofert –CeTO) was set up as a public market other than the Stock Exchange.

The development level of a stock exchange can be evaluated with the market value of quoted companies (market capitalization). At the end of 1998, the WSE capitalization exceeded \$20.5 billion or around 14% of Poland's GDP (Czekaj & Owskiak, 1999). This number is very important, since at the end of 1997, the capitalization accounted only for 5-6% of GDP. In 1999 the shares of six Polish companies were trading as Global Depository Receipts in London. Prospective EU accession brought about competition between Central European exchanges: Prague, Vienna, Budapest and Warsaw for the regional leadership in the capital market. Gorski (2001) claims that in near future alliances will be formed between these centers. The Warsaw Stock Exchange also considers trading shares of companies from other Eastern European countries: Lithuania, Latvia, and Ukraine.

The State Treasury is the second main supplier of tradable securities to the stock exchange. In 1997 Treasury bonds accounted for almost 20% of the entire value of turnover on the Exchange. Investor's interest in the bonds has developed together with their growth over longer maturity periods (from 1 to 10 years) and in variety (e.g. variable and fixed yield bonds). In the early 1990s State Treasury instruments dominated the bond sector, and from 1996 corporate bonds started to be traded. The relatively late introduction of corporate bonds was partly the result of lack of prudent legal regulations and partly the because of persistently high inflation, which made it difficult to forecast future returns. However, by the end of 1990 the bond market became a desirable source of capital for more companies.

The municipal sector also issues bonds but because it is positioned at the lowest level of local hierarchy, the bonds are not valuable. The highest issues run at a level of around \$6 million and the bonds issued by the municipal sector are generally not even publicly bought or sold. By the end of the century, Treasury paper and shares had a significant proportion in the Polish capital market only towards the mid 1990s did other financial instruments such as corporate bonds, municipal bonds and derivatives took place.

### **3.3 Non Deposit Accepting Institutions**

Non Deposit Accepting Institutions are one of significant elements of the financial system in Poland. Non Deposit Accepting Institutions Sector is dominated by the Pension Funds and Insurance companies with an insignificant role for Investment Banks or Open Ended or Closed Investment Funds. Pension funds began to be established in Poland only in 1999. The pension system is based on insurance of employees under three pillars: Pillar I, a mandatory insurance in the state Zaklad Ubezpieczen Spolecznych (ZUS) to which 15% of pension premiums to: Pillar II; an obligatory insurance in open pension funds, led by Powszechne Towarzystwo Emerytalne SA (PTE), and which gets 9% of premiums; Pillar III, voluntary private employee pension fund. In the first half of 1999, 21 PTE companies were given licenses from the Pension Funds Supervision Office. By mid 1999 the market leaders were established, with a combined market share of 70%; four pension funds established by Commercial Union, the banks BHP SA and WBK SA; PZU Zycie; Nationale Nederlanden; and Norwich Union.

By the end of 1998, 55 insurance companies operated in Poland, of which 24, engaged in life insurance sector. The capital raised by insurance companies has been increasing. Over the period 1996-98 the annual growth rate in the life assurance sector accounted for roughly 30%. In this period, insurance companies had almost three times more capital than investment trust funds and have become the largest non-banking financial intermediary in Poland. Despite the large number of companies, the insurance market is highly concentrated where Powszechny Zaklad Ubezpieczen (PZU), and Warta SA are the dominant players. Four leading companies (PZU Zycie, Commercial Union Poland, AIG Poland, and Nationale Nederlanden) control 98% of the life assurance business. At the end of 1997, the investment portfolios of insurance companies in Poland included mostly T-bonds and T-bills (88%), with the value of shares not exceeding 6%. This is due to the high yield and safety generated by Treasury securities and also the non-existence of alternatives on the market, e.g. mortgage loans, mortgage bonds and corporate bonds.



### **3.4 Effects of Financial Liberalization in Poland**

The process of financial liberalization has had a number of effects in Poland. Researches on relationship between financial liberalization and economic development and impacts of financial liberalization on banking system in Poland have reported several outstanding outcomes.

#### **3.4.1. Economic Growth and Cyclical Volatility**

Andriesz et al (2003) studied the impact of financial liberalization on economic activity in Poland from January 1990 to November 2001. They selected a number of monthly indicators related to money supplies (both the narrow money M0 and the broader M2), financial depth (the ratio of credit to the private sector over the nominal value of industrial production, zloty deposits of non-financial sector in both NBP and commercial banks, three-month treasury bill interest rate) and stock market indicators (the average market capitalization and the turnover ratio).

Andriesz et al (2003) found that there was a positive relationship between financial liberalization and economic development in Poland. They found a strong evidence supporting supply-leading hypothesis, especially in the long run. The researchers argue that the causality direction runs from all the financial development indicators (turnover, capitalization, M0, M2, Depth and Share Prices) to industrial production. According to the findings of their study, industrial production does not cause financial development in four cases: Turnover, Stock Market Capitalization, Share Prices and Narrow Definition of Money, M0. They also indicated that the relationship between financial development and economic growth is bi-directional, for the cases of Depth and Broader Definition of Money, M2. The researchers pointed out that this did not mean “finance followed growth” as the four other financial development indicators provided strong evidence in support of the supply-leading hypothesis. In this sense, they argued for the idea that “finance leads to growth” in the long-run.

Andriesz et al (2003) also found that the direction of causality in the short-run is significantly similar with the exception of the stock market development indicators and there was no short-run causality at all. The researchers point out that the Polish Capital Market is new and

relatively small and can not have a significant effect on economy without reaching around 20-25% of GDP. As a summary, the findings of the study of Andriesz et al (2003) support the view that financial liberalization has positively contributed to economic growth in Poland in the period under question.

Souza (2004) conducted a research to extend the work of Kaminsky and Schmukler (2003) to a number of the Baltic and Central Eastern European countries and studied the case of Poland in this respect. He concluded that financial liberalization and integration in Poland reduced cyclical volatility both in the short and long run. He indicated that financial liberalization led to benefits both in the short run and in the long run, measured through significant extension of the amplitude of upward cycles and the (although statistically non-significant) reduction of downward cycles of stock market indexes. His findings contradict with the estimated results of K&S, which states emerging markets experience a relative short run increase in the amplitude of downward cycles. In evaluation of the effects of liberalization on financial, real and nominal volatility, Souza (2004) found similar results with the previous ones but indicated that capital account liberalization was the one that most consistently and significantly reduced volatility.

### **3.4.2. Increased Competition and Decreased Real Credits in the Banking Sector**

Financial liberalization led to increased rivalry in the Polish banking industry. Financial competition led by new international entrants brought about pressure on domestic banks to improve their technology and know-how. Multinational Banks, which were the new entrants into the Polish financial system after financial liberalization, had better know-how and higher technology and were more efficient than the domestic banks. As a result, increased rivalry after entrance of new banks into the banking sector led domestic players to update their technology and to increase their know-how to survive under new circumstances of increased competition.

Domestic banks in Poland had bad loan portfolios remained from their earlier organizations. These large bad loan portfolios have resulted in high default rates, and hence in worsening of the capital levels of domestic banks in the early years of the liberalization process. Recapitalization of the domestic banks in Poland could not be realized by the underdeveloped

capital markets in the transitional Polish economy. Even though the local governments sought to recapitalize their domestic banking systems these efforts had been insufficient. As a result the remaining major source of new capital could be increased retained earnings that would result from greater interest rate spreads that would occur without international financial competition. Interest rate spreads declined due to financial competition and international financial competition became particularly fierce for domestic banks in low risk market segments, such as loans to MNCs. Thus, domestic banks decreased their exposure to risk in the face of slowly improving capital levels to remain competitive (Mondshean and Opiela, 1997).

Since increased rivalry after entrance of multinational foreign banks limited the ability for domestic banks to raise their capital levels, the possibility to improve their know-how, and renew their technology was also restricted. As domestic banks were unable to improve their know-how and technology fast enough to successfully compete with MNBs the alternative was to reduce their lending in an attempt to keep their limited capacity, and not to face increasing levels of negative cash flow.

#### **3.4.2.1. Technological Innovations**

In Poland, the application of modern computer technologies began in several places, while the speed and scale at which these changes were applied varies depending on the relative capital endowments of the respective domestic banks. BRE as the smallest specialized bank was the first to complete its computerization in 1993 and began to offer real time transactions. Larger specialized and regional banks launched to implement integrated networks, but did not complete these changes before 1995. Finally, the specialized banks with the most extensive branch networks, and lowest capital adequacy ratios, namely PKO BP, PeKaOSA and BGZ were the last to launch their capitalization.

Financial liberalization has an indirect role in technological advances of domestic Polish banks. Financial liberalization increased the rivalry and increased rivalry forced domestic banks to update their technology. Domestic banks that began with the introduction of new technologies earlier than others generally have an edge over their competitors since they can

offer more and faster services, such as real time transactions or electronic banking. (Mondshean and Opiela, 1997).

#### **3.4.2.2.Increased Know-How**

Increased rivalry in financial sectors due to the liberalization process forced domestic banks to improve their banking know-how by increasing their numbers of qualified personnel. Eastern European banks can use basically two strategies to improve their human capital: training for their employees, or hiring qualified personnel either from other banks or from other sources, such as universities.

The indirect effects of financial liberalization process on Polish banks occurred as the pressure to improve training and enlarge the pool of qualified personnel, while the direct effects are training of new personnel and the recruiting of qualified staff from domestic banks.

#### **3.4.2.3.Decreased Real Credits**

The real lending declined after financial liberalization in Poland. Polish commercial banks were equity constraint and subsequently decreased their risk by reducing lending, especially in market segments that carry higher information costs. A number of reasons can be proposed for the decline in real credits in early stages of financial liberalization in Poland. First, initially domestic banks may have been unwilling to enforce credit repayments in the years of the economic downturn because the initiation of bankruptcy procedures on the banks' borrowers would have eliminated any chance of future repayments. Second, creditors may have become more cautious about repayments of their loans and thus reduced their lending activities in the early stages of the transformation process Third, stricter enforcement of bad loan regulations by the government may have forced banks to act on their significant bad loan portfolios that they had acquired as a result of continuous lending to bad borrowers in the early transition years (Mondshean and Opiela, 1997).

The declining real credit in a banking system in transition from a centrally planned economy to a market based system may be caused by factors affecting either the supply of loanable funds or the demand for such funds. Supply-side factors include the amounts of deposits at the

respective banks, the banks' capital levels, the overall default rates, information about borrowers, and the opportunity costs of loans, while demand-side factors include the economic performance of borrowers, and the financial position of borrowers.

#### *Supply-Side Factors: Deposits*

Individual banks can give out loans based on their deposit base, and the required reserve ratios for different forms of deposits. Since monetary authorities have instituted tight monetary policies in both economies, the available real money has been declining. Theoretically, if there are no cash holdings the money supply is equal to the total amount of deposits. However, since Polish economy was financially relatively disintermediated at the beginning of the transformation period, the relevant number is not the total supply of money, but the supply of deposits that needs to be related to the supply of loans.

In Poland, real deposits as a whole and within the infant banking sector remain above the amount of real loans for the entire period. Also, real deposits have grown for the economy as a whole and for the specialized banks. Only at the regional banks have real deposits fallen faster than real loans. However, regional banks have continued to increase their loan portfolios as their loan/asset ratio has increase since 1994 (Mondshean and Opiela, 1997) which shows that a larger share of decreasing real deposits is allocated in loans at the regional banks.

#### *Supply-Side Factors: Capital*

Another reason for declining real loans may be declining real capital. It has been argued that domestic banks are equity constrained in the face of increased international financial competition for several reasons. First, capital markets were very narrow in Poland and did not provide sufficient opportunities to raise new equity. The equity markets could only play a limited role in raising new equity as Poland's stock exchange quoted 53 stocks in 1995. Second the Polish government did not have enough funds to re-capitalize its banking system as the country showed budget deficits, as its external debt burden have remained relatively high. Third, increased international financial competition limited the ability of domestic banks to raise new capital through retained earnings.

