
CASE-CEU

Working Papers Series

*Center for Social
and Economic Research*



*Central
European University*

33

Lucjan T. Orłowski

**The Development of Financial Markets
in Poland**

Warsaw, 1999

Responsibility for the information and views set out in the paper lies entirely with the author.

This paper was prepared for the research project "Sustaining Growth through Reform Consolidation" No. 181-A-00-97-00322, financed by the United States Agency for International Development (US AID) and CASE Foundation.

Published with the support of the Center for Publishing Development, Open Society Institute – Budapest.

Graphic Design: Agnieszka Natalia Bury

DTP: CeDeWu – Centrum Doradztwa i Wydawnictw "Multi-Press" Sp. z o.o.

ISSN 1506-1639, ISBN 83-7178-176-8

Publishers:

CASE – Center for Social and Economic Research
ul. Sienkiewicza 12, 00-944 Warsaw, Poland
tel.: (4822) 622 66 27, 828 61 33, fax (4822) 828 60 69
e-mail: case@case.com.pl

Open Society Institute – Regional Publishing Center
1051 Budapest, Oktober 6. u. 12, Hungary
tel.: 36.1.3273014, fax: 36.1.3273042

Contents

Abstract	5
1. Introduction	6
2. The Economic Environment of the Financial System in Poland	7
3. Capacity Building and Institutional Development of the Banking System	9
4. The Legal Environment of the Financial System	14
5. Integration with Foreign Financial Markets and Susceptibility to Financial Contagion	17
6. Developing Effective Defense Mechanism Against Financial Contagion	19
7. Optimal Choice of the Exchange Rate Regime	27
8. A Final Note: Future Tasks for Poland's Financial Markets in Transition	28
References	30

Lucjan T. Orłowski

Lucjan T. Orłowski is Professor of Economics and International Finance, and Chairman of the Department of Economics and Finance at Sacred Heart University in Fairfield, Connecticut, USA. His research concentrates on stabilization policies in transition economies with an emphasis on transformation of central banking, exchange rate systems and capital liberalization. He has conducted collaborative studies on economic aspects of the EU eastern enlargement and on institutional development of financial markets. He has been advising research and government institutions in the U.S. and in Europe. He is a member of the Macroeconomic Policy Council of Polish Ministry of Finance and a member of the Advisory Councils of the WEFA Group in Washington D.C., and of the CASE Foundation in Warsaw.

Abstract

This project analyzing the development of Polish financial markets sponsored by the USAID grant was aimed at examining selected problems of the banking system and financial markets in Poland. The main criterion for selection of these problems was their potential usefulness for policy-makers at the present stage of the economic transformation. The studies within the project address the issues that require special attention of policy-makers in their efforts to design future stages of the economic transformation and to formulate a program of effective preparations for the EU accession. The topics examined include: the advancement of risk management in the banking system, the economic and legal aspects of capital account liberalization, contagion effects of world financial crises, and sensitivity of financial markets to exchange rate policies.

The studies find visible improvements in the methodology of risk management in the banking system in Poland and in the institutional framework of financial markets. It is further suggested that a larger participation of foreign, more experienced banks would improve efficiency of Poland's financial institutions. It remains debatable whether the banks ought to evolve in the directions of universal or specialized institutions.

The financial system is prone to contagion effects of external financial crises as documented by the impact of the Asian and the Russian crisis episodes. Several measures aimed at developing an effective cushion against potential contagion effects of financial crisis are proposed. They include: an effective system of bank monitoring and supervision, a lower reliance on debt in relation to equity, a low (less than a multiple of three) ratio of M2 money to foreign exchange reserves, a higher degree of transparency of financial institutions, more transparent fiscal and monetary policies, and a significant increase in national savings. The advancement of capital account liberalization shall not be restrained by taxes on foreign exchange transactions or by similar measures aimed at containing capital flows. Capital controls could be devastating to still very fragile and volatile Polish financial markets.

I. Introduction

The economic transition in Poland has been accompanied by visible and durable institutional growth of the banking system and financial markets. Under central planning, the banking system was composed of a state monobank handling retail and commercial transactions and two specialized banks facilitating foreign exchange operations. The stock market was certainly non-existent. By contrast, at the end of 1998, the stock market capitalization reached USD12.5 billion or 8.0 percent of the GDP. Most of the stock market growth occurred during the 1996–1998 period. The market capitalization more than doubled at the end of 1998 when compared to the beginning of 1996. This may seem impressive, but Poland has a long way to go before catching up with the market capitalization rates in the Czech Republic (24.2 percent), Hungary (the same 24.2 percent), not to mention Germany (45.5 percent of the GDP at the end of 1998). There were 185 companies listed in the Polish stock market at the end of 1998, while the Czech Republic had 308 and Hungary 53 publicly traded firms. The banking system in Poland evolved into a competitive environment of small, undercapitalized financial institutions. The total assets of the Polish banking system are rather miniscule by the standards of developed industrial economies, reaching USD 56.8 billion (or 42.7 percent of GDP) at the end of 1996.