### *Supply-Side Factors: Alternative Fund Uses*

One possible explanation for the declining real loans in Poland may be that allocations in other assets than commercial loans may be less risky and more profitable. Two potential alternative fund uses were investments in treasury bills and interbank deposits. All banks in Poland invest between 15% and 30% of their assets in treasury bills, while interbank deposits play an insignificant role in the asset allocation of individual banks.

The interest differential between lending rates and t-bill rates was decreasing in early stages of financial liberalization in Poland. Domestic banks increased their allocation in t-bills, and decreased their commercial lending even if the real interest rate on t-bills was negative if the risk in commercial lending was too high.

### *Supply-Side Factors: Portfolio Risk*

The seemingly contradictory situation that growing economies can experience financial disintermediation after the transformation from a central planned economy to a market based system has been explained with the increasing overall risk of lending in the transformation economies. In particular, risk for lenders can emerge from lack of information about borrowers which can result in a poor selection of borrowers and consequently in rising default rates.

Various factors indicate that the default risk involved in lending may have slowly decreased in Poland. First, information about borrowers has become more readily available and the information that is available has become reliable e.g. through new accounting laws or better information technology. Second, the relative burden of bad loans in the portfolios of regional and specialized banks in Poland has been slowly decreasing after an initial increase. This is indicated by the decreasing absolute amounts of bad loans and the decreasing relative share of bad loans in the loan portfolio of regional and specialized banks in Poland. The relative measure, BL/TTL, reached its highest point at the regional banks in 1993, and at the specialized banks in 1992. Third, an established weighted average of different asset allocations was used as a measure for asset portfolio risk in Poland. The overall portfolio risk in Poland decreased continuously from 1991 to 2001.

### *Demand-Side Factors: GDP Growth*

In an expanding economy demand for credit is likely to grow to finance investments and to purchase working capital. The overall economic performance of Polish economy increased in terms of GDP growth, unemployment rates and inflation rates. As a result, demand for credit increased too. However, as the new market based system was slowly approaching the output levels of the pre-transition period in Poland, the percentages of loans to GDP continually decreased in Poland since 1991. This shows that despite the fact that the overall economic climate was slowly improving, the growth in loan rates was slower than the economic growth rate.

The fact that despite improving economic conditions real loans were either declining or were not growing as fast as the overall economy could be a result of declining demand for credit in Poland. Declining demand for real credit may in turn be a result of decreasing investment needs, or already high firm indebtedness. However, investment needs of old state owned enterprises (SOE), as well as new private businesses were great. The new market based environment had put pressure on firms to modernize their production facilities to remain competitive. Considering the outdated equipment that the SOEs used, modernization of production facilities would take several years, which made it unlikely that slowed demand for credit was a reason for the decline. Similarly, capital needs of start-up companies were high in the early years of operation, and hence it was unlikely that demand for debt financing slowed down in the most dynamic companies, either.

Demand for more debt financing may be decreased, though, by the fact that industries were highly leveraged in Poland. Corporate debt was a necessary tool to finance investment and pay for working capital as long as the greater costs of obtaining debt financing as compared to internal finance were not reducing the firm's cash flow unduly. Due to the cost wedge between debt and equity finance, however, greater leverage decreased a firm's ability to undertake desired. Thus, a firm may use increased cash flows in an expanding economy to reduce its outstanding debt.

#### **3.4.2.4. Concluding Remarks**

Increased rivalry had two outstanding effects on a domestic banking system in the early stages of financial liberalization. First, it increased the need of domestic banks to improve their know-how, their technology and subsequently their capital levels faster than it would be the case under purely domestic financial competition. Second, while the need to improve the domestic banking system to international standards increased with international financial competition, the ability to undertake these improvements was reduced by international financial competition. As a result the entry of MNBs in the early stages of financial liberalization led to larger decreases of real loans than without international financial competition. The international financial competition decreased the ability of domestic banks to raise their capital. As a result domestic banks in Poland had to compete with MNBs while they were burdened by bad loans, low capital levels, outdated technology and limited banking know-how. All these factors contributed to an increase in the chance of negative cash flow for domestic banks which in return would decrease their lending in market segments that contain higher risk than others. Thus, some sectors which were perceived by banks as riskier than others experienced greater financial constraints than market segments that were perceived as less risky.

#### **3.5. Evolution of the Money Market in Poland**

In Poland, money market instruments are debt instruments with maturities up to 1 year. The money market instruments used are interbank deposits, Treasury bills, NBP bills, repo, and buy-sell-back transactions, fx swaps, short-term debt issued by the corporate sector and bank short-term debt instruments (certificates of deposit).

In 2002 and 2003, the Treasury bill market was the most important segment of the short-term debt securities market. Issues of short-term bank and corporate bonds were small. FX swaps were the most liquid investment instrument but unsecured deposits were still playing the most important role in domestic bank liquidity management. The conditional transactions market was the least developed segment of the deposit transactions market (NBP, 2003-2003).



Table 3.1. Outstanding value of individual money market instruments as at year-end (PLN billion)

Treasury bills	35.2	42.0	48.1	46.9
Money market bills	14.3	7.3	6.0	5.7
Short-term corporate bonds	n/d	8.0	7.3	6.5
Short-term commercial bank debt securities	1.8	2.8	3.5	2.7
Unsecured deposits (interbank deposits)	15.3	10.0	10.1	25.1
Secured deposits	n/d	n/d	n/d	n/d

Source: NBP, 2004.

Compared to 2003, the outstanding value of short-term debt securities issued by all types of issuers (the Treasury, commercial banks and enterprises) decreased. As in previous years, in 2004, the Treasury bill market was the largest segment of the short-term debt securities market. FX swaps remained the most liquid investment instruments; they were most commonly used by non-residents to finance their investments in Treasury bonds and speculate on the zloty exchange rate. Commercial banks managed their current liquidity position mainly on the unsecured deposit market. The conditional transaction market was developing slowly (NBP, 2005).

### 3.5.1. Treasury bills

#### *Basic characteristics of the instrument*

The first issue of the Treasury bills was realized in May 1991. Treasury bills are bearer securities, with maturities ranging from 1 week to 52 weeks. Maturities of T-bills offered during the Ministry of Finance auctions are mainly 13, 26 and 52 weeks. Starting from July 1995, only dematerialized bills are issued (in electronic, book entry form). Treasury bills are sold with a discount and their yields are calculated on the basis of 360-day year. The nominal value of one bill is PLN 10,000.

#### *Market size*

In 1990, T-bills were the main instrument of funding the borrowing requirements of the Budget. In time, their role was taken over by T-bonds and volume of T-bills in circulation gradually decreased. In 2001, unexpected dramatic growth in the budget deficit led to the

increase in the size of the issue of T-bills. In 1998-2001, the nominal volume of the T-bills in circulation varied between PLN 23 billion and PLN 36 billion. At the end of 2003, Treasury bills accounted for around 18% of the entire domestic debt securities market (NBP, 2004).

The Treasury bill market was the second largest segment of the domestic debt securities Market in 1999-2004. In 2004, its share in this market reached 15.2% (a decline of roughly 3% compared to 2003). At the end of 2004, the outstanding value of Treasury bills issued was PLN 46.9 billion and declined by PLN 1.2 billion compared to 2003. At the same time, the total outstanding value of Treasury securities issued domestically increased to PLN 286.9 billion (NBP, 2005).

Since the demand for T-bills is always higher than the supply, the main factor shaping the size of their issues was the borrowing needs of the government.

#### *Market organization*

##### Primary market

Treasury bills are offered by the Ministry of Finance. The auctions, for T-bills are organized by the NBP, which acts as a government agent. Auctions are being realized regularly during the first working day of the week. Depending on the requirements of the government, the Ministry of Finance may realize additional auctions. The auctions are American auction in nature; therefore buyers pay prices, which they offered.

Only institutions meeting the requirements of the Ministry of Finance Issue Ordinance of August 26, 1999 can involve in auctions. The compliance with the Issue Ordinance is quarterly audited by the NBP. In 1998-2005, the number of direct participants, which were mainly commercial banks, usually varied from 40 to 50.

In 2003, the value of Treasury bills issued amounted to 57 bn zloty<sup>252</sup> (compared to 45.7 bn zloty in 2002). In 2002 and 2003, the Ministry of Finance issued primarily 52-week Treasury bills (NBP, 2004).

Table 3.2. Polish Treasury bills by maturity , %

Treasury bills	2001	2002	2003	2004
8-week	0.4	0.0	0.0	0.0
13-week	8.1	3.9	4.9	3.3
26-week	14.2	5.0	6.1	1.2
39-week	4.2	1.7	0.0	0.0
52-week	67.5	89.4	82.9	95.5
Other	5.6	0.0	6.1	0.0
Total	100.0	100.0	100.0	100.0

(NBP, 2005)

The improvement in the budget position led the value of Treasury bills issued to decline from PLN 57.0 billion in 2003 to PLN 48.7 billion 2004.<sup>294</sup> In 2004, the importance of 52-week bills rose further. 13- and 26-week bills were introduced to the market according to the current needs. Expectations of interest rate increases in 2004 resulted in a rise in the demand for Treasury bills relative to their supply. In 2004, the ratio was 2.33 whereas in 2003 it increased to 2.7.

#### Secondary market

Domestic banks, which act on behalf of their customers, are the main group participating in the secondary market.

In 2001, the proportion of the five biggest banks in the overall trade was 61%, which was 10 percentage points higher than in 1998. This reflects the tendency for the market concentration. An important role in the development of the market was played by the money market dealer banks, which was modified in 1996 (see Box 1). Typical volume of interbank market transactions range from PLN 2 to 20 million, while the sizes of transactions between banks and their clients vary from PLN 10 thousands to PLN 2 million (NBP, 2002).

Until 2001, turnover on the secondary Treasury bill market increased slightly. In 2002 and 2003, the liquidity of the market developed dynamically. As a result, the liquidity ratio of Treasury bills increased from 2.88 in 2001 to 6.58 in 2003. High turnover on the Treasury bill

market did not derive from the investors' robust activity on the outright transaction market but rather from the increasing popularity of conditional transactions. Sell-buy-backs and repos made up 87% of gross turnover in 2002, and 93% in 2003 (NBP, 2002).

In 2004, after a period of fast growth, the gross turnover in Treasury bills stabilized at PLN 3,546 billion declining by 0.5% relative to 2003. As a consequence, the liquidity ratio of Treasury bills declined from 6.58 in 2003 to 5.86 in 2004. Higher investors' interest in securities with short maturities was, in the period of interest rate rises, one of the reasons for a smaller decline in Treasury bill turnover compared to bond turnover (NBP, 2005).

#### *Settlement and depository system*

All transactions conducted in the secondary market are registered in the Central Register of Treasury Bills ("CRTB"), operated by the National Bank of Poland

#### *Investors*

Three types of investors can be registered in CRTB and these are domestic banks, domestic non-bank institutions and foreign entities. The investor structure has changed in the late 1990s. The portion of the banking sector has significantly decreased and was substituted by the non-banking domestic institutions sector.

The most dynamic growth was displayed by insurance companies and households. The share of foreign investors was the highest in mid 1998, when it reached 10%. In 2001, it amounted to only 3%. The weakening demand of the foreign investors was a result of liberalization of the foreign exchange law. Foreign investors prefer fx swaps as synthetic short-term zloty instruments.

Additional source of information on the structure of investors in the Treasury bill market are reports of money market dealer banks. They offer a more detailed breakdown of the domestic nonblank sector into particular categories of investors..

### Market liquidity

Liquidity of a market can be assessed with the help of various criteria such as the volume of turnover, the ratio of turnover to the value of the issue and the size of spreads between asked and offered prices of Treasury bills in the secondary market.

### Gross turnover

In the early 2000s, the total monthly gross turnover of the T-bill market (including repos and sell-buy-backs) varied from PLN 41 to 147 billion. In this period, the turnover of the T-bill market was continuously increasing, despite periodic declines.

### Liquidity ratio

The ratio of the turnover to the stock of Treasury bills confirms decreasing liquidity of the Treasury bill market, which took place in the second half of 2000, despite the increase in the volume of conditional transactions. A similar ratio, calculated for outright transactions alone, signals even greater decrease in the market liquidity.

### Price spreads

The size of spreads in the interbank market also illustrates deteriorating liquidity of the market. Although the turbulence in the interbank market (Russian crisis), and the Year 2000 Problem caused a significant volatility of spreads, the growth of average spread from 23 basis points in the first half of 2000 to 29 basis points in the second half of the year confirms a decrease in the liquidity of the market.

### Yields

Yields in the T-bills primary market varied between 8% and 25% in 1998-2001. The first quarter of 1998 witnessed yields around 23-24% and following quarters three quarters experienced a constant and significant decline up to 13%. In the first three quarters of 1999, yields in treasury bills in the primary market was relatively stable between 12-13% and gradually increased to slightly over 16% in the last quarter. In 2000, yields experienced fluctuations between 16% and 19% but increased to 18% at the end of the year. In 2001, yields experienced a down move to a level below 12%. The decrease in yields continued in 2002 and reached around 6%. In 2003, average yields was about 5.5% and ended at close to

%6 (NBP, 2003). From 1998 to the third quarter of 2003, except for short periods, the yield on Treasury bills was below the NBP reference rate.

### **3.5.2. National Bank of Poland money market bills (NBP bills)**

#### Basic characteristics of the instrument

NBP bills (issued since 1990) are bearer securities. Money market bills are sold at a discount, and their yields are calculated on a 360-day basis. Nominal value of one bill is PLN 10,000. Since May 1996, NBP bills are issued in dematerialized form (electronic book-entry) (NBP, 1998-2001).

#### Market size

The volume of the issue of money market bills depends on the volume of the excess of liquidity in the banking sector. In 1998-2001, the stock of money market bills varied from PLN 9 billion in January 1998 to PLN 31 billion in February 1999. In late 1999, as a result of an increase in the demand of banks for liquid assets, which was attributed to the Year 2000 Problem, the stock of money market bills decreased temporarily to PLN 11 billion. In February 2000, the stock was over PLN 24 billion again.

The size of the money market bills differ significantly in 2001. In February, the stock reached PLN 24.3 billion, which derived from a growth in the liquidity of banks after the central government sold foreign currency revenues to the National Bank of Poland. The lowest level of the stock of NBP bill issue was recorded in November and December (PLN 6-6.8 billion), when banks had liquidity problems. This derived, among others, from a significant involvement in the NBP operations in October and from the growth of central government term deposits in the central bank, which “sucked” funds out of the banking system.

In the period from December 2001 to December 2003, the outstanding value of money market bills issued declined by 8.27 bn zloty in balance sheet terms. The fact that the outstanding value of bills issued was lower than in 2001 (Figure 6.1.8) resulted from the decreased operational excess liquidity within the banking system.

Between 2002 and 2004, the excess liquidity of the banking sector, as indicated by the balance of money market bills issued and outstanding, decreased gradually. From April 2004, short-term excess liquidity was largely absorbed by the Ministry of Finance, which held a large amount of interest-bearing zloty time deposits in its central bank account (PLN 12.19 billion on average in 2004 and PLN 6.07 billion in 2003).<sup>300</sup> This was the main cause for the lower value of bills issued and outstanding (on an annual average basis, it was lower by around PLN 0.9 billion compared to 2003). The value of money market bills issued and outstanding at the end of December 2004 totalled PLN 5.74 billion, a decrease by PLN 0.26 billion from the previous year (NBP, 2005).

## Market organization

### Primary market

The issues of NBP bills are an instrument of the monetary policy. Money market bills are sold in auctions (American auction), although the NBP reserves the right to sell the bills on a bilateral basis. The auctions were organized irregularly, in the periods when the excess of liquidity in banks put a pressure on market interest rates. Only the money market dealer banks and the Bank Guarantee Fund had the right to participate in money market bills auctions (NBP, 1998-2001).

### Secondary market

Money market bills are traded in the interbank market. The trade takes form of outright transactions, repos and sell-buy-backs. In 2000, the proportion of five most active banks in the total turnover was 57.8%, which was 8 percentage points less than in 1998. The average value of a transaction in the interbank market is nearly PLN 100 million. Both outright and conditional (repo, sell-buy-back) transactions are conducted on the interbank market. The share of conditional transactions in total net turnover in 2003 accounted for around 7%. In 2004, secondary market turnover was less than half 2003. Both the number of outright transactions and repos fell.

### Settlement and depository system

All transactions in the secondary market are recorded in the Register of Money Market Bills operated by the National Bank of Poland. RMMB is an electronic system, in which the accounts of direct market participants are being kept. The register supports all types of market

operations, though, contrary to the CRTB, it does not allow for the identification of repo and sell-buy-back transactions.

#### Investors

According to the Resolution No 35/2000 of the NBP Management Board of November 24, 2000, on the issuance of NBP bills only domestic banks and BGF (Bank Guarantee Fund) are allowed to trade the instrument. Thus non-bank institutions and foreign entities are not able to buy the bills.

#### Market maturity

##### Gross turnover

Similarly to the Treasury bill market, a growing share of transaction falls on repos and sell-buy-backs. The only source of data on the structure of conditional transactions is the reports of money market dealer banks. Relying on these reports, the NBP estimates that approximately 35% of the turnover is the result of the conditional operations. The highest activity of banks is recorded immediately after the settlement of auctions, when money market dealers are reselling securities to other banks.

#### Liquidity of the market

A growing ratio of quarterly gross turnover in relation to the stock of NBP bills illustrates the increase in the liquidity of the market. This ratio increased from 49% in the first quarter of 1998 to 369% in the third quarter of 2000. In the following period this ratio was gradually decreasing in the consecutive quarters of 2001, to drop to 72% in the fourth quarter of the year. The decrease in the ratio was probably the result that the NBP did not take the volume of secondary market trading as one of the criterion in the selection of money market dealers.

#### Yields

Average yield of NBP money market bills in the primary market was around 24% in the first five months of 1998 and then gradually decreased up to 16% by the end of the year. The constant decrease continued during the first two months of 1999, but fixed at roughly 13% in the following six months and then continuously rose up to slightly over 16% and stayed in that level in the last four months of 1999. In 2000, average yields rose from 16% to 19% with



horizontal moves. The next year, however, average yields decreased from 19% to slightly below 12% (NBP, 2001).

### **3.5.3. Short-term commercial debt securities**

Short-term securities of nonbank institutions bear different names, which results from different legal base for an issue and marketing activities of banks organizing the issues.

#### **3.5.3.1. Commercial papers**

Basic characteristics of the instrument

Commercial debt has been issued since 1992. They take both the material and dematerialized form. There are two types of commercial paper: discount and coupon papers. They are issued both as bearer and registered securities, with maturities ranging from 7 to 364 days, although the dominant type are papers with maturities up to 3 months. Yields are calculated on 360-day basis. The legal base for an issue of commercial paper are Civil Code, Law on Bills of Exchange or the Law on Bonds. They are competitive instruments to the short-term bank loans.

Market size

The benefit for entities obtaining funding this way is the relatively low cost of money. The benefit for investors is yields, which are higher than in T-bill market. The stock of commercial paper increased from PLN 5.4 billion in 1998 to PLN 12.8 billion in 2001.

The size of individual issues varied from PLN 140 million to PLN 1 billion. The greatest volumes of commercial papers were issued by Elektrim (PLN 750 million), Thomson Polkolor (PLN 700 million), McDonald's (PLN 350 million).

The outstanding value of SBDS at the end of 2004 accounted for about 0.9% of the entire Polish debt securities market and 60.3% of total debt securities issued by banks. Short-term debt securities issued by monetary financial institutions in euro area countries accounted for 11% of the total value of outstanding debt securities issued by such institutions. The outstanding value of SBDS at the end of 2004 accounted for about 0.9% of the entire Polish debt securities market and 60.3% of total debt securities issued by banks. The reduction in the

amount of SBDS issued in 2004 was mainly caused by expiration of the capital gains tax relief on January 1, 2004 (NBP, 2005).

## Market organization

### Primary market

A peculiarity of the Polish commercial papers market is that the issues of the instrument are not public, because they are offered to less than 300 investors. The main reason for this was the high cost of public issue and long procedures of public trading.

The main group of issuers of commercial paper is enterprises. Commercial papers were also issued by non-bank financial institutions, as National Investment Funds and leasing companies.

Issues are organized by agent banks, which distribute the securities among investors. The agent banks, which participate in the issue of commercial papers perform also other functions: organizers of secondary market, clearing custodians, and underwriters of an issue.

### Secondary market

The secondary market for commercial papers is illiquid, since investors treat commercial papers as investment instruments and hold them until maturity. Among the most important barriers to the development of the commercial papers market are: a large portions of the stocks is held by banks, which realize the function of agents, relatively high margins realized by the issue agent, which lowers yield for investors, the absence of a uniform legal basis for the issue of short term debt instruments, the absence of a centralized depository for commercial papers.

### The depository and settlement system

The provisions of the Law on Public Trading in Securities allow the NDS to maintain a depository of non-public securities. Due to the high cost and complex procedures of registration of an issue in the NDS, no issue of short term debt instruments has been registered in the NDS yet.

Most frequently, the register of investors is managed by the agent bank, which distributes the issue in the primary market. Such registration (conducted by a uniform clearing and settlement chamber), would be a better solution for the development of a commercial papers market.

#### Investors

The dominant groups among the investors in CP market are banks and corporates. From January 2000 to December 2001, the share of investment funds increased. In this period, foreign investors' participation in the commercial papers market did not exceed 0.59% of the value of issue. This reflected both the restrictions of the Foreign Exchange Law and the illiquidity of the secondary market (NBP, 1998).

#### Market liquidity

No statistical data are available about the turnover in the commercial paper market, however, the limited size of individual issues, the absence of a central register and the limited access of foreign investors resulted in the assumption that the turnover in the secondary market is low.

#### Yields

The spread between commercial paper and T-bill market is around 1-2 percentage points.

### **3.5.3.2. Certificates of deposit**

#### Basic characteristics of the instrument

Certificates of deposit have been issued in Poland since 1997. It is worth mentioning that after the effective date of the new Banking Law on January 1, 1998, all bank securities of which issue is based on the Law (including certificates of deposit) must include the phrase "bank security" in the name of the security. This name distinguishes bank securities from other securities, which may be issued by banks.

Bank securities may have a material and dematerialized form. In practice, the certificates of deposit are bearer instruments and have a material form. Their yields are calculated on a 360-day basis. The nominal value of one certificate depends on the individual issue.

## Market size

The dominant maturity of certificates of deposit is up to 1 year (approximately 90% of bank debt instruments issue). In 1998-2001, the total value of bank debt, resulting from the issue of certificates of deposit was increasing constantly and varied between PLN 57.2 and PLN 1,488.9 million in some months.

Polish banks are not interested in the issue of certificates of deposit due to the excess of liquidity in the banking system and the mandatory reserve requirement regarding the liabilities from the issue of certificates, when they were purchased by non-bank or foreign entities. In 2000-2001 the issue of certificates of deposit grew by 43%. The main contributors to the growth were specialized banks, which do not have branch networks, and which obtained funding this way. A good example of such issuers is banks financing car dealers (e.g. Opel Bank S.A. and Volkswagen Bank Poland S.A.) (NBP, 2002).

In 2004, the average daily net turnover in the interbank deposit market decreased by PLN 0.3 billion compared to 2003 and amounted to PLN 7.4 billion. Transactions with maturities of up to one week prevailed.

## Market organization

### Primary market

The distribution of certificates of deposit is usually realized by other bank than the issuer. The agreements between the issuer and the agent bank intend to broaden the scope of the issue of certificates of deposit. Banks, which are active in the commercial paper market, are also active in the CP market. They offer the issuers the services of a payment agent (or sub-agent), custodian or a sub-custodian.

### Secondary market

Secondary market is practically non-existent due to the limited size of the issue.

### Investors

The share of corporates accounts for 50% of the market in 1998-2001. Households were the second most dominant investor group with 23% in purchasing certificates of deposit. Foreign

investors did not show much interest in purchasing bank securities. This results from a limited size of the issue, the limitations of the Foreign Exchange Law and low liquidity of the market.