This project analyzing the development of Polish financial markets sponsored by the USAID grant was aimed at examining selected problems of the banking system and financial markets in Poland rather than elaborating a plethora of general aspects of their growth. The main criterion for selection of these problems was their potential usefulness for policy-makers at the present stage of the economic transformation. The studies within the project address the issues that require special attention of policy-makers in their efforts to design future stages of the economic transformation and a program of effective preparations for accession to the European Union. Therefore, the main topics covered by the project include:

1. The analysis of the institutional development of the Polish banking system with a special attention to the improvement of the management of risk and modern approaches to the management of assets and liabilities – addressed by the studies by Zawalińska (1999) and Fink, Haiss, Salvatore and Orłowski (1999);
2. The cointegration analysis of the Polish and world financial markets helpful for designing effective resistance mechanisms against contagion effects of international financial crises – assessed by Linne (1998);

3. The threats and opportunities stemming from the introduction of derivative markets – elaborated by Rybinski (1998);

4. The legal framework of the banking system and capital markets liberalization, shaped in accordance with the requirements of the OECD membership and in compliance with the program of preparations for the EU accession – examined by Tomczyńska (1999) and Sadowska-Cieślak (1999);

5. the impact of the exchange rate and monetary policy on financial markets – addressed by Tomczyńska (1998).

The major findings of these studies along with additional findings that have emerged since the completion of individual research papers will be addressed in subsequent sections of this report. In general terms, the authors see vast areas of improvement in the methodology of risk management in the banking system, in the design and the speed of privatization of the banking system and in the institutional framework of financial markets. A larger participation of foreign, more experienced banks would improve efficiency of Poland's financial institutions – they need to be allowed to gain majority shares in the country's banking system. It remains debatable whether the banks ought to evolve in the directions of universal or specialized institutions. Furthermore, since the financial system is still prone to strong contagion effects of external financial crises, we propose a series of measures that would help to develop an effective cushion against potential episodes of financial crisis. They are outlined in Section 7 of this report.

2. The Economic Environment of the Financial System in Poland

The development of the Polish financial system has been strongly related to the overall macroeconomic performance of the national economy in the recent period. The strong economic growth in Poland has been accompanied by a corresponding solid growth of credit to households and businesses, despite attempts by the NBP to stem the credit expansion through high interest rates. At the same time, the Polish Złoty (PLN) deposit rates have shown a comparably solid growth, outperforming the growth of nominal GDP by a wide margin. The medium-range money supply M2 has grown at a corresponding strong rate reflecting a gradually expanding degree of monetization of the Polish economy.

Selected macroeconomic indicators illustrating the growth of financial intermediation, the credit expansion and the monetization of the national economy are presented in Table I.

Table 1. Macroeconomic Environment of the Financial Sector in Poland

	1995	1996	1997	1998
Real GDP Growth Rate (%)	7.0	6.0	6.8	4.8
CPI Inflation – end of period	21.8	18.5	13.2	8.6
Real Income of Households (% growth rate, deflated by CPI)	15.1	4.2	7.4	4.5
Average Monthly Nominal Wages in the Private Sector (% growth rate)	31.6	26.4	20.5	15.6
Household Savings Rate	13.3	12.8	13.4	13.2
Total Private Sector PLN Deposits (% growth)	30.3	40.2	31.3	35.8
Total PLN Credit to Private Sector (% growth)	35.2	44.0	31.1	30.3
M2-money Growth Rate (%)	35.1	29.2	30.8	25.2
M2-to-GDP Ratio	0.37	0.38	0.41	0.41
Real 3 Months WIBOR (CPI deflated)	-0.2	+3.9	+13.1	+7.2
Real 52-week T-Bill Yield (CPI deflated)	-1.6	+0.6	+6.6	+3.7

Source: Ministry of Finance and CASE: "The Polish Economy – 1 Quarter 1999", CASE, Warsaw

The economic indicators stated in Table 1 prove a sustained, strong growth of the Polish financial system. Real incomes of households have showed a spectacular growth in 1995, followed by a steadily declining, yet still very strong expansion in 1996–1998. The development of financial intermediation is reflected by a continuously strong growth of private sector savings, outperforming inflation rates by a wide margin. At the same time, credit to the private sector has expanded at a roughly comparable rate, despite efforts by monetary authorities to slow it down. The propensity to save has been stimulated over the last three years by high, positive real interest rates that provide incentives to financial intermediation. On a positive side, private sector savings have expanded more vigorously than credits in 1997–1998 in contrast to 1995–1996. This reversal contributes to easing of the inflationary pressures. The household savings rate of 13.2 percent may seem to be satisfactory by international standards. However, Poland has a relatively high share of the underground economy, inclusion of which would make a picture of the actual household savings much gloomier.

In general terms, the growth of financial intermediation and monetization in the national economy is accompanied by effective disinflation, which is a phenomenon inconsistent with the monetarist view of inflation. The favorable behavior of monetary variables shall be viewed as an undeniable accomplishment of both fiscal and monetary authorities. They have effectively managed to maintain a high degree of fiscal discipline, by keeping the consolidated budget deficit-to-GDP ratio below 4 percent, coupled with a tight monetary policy yielding strong, positive interest rates.