#### Market liquidity

Information about the value of the turnover in the secondary market is not available. The small size of issues resulted in assumption, that the scale of trading is small.

### **3.5.4. Repo and sell-buy-back transactions**

#### Basic characteristics of the instrument

There are the two basic types of conditional transactions: repurchase agreements (repo) and sell-buy-back and buy-sell-back (SBB/BSB) operations.

Repo and SBB/BSB are transactions where one of the parties sells securities, simultaneously agreeing to repurchase the securities at an agreed price and on a date specified in the agreement.

The fundamental difference between repo and SBB is that the former is based on one agreement, while the latter on the two agreements (sale of securities in spot market and purchase of securities in forward market).

Repo and SBB can be treated as collateralized deposits. The deposits obtained in the repo market are subject to mandatory reserve requirement (with the exceptions specified in the Law on the NBP). No such requirement applies for SBB. For these reasons, repo is used mainly to obtain funds in the interbank market, while the SBB operation is used by banks in transactions with nonbank institutions. Repo transactions allow for an alleviation of limitations resulting from credit ceilings set between banks.

Interest on such transactions is negotiable according to WIBID and WIBOR9 rates, and yields are calculated on a 365-day basis. Repos and SBB are short-term operations. A majority of operations (80-90% in the case of SBB and over 90% in case of repo) are operations with

maturities less than 7 days. The remainder are transactions executed for periods of up to 1 month.

An average value of a repo and SBB transaction depends on the type of entity, with which a transaction is executed. In case of repo it amounted to PLN 96 million in 2001, and in case of SBB to 118 million. The transactions executed with non-bank entities did not exceed PLN 5-7 million.

#### Market size

Repo market size (measured by the balance of operations) reached in the third quarter of 2000 the value of PLN 0.6 billion for Treasury bills and PLN 1.1 billion for money market bills. During the entire year 2001, the market size of the repo market was systematically declining. At the same time the balances of SBB market were increasing. The average market size in the fourth quarter of 2000 reached PLN 5 billion and it increased to PLN 10 billion in the fourth quarter of 2001 (NBP, 2002).

The decreasing size of the repo market resulted from decreasing issue of money market bills, which constitute the main collateral used by banks. Another reason was an increased attractiveness of the synthetic deposit market (fx swaps).

#### Investors

Mainly the domestic banks participated in the repo market. This resulted from the fact that based on the resolution of the NBP Management Board<sup>10</sup>, the NBP bills are available only for banks (with the exception of the Bank Guarantee Fund). The share of the institutions in the total turnover of the repo market in 1998-2001 exceeded 99%.

The SBB transactions were executed between banks and with non-bank entities. The share of the interbank operations was declining and reached 53% of turnover at the end of 2001. The first SBB transactions with foreign entities were executed in the beginning of 2000.

#### Market liquidity

##### Gross turnover

While the value of turnover on the SBB market was displaying a constant growing trend (from PLN 110 billion in 1999 to PLN 878 billion in 2001), the repo market turnover declined to PLN 86 billion in 2001, after the initial growth from PLN 89 billion in 1998 to PLN 225 billion in 2000. Turnover in the SBB market increased by 699% between 1999 and 2001. At the same time, the turnover in the repo market increased by 154% in the period of 1998-2000, to decline by 62% in 2001. The reason for the decline is that the repo transactions were secured almost solely by the NBP money market bills and there was a decline in their issue in 2001 (NBP, 2002).

Quarterly values of the liquidity indicator for the repo transactions in 2001 ranged between: 4.3 and 7.2 for transactions secured by Treasury bills, and between 9.1 and 22.4 for transactions secured by the NBP bills.

The quarterly values of the liquidity indicators for the SBB market and for the market for repo market declined in 2001. The levels of liquidity indicators of the market for repos on Treasury bills remained unchanged.

Among the fundamental barriers to the development of the market for deposits secured by securities were legal issues. To stimulate the development of the deposit market, “Recommendations regarding the execution of repo and SBB transactions” were introduced in 1999. This document was approved by the Polish Banks Association in 2001.

#### Yields

In 2000 and 2001, the average monthly yields in the repo market were, on average, 1 percentage point below the average monthly WIBOR. The NBP does not have data on yields in SBB market. Considering the fact, that a SBB is in fact a type of repo transaction, one can assume, that yields on such operations were similar as in the case of repo transaction.

### **3.5.5. Interbank deposits**

#### Basic characteristics of the instrument

Interbank deposits are the key instrument for liquidity management in banks. Transactions in interbank market are based on Article 49 and 50 of the Banking Law. In the interbank market

banks are borrowing funds held with central bank. Interbank deposits are not collateralized. Thus they bear relatively high credit risk. As a result, bank management boards impose limits on operations in depo market.

Although the interbank deposits were used since the end of the 1980s, only after the consolidation of the bank accounts in the Headquarters of the NBP in 1993, did a nationwide market emerge.

In 1998-2001, 45.7% of interbank deposits had maturities up to 1 month and 59.6% of deposits had maturities of up to 2 months. The share of deposits with maturities longer than 12 months varied from 2.8% (in December 2000) to 32.2% (in December 1999) of the total. Long-term deposits were made mainly in banks affiliated with the lending banks (NBP, 2002).

The average annual value of a single transaction in the interbank deposit market increased from PLN 24 million in 1998 to PLN 49 million in 2001.

#### Market size

Value of funds placed in the interbank deposit market was constantly growing: from PLN 11.1 billion in January 1998 to PLN 22.1 billion in December 2001. The highest level of funds borrowed in the interbank market in the analyzed period (PLN 33.1 billion) was recorded in October 2000. The decline in the value of funds borrowed in the interbank deposit market in 2001 was partly a result of the PKO BP SA transaction with the central bank, under which PKO BP SA invested PLN 7.5 billion in the 91-day NBP bills. The declining scale of the trade in the depo market influenced also the repo market, the sell-buy-back market and the fx swap market.

#### Market organization

Mainly the domestic banks are participants in the market, since only domestic banks hold accounts with the NBP.

#### Market liquidity

#### Gross turnover



The scale of the trade in the depo market was gradually growing. The average monthly gross turnover increased from PLN 346.9 billion in 1998 to PLN 623.6 billion in 2001 (the highest level of turnover, PLN 719.8 billion, was recorded in July 2001).

#### Interest rates

The average level of interest rates in the depo market is reflected by WIBOR and WIBID. Volatility of the interest rates in the depo market reflects the changes in the liquidity of banks, which results mainly from flows of funds on the accounts of the government and NBP operations. In case of deposits with longer maturities (over 3 months), the changes in expectations regarding the future levels of interest rates are an important factor. O/N interest rates are the most volatile rates.

### **3.5.6. Foreign exchange swaps**

#### Basic characteristics of the instrument

Fx swap is a purchase of the zlotys with foreign currencies in the market and a simultaneous repurchase of the foreign currencies in forward transaction. The buyer of the zlotys in the spot transaction is in fact swapping foreign exchange loan into zloty short-term loan. The buyer of the foreign currency in the spot transaction is swapping zloty deposit into foreign exchange deposit. In both cases the level of interest reflects the difference between spot and forward exchange rate.

The swap market has been developing in Poland since 1999, after the introduction of the Foreign Exchange Law of December 18, 1998, which made Polish zloty externally convertible. A rapid development of the swap market results from the number of uses of the instrument, which:

- offers short-term zloty financing for foreign bond traders,
- enables speculations on the changes of interest rates and exchange rate<sup>14</sup>,
- offers hedge for issuers of FRA contracts.

Fx swaps involving the zloty constituted 80% of the total volume of fx swaps in 2001. In 88% of such transaction the second currency was the US dollar. The share of the euro was 4%<sup>16</sup>.

The data on the turnover structure shows that approximately 75% of fx swaps have maturities up to 7 days. In contrast to the depo market, which is liquid for transactions with maturities up to 1 month, the fx swap market is liquid for much longer maturities, up to 15 months. The minimum size of a transaction in the fx swap market is the equivalent of approximately USD 10 million.

#### Market size

The stock of bought and sold fx swaps increased from PLN 43 billion in December 1999 to PLN 206 billion in December 2001, or four times. FX swaps are the most liquid instruments of the Polish money market. In 2003, the average daily turnover on the interbank FX swap market was 11.8 bn zloty, i.e. over three times that on the spot FX market. In 2004, a further rapid development of the domestic FX swap market in terms of turnover was observed. Compared to 2003, average daily net turnover grew by around 10%, and the share of non-residents went up by 3 percentage points on average (NBP, 2004).

#### Market organization

Fx swap market is a segment of unregulated interbank market.

#### Market participants

The NBP does not have data, which would allow identifying the most active participants in the market. Information obtained indicates that there is a group of 3 to 5 domestic banks, which are particularly active. An important role is played by foreign banks operating from London and Frankfurt. These banks perform the functions of intermediaries (swap-houses) in the fx swap market. The operations of these banks with Polish banks are associated with their core transactions and with hedging customers transactions.

The 67-80% share of non-residents in the trade in fx swap market illustrates the dominant role of foreign banks in the market. The average daily turnover with foreign entities in the fx swap market increased from PLN 348 million in January 1998 to PLN 12,789 million in December 2001, i.e. by 3,575% (NBP, 2003).

Investments in Poland create long position in zlotys in balance sheets of foreign investors, which exposes them to the risk related to a possible fall of the zloty. Therefore, foreign

investors often use fx swaps to finance their investments in Poland to hedge themselves against exchange rate risk.

On the other hand, due to the large interest rate differential, foreign investors were using fx swaps to speculate in the foreign exchange market. Using the combination of spot transaction and fx swap investor can engineer synthetic outright forward. Such speculation offers profits when the zloty does not fall in the spot market below the initial level of the forward rate.

### Market liquidity

#### Gross turnover

In the analyzed period, the volume of gross turnover in the fx swap market increased more than 23 times, from PLN 68.7 billion in the fourth quarter of 1998 to 1,592.9 billion in the fourth quarter of 2001 (Figure 28).

Such a dynamic growth of trade was caused mostly by the increased demand from foreign banks and their customers.

The factor, which also stimulated the development of the fx swap market was the introduction in November 1999 by the Polish Banks Association and the Polish Association of Bank Dealers “Forex Poland” of a standardized agreement for fx swap transactions, which was similar to ISDA (International Swap and Derivatives Associations) agreement.

#### The ratio of gross turnover to the total stock

The analysis of the ratio of the gross turnover and the stock of fx swaps shows large changes in the liquidity of the market. In 2001, the described ratio was falling. It does not necessarily mean a decline in the liquidity of the market. A more probable is that it was caused by lengthening of the average term to maturity of swap contracts and the increasing utilization of such transactions as hedging instruments. In 2002 and 2003, despite the fact that the Foreign Exchange Act was liberalized and opportunities for arbitrage were reduced, the turnover on the FX swap market continued to rise and in 2003 was around 28% higher than in 2001 (NBP, 2004)

## Yields

Interest rates in fx swap market declined from a level of 25% at the beginning of 1998 to a value of 15%. The decline in the first month of 1999 was relatively sharper (from 15% to 10%) and decreased below 10% by the end of the second month. In the following 7 months, yields fluctuated between 7 and 8% and began to rise with the 9th month of the year. After a dramatic increase by 6% (from 10% to 16%), yields continued to increase up to a level of 23% and then ended at 17% at the end of the year. In 2000, yields fluctuated between slightly under 15% (in the second month) and slightly over 20% (in the 11th month) and reached 19% at the end. In 2001, from around 19% to slightly over 11% by the end of the year (NBP, 2003).

#### **4. FINANCIAL LIBERALIZATION IN TURKEY**

In Turkey, financial liberalization took place as a part of economic reforms aiming at creating a liberal economy at the beginning of 1980s. The structural adjustment and liberalization program, which was launched starting at early 1980s, was a milestone in the reforms. The major goal of the program was to enhance the role of market mechanism in the distribution of resources by liberalizing the economy and limiting the state's role in the economy. Before the structural adjustment and liberalization program, which took place in early 1980s, Turkish economy was associated with following characteristics (Ulussever, 2004);

- direct control methods have been implemented in macroeconomic management and led to relatively significant fluctuations in the economy
- the state-owned enterprises have been loss-making and dependent upon subsidized bank loans to keep operating
- the state-owned bank credits have been allocated according to policies and needs of the public sector rather than market mechanism

To deal with these issues, Turkey aimed at transforming her financial structure into a market-based system and began to reform her state-owned enterprises. After structural adjustment and liberalization program, the growth rate of Turkish economy became 4 percent in the long-run and the composition of GDP significantly changed. The proportion of the agricultural products decreased whereas that of industrial products and service sector rose.

The structural adjustment program also resulted in more efficient allocation of resources and improved productivity, which increased with an average of two percent after implementation of the program for several years. Gross domestic savings as a proportion of GNP nearly doubled from about 10 percent in 1980s to about 20 percent in 1990s.

Parallel to efforts to liberalize overall Turkish economy, some steps were taken to create a liberal financial system. Institutions which would operate according to free market mechanism have been established and a comprehensive financial reform was implemented to establish a market-based financial system in 1984. Interest rate liberalization in early 1980s and full liberalization of the capital account in August, 1989 took place steps toward

liberalization. Following policies and goals were main aspects of the new financial system (Ulussever, 2004):

- commercialization of the banks
- creation of more competition in financial markets
- liberalization of interest rate
- Central Bank independence
- Development of policy framework

Fiscal deficits due to poor public finance policies brought about economic instability throughout 1980s and 1990s. Even though the adjustment and liberalization program launched in early 1980s aimed at decreasing fiscal deficits by increasing tax revenues and diminishing public expenditures, public sector continued to give fiscal deficits and the monetary and exchange rate policies could not be liberalized because of the deficits. Lack of fiscal discipline caused an undesirable increase in perceived risk premium on Turkish lira assets, especially on government paper. The links between domestic and foreign interest rates were reinforced and as Celasun, Denizer and He (1999) argued the differential between interest rates in Turkey and abroad was the principal reason for capital inflows.

The risky economic environment shortly explained above decelerated liberalization of Turkish financial system. If Turkish financial system had been fully liberalized following questions would occur (Ulussever, 2004);

1. If credits were allocated based on deregulated financial markets, the banks would be free to determine their own loan and interest rate policies and unprofitable state-owned enterprises would find themselves in much more difficult environment to obtain working capital or fixed investment credits from the banks.
2. Larger budget deficits would lead the government to increase the subsidies to the unprofitable state-owned enterprises as a result of any economic disturbance.
3. Higher central bank independence would disable the government to finance budget deficit through monetization.

#### **4.1. Evolution of Early Financial Liberalization Attempts**

In pre-1980s, Turkish financial system was strictly repressed with various restrictions and regulations. Financial markets, deposit and loan interest rates were under control; exchange rate transactions were fiercely limited and individual portfolios were not allowed to include exchange in stock; reserve ratio and liquidity ratio were high; inflation was high and the economy was unstable. Furthermore, participation ratio of domestic and foreign banks to the system was quite low due to lack of institutionalism in financial system. There was no stock and bond market and the market for Turkish lira was insufficient.

Upon the goal of increasing efficiency in allocation of financial resources, financial liberalization was welcomed as an overall strategy and on July 1980, loan and deposit interest rates were liberalized and certificates of deposits were introduced in order to increase saving ratio and to deepen the financial sector. Capital Law enactment was introduced in 1981 and Capital Market Board was founded to regulate primary markets in 1982. After these first trials of liberalization process and liberalized interest rates, large banks began to compete for deposits in order to take the potential market share. In the third quarter of 1981, the cost of deposits increased because of payment of real interest deposits led to raising deposit interest rates along with no return of credits. In 1980, the ratio of the volume of financial sector to GDP was 15.6% and real interest rates varied between negative amounts of 25% - 40%. In 1982, the ratio increased to 23.1% and positive real interest rates of 7.1% were observed. The first trial of financial liberalization resulted in banks failure in 1982 and Central Bank took the interest rates under control (Koska, 2002).

1983-1987 periods were the periods of establishing the institutions of financial system and Ozal's government's expansionary periods. Capital Market Board launched to regulate the secondary markets, limited deposit insurance system was introduced and in order to decrease the financial intermediation costs, stoppage taxes charged from interest revenue were declined from 20% to 10% in 1983-1984. Quantity restrictions were removed in consistency with foreign trade liberalization. In 1984, allowing domestic individuals to open foreign exchange accounts and to conduct foreign exchange transactions partially eliminated restrictions on capital movements and therefore, foreign reserves of banks increased and banning capital outflows in this context raised resources of banks. Turkish lira began to be substituted with

stronger foreign currencies and this resulted in an inflationist pressure Turkish government. The government increased the deposit interest to increase return on TL assets. Istanbul Stock Exchange reopened in 1985 and was activated in 1986. Interest payment to required reserves was eliminated in 1985 and required reserve ratio was decreased in 1986 in a consistency with new instruments that Central Bank adopted in order to raise the control over money supply. On May 1985, Turkish government securities were traded on a weekly basis with one-year maturity in order to establish interbank markets and to find debt resources in domestic markets by exporting bonds to private sector. After that time, interest rates again were constituted based on market dynamics in accordance with the market's perceptions on macroeconomic goings-on (Koska, 2002: 7).

In 1986, Central Bank declared that it would execute monetary and foreign exchange policies in consistency with the objective of price stability. In 1986-1989, Central Bank set up the necessary markets to allow banks to have their own current accounts and to take the idle savings into the system and to constitute alternative investment areas. As a consequence, in 1986 Interbank Markets and Banks Supervision Directorate were settled and banks became entitled to Treasury and Central Bank determined institutions' independent auditing. Open Market Operations were realized in 1987 led to secondary market in government securities expanded. In 1988, Official Foreign Exchange Market and in 1989 Foreign Exchange Reciprocal Gold Market were settled.

In 1986, foreign exchange deposits became subject to reserve requirements and interest earnings from foreign exchange deposits became subject to taxation, 5%. This taxation ratio rose to 10% in 1988 in order to limit currency substitution and on September 1988 exchange rate for TL had been freed to be settled according to the demand and supply dynamics in markets. Also on February 1988 Central Bank determined lower and upper limit to interest rates in order to prevent huge fluctuations if not being determined according to market conditions (Koska, 2002: 8).

The date of August 1989 is a milestone in the financial liberalization process in Turkey. In that date Decree No.32 was issued and foreign exchange regime regarding capital account transactions was liberalized.



#### **4.2. Decree No.32 and Capital Account Liberalization**

Under decree no.32, value of Turkish Lira against foreign currencies would be determined in order to preserve the worth of domestic currency. Also, fundamentals on savings and transactions both with foreign and domestic currency in both national and international perspective; on all value-creating sphere; on both capital movements and foreign exchange transactions would be determined.

Saracoglu (1997: 14-5) had summarized the fundamentals of the decree on domestic and foreign currency as follows:

- Residents were permitted to buy foreign exchange and freely use their foreign exchange accounts.
- Non-residents were allowed to buy and sell Turkish securities quoted on the domestic stock exchange or government securities and to transfer income and the sales proceed of these securities.
- Residents were permitted to purchase shares that were quoted on foreign stock exchanges or government securities issued by foreign countries.

According to the fundamentals of decree on foreign trade, value of trade-purposed export goods were obliged to be brought into the country and to be documented or sold to banks or private financial institutions, within 180 days. If 70% of the total value was brought and sold in 90 days, possessor could save 30% of the remainder. Also according to the decree, there were no obligatory rules on bringing the value of an exported crude gold. Created revenue due to exchange rate discrepancy after transaction in a time exceeding the legal duration, even within the additional determined time, was transferred to the Support and Price Stability Fund (Destekleme ve Fiyat Istikrar Fonu). Both possessors of the transaction and intermediary institutions paid the values of imported goods, under the fundamentals determined by ministry.

Decree no.32 had allowed foreigners to establish company in the manner of depending on related laws and bringing the anticipated capital. Also residents could make arrangements in the types of license, know-how and technical support with foreigners. Furthermore, residents

were allowed to establish agents and contact offices and to transfer the establishment costs through the banks and private financial institutions.

Also, entrance and exit of stocks and bonds with other types of capital market instruments to/from the country were allowed and residents could export, supply and sell those instruments abroad. Transactions of foreigners (residents) on domestic (foreign) capital market instruments and on real estates, transfers of real estates' selling values were allowed. In addition to those, residents were allowed to procure loan on condition that using those loans through banks and private financial institutions mediation. Domestic banks could also give TL-based credits. Foreigners and residents were allowed to open foreign exchange and gold stock account and possessors and banks determined the related interest rates freely.

According to Boratav and Yeldan (2001:127) the export-led growth idea, which was dependent on wage suppression, depreciation of the domestic currency, and extremely generous export subsidies reached its economic and political limits by 1988 and the last stage of the liberalization program, capital account liberalization, became necessary. Capital account liberalization is expected to increase demand in domestic financial markets and selling public debt securities in those markets would become possible leading to financing public deficits without giving rise in real interest rates. As a result, decree no.32 was issued.

The purpose of that policy was to produce a more liberalized exchange rate system, to accelerate the integration on financial markets and also facilitate the progress of capital markets by eliminating the barriers (Binay et.al. 1999: 40). Saracoglu (1997: 6) argued that the principal goal was to increase the operational and allocative efficiency of the system via liberalization and raised competition and increase monetary policy effectiveness, especially stabilizing the value of the Turkish Lira.

#### **4.3. The Period after Capital Account Liberalization**

Capital account liberalization increasingly caused the economy to become dependent on the newly emerging financial cycles. Significant leakages from net inflows, i.e. via capital outflows and reserve accumulation changed the conventional linkages among growth, current account balance and capital flows. Finally, arbitrage-seeking ("hot money") inflows and

outflows started to create a rising share within capital movements, and caused an increase in external and domestic instability (Koska, 2002).

After capital account liberalization and financial liberalization, the public sector's share in financial market continued to remain high. No significant change was observed in financing patterns of corporations and credit financing from the banking sector did not vary. In addition to these, the proportion of private sector securities in overall financial assets declined. The commercial banking system continued to be the major buyer of Treasury bills and marketed T-bills to real persons via the repo operations. In 2000, the repo-reverse repo trading volume reached US \$ 221 billions (110% of the GNP) from US \$5 billions in 1997. Securitized debt deficit financing via T-bills and other debt instruments resulted in an overall upward movement in interest rates involving the deposit rates. Positive interest rates and new possibility of foreign exchange accounts brought about financial deepening for households. These developments also led to increased foreign exchange deposits with substantial currency substitutions. As a consequence of these and previous developments, in Turkey, financial deepening took place via public sector securities and the foreign exchange deposits during the periods of 1980s and 1990s (Boratav and Yeldan, 2002: p. 8-9).

Turkey's financial liberalization endeavor contradicts with McKinnon-Shaw hypothesis of financial deepening leading portfolio selection from "unproductive" assets to those creating fixed capital formations. During the early process of financial liberalization Turkish banks operated as rentiers making huge arbitrage gains when adequate environment occurred. The same banks were quite in vulnerable to exchange rate risk.

High interest rates offered by the government bonds and treasury bills resulted in dominance of finance over the real economy. Commitment to high interest rates and cheap foreign currencies did not allow interest rates to decrease. When the current account distorted as a result of overvalued TL, the strategy used to prevent capital outflow was to further increase domestic interest rates (Boratav and Yeldan, 2002: p. 9-10)..

Financing public deficits with short-term capital flows based on overvalued TL from suppressing exchange rates after liberalization process distorted trade balances and dramatically increased foreign trade deficits. The imports increased by 100% whereas the

exports increased by just 25% in the 1988-1993 period. Foreign trade deficit, which was US \$2.6 billion in 1988 increased to US \$ 4.16 billion in 1989, to US \$9.3 billion in 1990 and then to a record level of US \$14 billion in the period 1991-1993. Within 5 years (from 1988 to 1993) foreign trade deficit increased as more than five times widely due to the overvaluation of TL after issuance of Decree No. 32, capital movement liberalization (Koska, 2002, p. 17).

High economic growth rates, despite high inflation rates throughout 1980s, can be explained by the policies overvalued TL, which increased import consumption. Foreign exchange rates had decreased from 1985 to 1987, which was an economic stagnation period, and reached 1982 levels after devaluation of TL. Contrary to this, exchange rates continued to decrease and reached the lowest levels of the decade in 1994, when TL was devaluated.

Despite of negative real interest rates observed in the very early 1980s, time deposit real interest rates reached a positive value of 7% for the first time in 1982 and 8.5% in 1986. The real interest rates again experienced negative value in 1987-1990 period. In the period of 1991-1992, real interest rates on three-month time deposit were, respectively, 6.5% and 8.2%. In 1993-1994 period, on the other hand, real interest rates declined to around 2.5% (Koska, 2002, p. 19).

Turkish economy experienced increasingly huge foreign trade deficits in late 1980s and early 1990s. Ill-timed liberalization of capital accounts in 1989 and uncontrolled financial liberalization created an economic environment that is politically and financially fragile. The financial system was based on volatile short-term capital inflows, which was open to speculations. Huge deficits in public expenditures, low real exchange rates and high interest rates increased market volatility and inflationary pressures.

High market volatility and increased perceived country risk resulted in capital outflows. In 1994, net outflows by non-residents reached 4.8% of GNP. The difference between two successive years (1994 minus 1993) was US \$ -19.1 billion. The net reversal of both non-resident and resident flows in 1994 compared with 1993 was US \$ -12.8 billion (9.7% of GNP). The capital movements forced the government into two successive devaluations of TL and resulted in 6.1% contraction in GNP.

Negative impacts of capital movements in were also observed in consecutive years. 1998 minus 1997 capital flows of non-residents were US \$ -7.6 billion. Residents' flows were also outward and US \$ - 417 million. Total of capital outflows were US \$8 billion, which was 3.9% of GNP.

After a 6.1% decline in real GDP, an exchange rate-based disinflation and stabilization program was launched. IMF was financially supporting and monitoring the program. The program aimed at decreasing the annual inflation rate from 68.8% in CPI and 62.9% in WPI to, respectively, 25% and 20% as of end 2000. Furthermore, it targeted 20% appreciation of TL with respect to US \$. The program was quite successful in attaining the objectives during the first 10 months. However the last weeks of 1999 and first weeks of 2000 experienced some negative developments. In mid-2000, real interest rate, which was around 33% in 1999, declined to zero, but Turkey continued to receive foreign capital inflows. Even though the exchange rate basket rose by 20.3%, WPI and CPI Indices increased by, respectively, 32.7% and 39.0%. These developments indicated real appreciation of TL and perceived as foreign exchange risk by foreign investors. Foreign investors who had concerns for rapidly increasing foreign trade deficit, which reached US \$9.5 billion, and appreciation of TL called their short-term loans to Turkish banks. Turkey, which received more than US 15.5 billion as net capital flow in the first ten months of 2000, encountered a huge capital outflows in early 2001. Rapid and enormous capital outflows within a very short term, again, brought about devaluation of TL and a financial crisis in which overnight interest rate recorded with 7000%. By the end of 2001, interest rates on public borrowing, inflation and rate of change in the nominal (weighted) exchange rate were, respectively, 0.36, 0.327 and 0.203.

#### **4.4 The Situation of the Banking Sector After Liberalization**

As explained above, 1989 and 2000 are two milestones in the liberalization process of Turkish financial system. Thus, the period before 1989, that between 1989 and 2000, and one after 2001 should be separately analyzed and compared with each other to observe effects of liberalization on the financial system in general and on the banking sector in specific. In this part of the study, performance of the banking sector in the three periods pointed out above was examined based on basic financial data. Statistics of 1988, 1999 and 2006, one year

chosen for each period, were presented and changes were analyzed to investigate probable impact of financial liberalization on the banking sector.

While analyzing the effects of the financial liberalization, we should take into account the high rated inflation experienced in post-1980 period due to increased public finance deficits as well. This had negative effects on both assets and liabilities of banking sector as well. With the decreasing inflation environment after 2002, structure of assets and liabilities of Turkish Banking Sector indicates that Banking reverts to type.

#### 4.4.1.Asset Structure

Table 4.1: The Structure of Assets in the Banking Sector

(Thousand NTL)	1980	1988	1999	2006
<b>Total Assets</b>	<b>1633</b>	<b>68.355</b>	<b>72.120.858</b>	<b>460.988.505</b>
State Banks	<b>795</b>	29.492	25.182.230	137.878.913
Private Banks	<b>734</b>	29.927	35.679.111	263.278.713
Banks Taken Over By SDIF	-	-	4.054.017	1.025.769
Foreign Banks	<b>47</b>	2.444	3.765.998	44.115.919
Development & Investment Banks	<b>53</b>	6.492	3.439.502	14.689.191
<b>Total Loans</b>	<b>945</b>	<b>27.750</b>	<b>21.714.974</b>	<b>203.753.107</b>
State Banks	<b>526</b>	13.000	6.124.954	41.782.427
Private Banks	<b>359</b>	9.964	11.962.635	127.672.143
Banks Taken Over By SDIF	-	-	750.193	21.035
Foreign Banks	<b>17</b>	818	620.112	25.091.821
Development & Investment Banks	<b>43</b>	3.968	2.257.080	9.185.681
<b>Impaired Loans</b>		<b>1.994</b>	<b>2.327.282</b>	<b>7.773.049</b>
State Banks		1.067	611.057	2.408.366
Private Banks		472	434.029	4.385.568
Banks Taken Over By SDIF		-	1.220.944	96.732
Foreign Banks		46	16.838	716.072
Development & Investment Banks		409	44.414	166.311

Starting from 1980 and up until 2006, 80% of total assets on an average consist of liquid assets and credits (loans). The share of liquid assets has increased considerably from 2001 to 2006. If we look at the asset structure of the state banks and the banks taken over by SDIF, as definition of Liquid Assets comprises Securities Portfolio (SP), we see an increase owing to Government Domestic Borrowing Instruments transferred to state and SDIF banks in the banking sector re-structuring process. Duty loss (functional loss written off) of Ziraat Bankası and Halk Bankası being 7% of total balance sheet size have been removed from Credits sub-

item as from 1998 and shown in Other Assets item. For that matter, the share of credits in total assets of state bank and banks taken over by SDIF has declined

On the other hand, if we look at Table 4.1, we see that the total loan portfolio of the private banks increased significantly especially with the effect of the decrease in interest rates, increase in consumer and investor confidence and increase in total investments. The share of loans within the total assets and also the share of loans provided by private banks within the Banking Sector have increased with the effect of shrinking Securities Portfolio of private banks. Different from the previous periods, retail banking is the new target of all private banks in the new environment.

#### Credits (Loans)

As governments tended to cover the increasing public deficit by means of domestic borrowing in high inflation periods, the rate of Credits in Total Assets has decreased gradually. Looking at the main reasons for the decline in share of Credits within this framework, we can say that public borrowing papers included in Securities Portfolio have carried lesser risk than Credits and that high credit interest rates has posed non-performing loan hazards and that government domestic borrowing instruments have offered higher return, and all such factors led the way to a limited use of Credits in banking sector until 2002 period both for the state banks and for the private . Besides, credits made available by banks taken over by the Fund have gone out of the system and demand for credits has remained limited due to high interest rates and triple-audit program launched by the BRSA (TBB, 2002).

In rising inflation periods, credit-demanding actors have suppressed their demands due to bad predictability about economy and to high inflation rates and, on the other hand, banks have considered credit placements to be risky and opted for shifting their placements towards in GDBIs for they offered higher return in real basis. All such factors led to a decline in the share of Credits in Total Assets. However, while the downward trend in inflation as from 2002 has led the way to an environment of trust and to a rise in credit demands, Credits have begun to rise again. Also together with the entry of the foreign capital into the banking sector starting from 2002-2003 period, the competition among the private banks started to increase and with the decreasing inflation, banks started to compete for higher market share in the loan market.

Finally, it is seen on looking at composition of credits extended by banks that there is an increase in favor of Turkish currency and that such increase is mostly driven by consumer credits. Consumer credits being 90% in 2001 have declined to 87% in 2002 and to 84 in 2003, and then increased to 94% in 2006.

#### Impaired Loans

The share of nonperforming assets in total assets being about 7% on average between 1980 and 1999 has increased up to about 15% in 2001 owing to effects of November crisis in 2000 and February crisis in 2001. This increase has been driven mostly by the fact that banks have been subjected to Triple Audit within the framework of restructuring programme and that nonperforming assets have been reflected in an accurate way. And the share of nonperforming assets in 2001 turned out to be 13%. Nonperforming assets fell down to about 5% as of 2006 as the result of financial restructuring of debts due to financial sector, facility launched under Istanbul Approach for the corporate sector, and of economic revival between 2002-2006.

Following the IMF agreement made for a loan of 687 Million Dollars for two years due to 1994 crisis, no further agreement has been made for 1996 and 1997 (Boratav, 2003), and fast economic recovery in 1995 to 1997 has had positive effects on banking sector, as is the case in all other sectors. However, interest rates have risen as the result of crisis making its first appearance in Asia 1997 and then in Russia in 1998, in particular, and such rising interest rates have impaired asset quality of banking sector which began to shrink depending on real sector, leading the way to credits in prosecution (Saraç, 2002).

#### 4.4.2.Liability Structure

Table 4.2: The Structure of Liabilities in the Banking Sector

(Thousand NTL)	1980	1988	1999	2006
<b>Total Liabilities</b>	<b>1633</b>	<b>68.355</b>	<b>72.120.858</b>	<b>460.988.505</b>
State Banks	<b>795</b>	29.492	25.182.230	137.878.913
Private Banks	<b>734</b>	29.927	35.679.111	263.278.713
Banks Taken Over By SDIF	-	-	4.054.017	1.025.769
Foreign Banks	<b>47</b>	2.444	3.765.998	44.115.919
Development & Investment Banks	<b>53</b>	6.492	3.439.502	14.689.191
<b>Total Deposits</b>	<b>1109</b>	<b>76.765</b>	<b>48.263.769</b>	<b>294.561.669</b>
State Banks	<b>276</b>	16.675	19.204.023	107.746.302
Private Banks	<b>814</b>	20.230	22.385.819	163.751.184



Banks Taken Over By SDIF	-	38.384	5.362.936	53.576
Foreign Banks	<b>19</b>	1.476	1.310.991	23.010.607
Development & Investment Banks	<b>0</b>	0	0	0

<b>Shareholder's Equity</b>	<b>151</b>	<b>6.252</b>	<b>4.234.150</b>	<b>56.219.512</b>
State Banks	<b>63</b>	2.247	1.031.478	13.123.482
Private Banks	<b>84</b>	3.029	4.618.247	29.947.795
Banks Taken Over By SDIF	-	-	-2.540.071	717.616
Foreign Banks	<b>1</b>	282	473.280	5.533.589
Development & Investment Banks	<b>3</b>	694	651.216	6.897.030

Total Liabilities on an average consist of Deposits from 1980 up to 2004. This rate showed upward trend in increasing inflation periods and downward trend in decreasing inflation periods.

### Deposits

If we look at the distribution of deposits between state banks and private banks, we see that the gap has increased especially after the 2002 period in favor of private banks. While state banks continue to collect deposits mainly from the state companies, the competition between the private banks increased to attract more deposits from corporate and retail customers. We see that foreign banks still do not have a significant portion when compared with private banks but this is mainly due to the fact that the banks acquired by foreign banks are mainly small & medium banks.

If we look at the deposit structure of the banks in terms of dolarization, we see that money savers have opted for deposits in foreign currency as Turkish Currency has been suffering loss in its value vis-a-vis foreign currency rates especially until 2004. The share of FCDA's in Total Deposits has risen up to 56.5% due to the sudden devaluation experienced in 2001. Rise in the share of FCDA's in Total Deposits led the way to currency mismatch in bank balance sheets. While banks' liabilities consisted of obligations in foreign currency of significant size, they encountered short positions as their placements denominated in foreign currency in their assets were at limited levels, and banks suffered huge losses on facing the fast devaluation of TL against foreign currencies in 1994 and 2001 crises. However, after the disinflation programme launched as from 2002, a reverse currency substitution has set in with the result that the share of TL in Total Deposits is now below 50%.

The share of FC Deposits (FCDA) in Total Deposits has declined after 2001 crisis and such decline has resulted from restored confidence in Turkish Lira and downward trend in exchange rates on the strength of correct economic policies put into implementation. The entry of foreign capital into the banking sector as well as other sectors is an important comfort for the depositors to shift into Turkish Lira and also to place more deposits with private and foreign banks.

Credits / Deposits ratio, being an indicator of how much of funds resources by banks has been placed to credits, has exhibited a downward trend for such reasons as the fact that banks' credit channels have functioned inadequately during up until the period after 2001 crisis and that they have opted for public securities. The increasing share of Securities vis-a-vis decreasing credits in banks' assets indicates that banks have opted for placing their deposits and other collected resources towards Securities rather than Credits. However, Credits/Deposits ratio has exhibited an upward trend starting from 2002 with the increasing foreign investments and confidence to the system.

Table 4.3: Dolarization of the Banking Sector

<b>Total Assets</b>	<b>1988</b>	<b>1999</b>	<b>2006</b>
<b>State Banks</b>	<b>29.492</b>	<b>25.182.230</b>	<b>137.878.913</b>
Local Currency	24.542	20.301.918	107.025.240
Foreign Currency	4.950	4.880.312	30.853.673
<b>Private Banks</b>	<b>29.927</b>	<b>35.679.111</b>	<b>263.278.713</b>
Local Currency	20.156	17.492.833	156.629.554
Foreign Currency	9.770	18.186.278	106.649.159
<b>Sector Total</b>	<b>68.355</b>	<b>72.120.858</b>	<b>460.988.505</b>
Local Currency	50.435	44.661.329	304.554.617
Foreign Currency	17.920	27.459.529	156.433.888
<b>Total Liabilities</b>			
<b>State Banks</b>	<b>29.492</b>	<b>25.182.230</b>	<b>137.878.913</b>
Local Currency	24.919	20.264.300	104.180.461
Foreign Currency	4.573	4.917.930	33.698.452
<b>Private Banks</b>	<b>29.927</b>	<b>35.679.111</b>	<b>263.278.713</b>
Local Currency	21.196	13.548.700	146.089.716
Foreign Currency	8.730	22.130.411	117.188.997
<b>Sector Total</b>	<b>68.355</b>	<b>72.120.858</b>	<b>460.988.505</b>
Local Currency	51.120	37.521.916	284.802.133
Foreign Currency	17.235	34.598.942	176.186.372
<b>% of Foreign Banks in Total Banking Assets</b>	<b>3,57</b>	<b>5,22</b>	<b>19,80</b>

## Shareholder's Equity

We see an important increase in terms of Shareholder's Equity item in the Balance Sheet of the banking sector especially in the 2006. Weak capitalization is an important problem of the Turkish banking sector and one of the main reasons for the sale of local banks to foreign investment. The lack of capital injection by the shareholders of the banks is an important problem of the banking sector in Turkey which is trying to become a EU country and has to compete with foreign banks in the new environment. It will not be possible for most of the banks to compete with the foreign banks and also with the big local banks in the low inflation environment. Therefore, most of the banks are sold to foreign capital and we see new capital injection from the new shareholders, especially in case of medium and small sized banks, to become more solid and to be able to compete with the new entrants to the market.

### 4.4.3.Profitability

Table 4.4: The Structure of the Profit/Loss Account

<b>Net Profit</b>	<b>28</b>	<b>1.820</b>	<b>2.258.921</b>	<b>8.447.578</b>
<b>State Banks</b>	<b>12</b>	683	284.476	2.660.896
<b>Private Banks</b>	<b>8</b>	885	1.556.542	3.898.362
<b>Banks Taken Over By SDIF</b>	-	-	916	247.764
<b>Foreign Banks</b>	<b>1</b>	136	222.737	1.064.079
<b>Development &amp; Investment Banks</b>	<b>7</b>	116	194.250	576.477

<b>Net Loss</b>	<b>3,05</b>	<b>121</b>	<b>2.537.671</b>	
<b>State Banks</b>	<b>3</b>	100	0	0
<b>Private Banks</b>	<b>0,05</b>	0	15.440	0
<b>Banks Taken Over By SDIF</b>	-	-	2.520.704	0
<b>Foreign Banks</b>	<b>0</b>	21	1.527	0
<b>Development &amp; Investment Banks</b>	<b>0</b>	0	0	0

Profitability of banking sector growing in inflation period in post-1980 era has continued until 1999 and declined in November crisis in 2000 and then again increased thereafter. It is seen on looking at relationship of Net Period Profit (Loss) that profitability increases in high rated inflation periods and turn into significant losses in the crisis period. Within this framework, it can be said that inflation used to be a factor which drives profit up in banking sector and however in this economic environment the banks who are active in real banking business with more products, more loans and more free capital will be most profitable ones.

The increase in the profit of banks in the post-crisis period is the result of positive effect brought by increased interest income generated from growing credit volume depending on growing domestic demand, as well as by decline in interests depending on current (short-term) liability structure. Banks with foreign capital has an important advantage in this new period since they have strong shareholders who can support them in terms of capital. And also their cost of funding decrease, especially from the foreign markets, due to to the strong and big names behind them.

#### 4.4.4. The Number of Banks, Branches and Personnel

Table 4.5: Banks, Branches and Personnel Statistics in the Banking Sector

	1980			1999			2006		
	Number of Banks	Number of Branches	Number of Personnel	Number of Banks	Number of Branches	Number of Personnel	Number of Banks	Number of Branches	Number of Personnel
State Banks	14	2490	68318	4	3153	72.007	3	2147	39.509
Private Banks	24	3374	60596	31	4025	76.386	14	3582	84.193
Banks Taken Over By SDIF	0	0	0	8	713	15.980	1	1100	342
Foreign Banks	4	105	1842	19	123	4.185	15	45	12.336
Development & Investment Banks	2	6	394	19	48	5.430	13	45	4.508
<b>Total</b>	<b>33</b>	<b>4286</b>	<b>131150</b>	<b>81</b>	<b>8062</b>	<b>168.558</b>	<b>46</b>	<b>6960</b>	<b>136.380</b>

As argued in the literature review section of the study, financial liberalization has some effects on number of banks, branches and personnel employed by banks. When the case of Turkey in 1980, which indicates a year before liberalization, in 1999, a year in which financial liberalization is experienced under a legal environment with insufficient arrangements, and in 2006, when a further liberalization with a sounder legal infrastructure is experienced, are analyzed following findings are gained: From 1980 to 1999, the number of state banks decreased by 33.33%, that of private banks increased by approximately 72%, number of foreign banks increased by 375%, that of development and investment banks by 280% and totally the number of all banks in the sector rose by nearly 146%. Parallel to general increase in the quantity of banks, the number of branches in each categories increased by 53.80% in state banks, 85.74% in private banks, 167% in foreign banks, 109% in development and investment banks, and a sum of 88% in overall banking sector. As it can be

easily noticed, foreign banks have expanded faster than other banks in the period under question.

When the years, 1999 and 2006, are compared with respect to number of banks, branches and personnel, it can be observed that the number of state banks decreased by 25%, private banks by approximately 55%, foreign banks by 21%, and development and investment banks by 32%. Total of these categories indicates a 43% decrease in total bank numbers. As seen, the number of private banks decreased more dramatically when compared to banks in other categories. The number of branches also decreased in the period stated: by 32% in state banks, 63% in foreign banks, and 14% in total. The number of personnel employed by contracted in state banks, and development and investment banks, respectively, by 45% and 17%, and expanded in private banks and foreign banks, respectively, by 10% and 195%. Despite of increase in personnel number hired by private and foreign banks, the overall statistic indicates a 19% decline in overall employment in the banking sector. Table 4.5 presents relevant statistics.

#### **4.4.5. Percentage of Foreign Banks in Total Banking Sector**

The share of foreign banks in Turkish banking sector reached about 20% from 3% on the strength of the foreign interest in Turkish finance sector especially beginning from 2004. Financial crisis of 22 July 2001 had hailed the acquisition by HSBC of Demirbank, a Turkish bank taken over by the Savings Deposit Insurance Fund (SDIF), as “an important milestone”. The share of foreign banks in Turkish banking system, being 3% just five years ago, reached 19,8% as of end 2006. The controlling rate of foreigners in the sector when their Stock Exchange holdings are included has reached 35,6%, an all-time high. Foreign banks joining Turkish banking family by way of partnership and acquisition are now holding the reins in management of 14 Turkish banks. European, American and Israeli banks spent 14 Billion 320 Million Dollars to date.

It goes without saying that such developments trigger a series of debates. Some circles argue that the future of Turkish banking sector would be in jeopardy if such foreigner interest gains further momentum; and, for that matter, that a limitation needs to be put on foreigners. On the other hand, there are people who argue that Turkey and Turkish banks are in need of

cheaper and stronger capital in order to be able to compete under changing world circumstances and that, therefore, active presence of foreigners should be allowed to increase more.

Foreign banks functioned in a very narrow field of activity between 1924 and 1980, but, right after economical and political decisions of 24 January 1980, came to the picture once again. Turkey is a country of big opportunities for foreigners on the strength of its strategical geography, demographic structure and financial market still in its infancy. Foreign banks made considerable money between 1980 and 2000 in consideration of much-needed loans made available to Turkey at high interest rates. While foreigners actually tempted to do banking in crisis-rich Turkey at branch and representative office level, they changed their strategy after February crisis in 2001.

Domestic banks faced a new era when crisis wounds healed and inflation rate fell down and interest rates falling with declining public borrowing requirement drove economy to growth. Turkish banks had troubles with keeping up with low inflation rate unlike their foreign competitors and had their profitability eaten away gradually and, therefore, they now needed more resources in order to be able to compete with foreign rivals. With falling interest rates, now it is not the time for banks to take deposits from the people and to lend such money to the government at high interest rates and to make profit from it. Banks now reverted to type dealing with their real operations, but, this time, they faced credit cost problem. They take money from the general public with a maturity of 40 or 45 days and lend such money with a maturity of 5, 10 or 20 years. If a bank does not have a big scale, they have two options in order to be able to compete with their rivals; either to get funds from international markets at low cost (syndication or a foreign partnership) or bank's will increase equity. Banks partnering with foreigners are able to get funds from international markets at more competitive prices and offer such funds to their customers under most favourable conditions. In today's competition environment, cost of funds has crucial importance.

Foreign partnership bids gained momentum after the EU summit of 17 December 2004, starting with sale of TEB to BNP Paribas, Dışbank to Fortis Bank, C Bank to Bank

Hapoalim, Finansbank to NBG, Denizbank to KBC, Şekerbank to Bank TuranAlem, Tekfenbank to EFG Eurobank and MNG to Arab Bank . Foreigners bought stakes in two upper-tier banks, that is Garanti and Yapı Kredi, as well. At present, only İş Bankası, Ziraat Bankası, Halkbank, AnadoluBank, Tekstilbank and Vakıflar Bankası have no foreign shareholders. Foreigners have a powerful hand in almost all of others banks.

Foreign banks' interest in Turkey gained momentum in the last two years is driven up by stability in macroeconomic balances. Turkish economy began to grow in scale terms with the decisive steps taken towards the EU. Turkey became a big and serious market for foreign banks as a result of its growing economy and its still-developing banking sector. Turkish banking sector is well below the EU average on the score of fundamental aspects as credits and asset size and foreigners are lining up as they noticed this big cake. Turkey was not able to take advantage of international financial integration which gained momentum as from 1990s because of its never-ending economical and political uncertainties. For example, foreigners' share in Czech Republic reached 96,2% and in Hungary to 87,1%. Only in Poland, foreigners' market share remained 70% due to the unchanging strong and officious structure of the state just like in Turkey.

Liberalization of the economy and also the EU process, brings the investment of foreign capital. However the important risk here is the 'market making'. In 2002, the system had 10 market making banks and only 1 of them was a foreign bank. At this point, 6 out of 12 market making banks in the system are controlled by foreigners and this might bring some concerns for the future. 'Market making' system launched in 2002 has vital importance for the Treasury's borrowing interest rates. Some banks selected according to certain criteria (capital adequacy, asset quality) are given privileges under this system with respect to sale of Government Domestic Borrowing Instruments (GDBI), and increased share of foreign banks in this system brings forth a set of risks with it. First of all is that the increasing share of foreign banks in this system could give rise to increased political sensitivity in the market and rise of market interest rates up to record-high levels when foreigners pull out of the market suddenly on facing an uncertainty or a negative change in macroeconomic balances.

According to sector experts, Halkbank privatization will be the turning-point of this process. This bank is expert in field of small- and medium-sized enterprise banking and, if it is acquired by international giants operating in the same field, not only banking sector but also industrial sector would be affected considerably by such change. In view of the fact that foreigners' share in the sector would reach 50% with the sale of Halkbank after Oyakbank and Alternatifbank, the importance of this sale becomes clearer.

Advantages of foreign banks:

- They ensure that foreign direct capital inflows are increased. They make contribution to economic stability in this way.
  
- They make contribution to growth of national economy by ensuring that loans extended to private sector are increased.
  
- Foreigners' entry improves regulation and audit quality and corporate management practices and ensures transparency.
  
- They improve competitive environment by encouraging domestic banks to reduce costs. They drive banks to improve quality in order to be able to protect their market share.
  
- They ensure that customer portfolio and risks are followed up regularly by implementing comprehensive and advanced risk management. They urge healthier bank balance sheets.

Disadvantages of foreign banks:

- Foreign banks generally prefer to do business with multinational firms or big-scale clients. Domestic businesses' ability to make use of financial services is restricted by such approach.
  
- Foreign banks behave less flexible toward government's demands. Thus, government's control on economy weakens. They don't care about and support national interests as much as domestic banks as their priorities are different.



- Domestic banks tend to take higher risk in order to be able to compete with foreigners. And this lays a serious cost burden on the sector.

- Foreign banks make inroads into most profitable segments of domestic market on the strength of their advanced product and service range, while domestic banks making do with more risky segments.

- Foreign banks might get out of country at times of crisis. Domestic banks continue to operate even under such conditions.

## 5. CONCLUSION

Financial liberalization, which is a process expected to positively contribute to allocation of financial resources, has some potential effects on a developing economy. As it was stated in the literature review chapter of this paper, under proper circumstances, a well-timed and well-designed financial liberalization brings about financial development and financial development positively contributes to economic growth. A well executed financial liberalization is likely to bring about financial depth and development, and, as a result, faster economic growth as Andriesz et al (2003) concludes in the case of Poland, the relationship between the financial liberalization and economic growth is likely to be bi-directional and financial development leads to economic progress at least in the long run.

Financial liberalization has prospective effects on a number of financial and economic variables. Domestic interest rate is one of these variables. As it was argued in first chapter, negative real interest rate is one of the negative outcomes of financial repression. Negative real interest rate leads to insufficient savings and an inefficient credit mechanism for investments. It results in low saving and investments and, as a result, in lower economic development relative to potential capacity of an economy.

Turkey took its early steps towards financial liberalization at the beginning of 1980s. By that time, Turkey was executing policies which brought about negative real interest rates. While adopting financial liberalization, the government expected financial liberalization to increase real interest rates and increased real interest rates to raise savings. Indeed, very high interest rates negatively affect investments. But, as indicated in the literature review section of the study, a low real interest rate is usually ideal for an economy, which aiming at an efficient saving-lending mechanism and faster economic development in this way. Turkey liberalized its domestic interest rates in early 1980s and experienced positive real interest rates reaching around 7% just at the beginning of the process. As it was expected, commercial banks competition for deposits led real interest rates to positive values.

In addition to the expected positive contribution of the preferably low but positive real interest rate to the economy, increased efficiency in allocation of investible funds was also expected to positively contribute to Turkish economy after financial liberalization. Under financial

repression, the government had directed credits to certain industries, which had priorities. Such a role of the government usually had led to inefficiency in loanable funds market. As explained in the literature review, financial liberalization brings about efficiency in allocation of financial resources such as loans. Thus, financial liberalization was likely to raise investment efficiency. In Polish financial liberalization process, a decline in real credits was observed in the early phases. In Turkish case, industries, which had been used to utilize credits with negative interest rates, were not expected to suddenly increase their demand for credits after emergence of positive real interest rates. But free allocation of credits was expected to increase both the supply and demand of loanable funds.

Potential impacts of financial liberalization on ratios of M2 to GDP and M3 to GDP are contradictory. Even though financial liberalization resulted in increased M2 to GDP in some developing economies such as Brazil, Indonesia, Argentina and Malaysia and increased M3 to GDP in New Zealand, initial results in a number developing countries including Turkey showed contrary results. It can be argued that potential changes in these ratios depend on monetary policies of Turkey. If tight monetary policies aiming at decreasing inflation rate were adopted then lower ratios (and vice versa in contrary case) might have been observed in Turkey.

As observed in the cases of Mexico, Thailand and the United Kingdom, financial liberalization was likely to bring about a consumption boom in Turkey. Such a probability depends on the balance in loanable funds market. If supply of loanable funds was higher than the demand for the funds, an increase in consumer lending would be expected parallel to optimistic approach of lenders and intermediaries. As seen in other cases, consumer lending appears in terms of expanded credit-card issuing and expanded credits for real estate and automobile purchases. Turkey experienced such a process in 2000 when the exchange rate-based disinflation program drastically decreased inflation rate, led real interest rates to approach zero and a bulk of loanable TL funds were in commercial banks. Banks rapidly decreased interest rates of credits and offered a wide range of consumption credits. The trend resulted in increased demand for imported goods, which finally caused deterioration of foreign trade balance.

The relationship between financial liberalization and financial crises (banking or currency crisis) is one of the most critical issues in estimating potential consequences of financial liberalization in an economy. As it was argued and explained in the literature review and the Polish Case of the paper, financial systems become more fragile to banking and currency crises after financial liberalization, which allow capital inflows and outflows. Even though some researchers claim that financial liberalization only reveals portfolio risks of banks, which already have a large number of non-performing loans before or at the time of liberalization, the dominant notion is that financial liberalization is at least a contributory factor in many cases of banking crises.

A number of variables other than financial liberalization itself have a significant impact on whether financial liberalization leads to banking crises or not. As it was argued in the literature review and the Polish case sections of the study, structural weaknesses, lack of prudential regulations and supervision in the banking system, capital inadequacy of banks operating in the industry, political and economic instability, and negative external developments such as speculations and capital outflows may significantly increase the probability of a banking crisis after financial liberalization. In the deregulated nature of financial system, speculative capital can easily enter and exit the market and proportion of speculative investments in a financial system determines the extent to which an economy experience banking crisis.

Turkey experienced such a process in 2000-2001. Ill-operating banking system, which lack prudential regulations, had resulted first in liquidity crisis and then in currency crisis in respectively November 2000 and February 2001. After restructuring its banking and financial sector widely in 2001 and partially in later periods, Turkish economy has become less fragile to conditions that may bring about another banking crisis via a liquidity crisis, an interest rate led crisis or a currency attack. After the last crisis in February 2001, which had been launched by huge outflows of foreign capital within a very short period, majority of the banks, which were financially weak in terms of capital inadequacy and high proportion of non-performing loans in their portfolio, went crisis and then were taken over by BDDK (the Board of Banking Regulations and Supervision) or liquidated. No proper measures in front of short-term capital (“hot money”) and lack of regulations in banking system caused the process of financial liberalization to bring about a currency attack and banking crisis in Turkey.

Whether a similar banking or currency attack-based financial crisis may be experienced in the future is an argumentative issue. Some economists argue that foreign trade deficit of Turkey and a potential currency attacks that may be triggered by increased concerns for sustainability of the deficit or by an external financial crisis can again result in a banking and/or financial crisis. Some, on the other hand, argues that prudential regulations in the banking system, financially stronger commercial banks, much lower inflation rate, high economic growth rate, positive real interest rates and some other positive macroeconomic variables create a positive economic environment for both foreign and domestic investors and no need for a similar currency attack and financial crisis.

Economies with low foreign exchange reserves and high current account deficits are more fragile to currency attacks and currency crises. Current foreign exchange reserves of Turkey do not allow a pessimistic view but continuously increasing current account deficit do. But economic and political stability, continuously decreasing inflation rate, discipline in public finance, and increasing foreign investments increase positive expectations about economy in Turkey.

When sector-specific consequences of financial liberalization are studied it is observed that financial liberalization have most serious impacts on industries including financial intermediaries. In this sense, the banking industry is significantly influenced by financial liberalization. Thanks to increased financial competition, especially international competition, and new entrants, usually multinational banks, domestic banks become able to promote their technology, improve their know-how, and increase their service quality, especially in terms of employing more qualified labor. Even though the number of personnel employed by the banks dropped from 168558 in 1999 to 136380 in 2006, the quality of labor has been gradually increased via recruitment of university graduates for almost all blank positions. Similar developments were also observed in financial liberalization process of Poland and some other developing economies such as Thailand, Mexico and Malaysia. In Poland, the number of the personnel decreased from 174748 in 1999 to 149638 in 2006 (NBP, 2006). But the quality and efficiency of labor used have been increased via increased know-how and technological infrastructure. As a result, it can be argued that domestic banks and other financial

intermediaries of Turkey have experienced similar processes as financial liberalization has deepened and financial competition has increased.

Despite of relatively higher risk of banking or financial crisis due to fragility to currency attacks and/or sudden capital outflows, financial liberalization serves the objective of profitability and efficiency for financial intermediaries. According to data provided by National Bank of Poland (1999, 2006) net profitability of the banking system increased from 6.7 in 1999 to 11.1 in 2005 and from that rate to 12.4 in 2006 and the total income increased Zloty 52790.6 million in 1999 to Zloty 82683 million in 2005. In the same period, total assets increased from 83698.3 million Euro to 146006.5 million Euro, loans granted rose from 34441.1 million Euro to 61053.2 million Euro, deposits taken from non-financial sector increased from 50352.5 million Euro to 77919.9 million Euro, and total capital base rose from 7095.6 to 13391.9 million Euro.

With respect to increases in efficiency and profitability in financial intermediation, Turkey had similar experiences with Poland. According to the data provided by TBB (2000, 2006) total assets of the banking sector increased from 72.120.858 to 460.988.505 thousands NTL, total loans increased from 21.714.974 to 203.753.107 thousands NTL, total deposits rose from 48.263.769 to 294.561.669 thousands NTL, shareholders' equity increased from 4.234.150 to 56.219.512 thousands NTL, and finally net profit increased from 2.258.921 to 8.447.578 thousands NTL.

As explained in the *Financial Liberalization* part of the study, the process of financial liberalization had been launched to reach certain objectives. Like Poland Turkey initiated her own process of financial liberalization to have an efficient and diversified financial system. The objective of financial depth and more efficient allocation of financial resources have been partially attained in Turkey. The government no longer has a significant role of directing credits to certain industries as it was used to do in the pre-1980s period. In Turkey, financial deepening took place particularly in time deposits, government bonds and Treasury bills trade, and repo transactions in 1990s and early 2000s. Chronic deficits in public finance led the government to continuously issue Treasury bills and government bonds. Repo transactions had been widely conducted in periods of increased uncertainty. TL nominated time deposits had been widely replaced by foreign currency (particularly US dollars and Euro) nominated

time deposits, but the trend has reversed in recent two years as TL has appreciated with respect to US dollars.

As a conclusion, it can be argued the Turkey experienced a significant number of negative and positive impacts of financial liberalization in its 25 years experience since 1980. But enormous increase in credit cards issued and drastic rise in volume of consumer credits expanded and introduction of some other instruments is likely to help Turkey in having new experiences such as further financial deepening and higher ratio of financial markets to GNP.

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