An alternative indicator of the expanding role of the financial sector in the national economy is the share of value added of this sector in the GDP. In 1992, the financial sector value added reached only 0.5% of the GDP, while in 1998 it exceeded 1.4%.

The growth of financial intermediation, household savings and credits requires a corresponding institutional development of financial institutions. Banks ought to be ready to absorb a large share of rapidly expanding savings and to translate the absorption of deposits into efficient credits. But the banking sector in Poland generally seems to lag behind in capacity building and institutional development, not keeping up with the tendency to save and the demand for credit in the national economy.

3. Capacity Building and Institutional Development of the Banking System

The process of capacity building and institutional development of the banking sector in East European economies has taken only ten years, in sharp contrast to Western Europe where banks have had decades of years of capital formation and financial management experience. The banking institutions in Poland have shown an undeniable record of accomplishments in the introduction of modern approaches to management of assets and liabilities, yet they still experience some serious backward areas of their activities that need to be resolved.

The banking reform in Poland in the late 1980s and the early 1990s was viewed as a chance to use banks as separate entities to enhance the efficiency of the enterprise sector [Fink, Haiss, Orłowski and Salvatore, 1998]. The monobank that prevailed in the centrally-planned system became decomposed into independent financial institutions. Sections and departments of the national bank were spun off and established as separate banks. There were nine banks established in this way in Poland in 1988. These new institutions started their functioning with an inherited burden of troubled assets, highly concentrated in the industrial sector. These banks did not have a solid depository base, thus they needed to be refinanced by the NBP.

The economic transition of the 1990s created a chance to improve competitiveness and to increase the scope of activities of the banking system. In essence, all commercial activities were removed from the central bank and placed with increasingly independent banks. Entry conditions for new institutions were relatively easy, which has led to the emergence of a number of new banks, including some foreign entries. Since most of the banking institutions in Poland were very small, their preparation for privatization and their

institutional strength had to be assisted by the program of bank consolidation launched in 1993. The largest Polish bank in terms of its own capital – Bank Handlowy – with over USD 7 billion of assets in 1997 ranked only 286 on the list published by *The Banker* magazine. Nevertheless, the Polish banks have experienced a gradual growth of and a better overall quality of assets since 1993. This can be documented by a significant decline of classified loans in relation to total assets; they peaked at 31 percent in 1993 and gradually declined to slightly over 10 percent at the end of 1998.

The scope of total financial intermediation, including bank intermediation in Poland in comparison to the EU member countries is presented in Table 2.

Table 2. Indicators of Financial Intermediation in Poland and in EU-15 (1996 data)

	Poland	EU-15
Total Financial Intermediation (bank, equity, bonds) USD, bln	86.4	1890.1
Bank Intermediation Ratio (bank assets/total intermediation)	68.7	55.8
Equity Intermediation Ratio (stock market cap./total interm.)	9.7	17.1
Bond Intermediation Ratio (bonds/total intermediation)	21.6	27.1
Bank Assets (% GDP)	44.1	154.2
Total Financial Intermediation (% GDP)	64.3	288.1
Financial Intermediation Per Capita (in USD)	2,238	67,208

Source: Fink, Haiss, Orłowski, Salvatore, 1998

The data imply tremendous tasks of the Polish financial system in its way to the EU accession. The scope of financial intermediation per capita among the fifteen EU members is roughly 30 times larger than in Poland. Intermediation as a share of the GDP is also miniscule in Poland comparing to the EU average and the bank assets in relation to GDP in the EU are roughly 3.5 greater than in Poland. Needless to say, Poland has a great deal of catching up to do with the Union in terms of the role of the banking system and financial markets in the national economy. In addition, the Poles hold a relatively larger share of their assets at banks, and a considerably lower share of their assets in stock markets comparing to the EU. This reflects gigantic tasks for achieving a greater degree of financial stability in Poland that can be accomplished through: disinflation, resistance to international financial markets jitters, and reduction of volatility of exchange rates and market indexes. The road to gaining confidence in the domestic stock market may still be long and rocky for Poles.

Nevertheless, the institutional framework of the banking system in Poland has considerably improved, mainly with the introduction of the effective system of bank monitoring and supervision in 1996 and 1997, and through further bank consolidation and privatization. However, the foundations of prudent banking among Polish financial institutions are far from being effectively introduced. In their study for the summarized

project, Fink, Haiss, Orłowski and Salvatore (1999) call for strengthening the framework of prudent banking in Poland and in other Central European countries. In their opinion, prudent financial institutions reduce market imperfections and improve the allocation of resources by performing the following functions:

- (a) facilitating transactions,
- (b) portfolio management,
- (c) the transformation of illiquid assets into liquid liabilities, providing liquidity insurance and risk-sharing opportunities to agents,
- (d) minimization of transaction costs.

Some of the episodes of bank failures in Central Europe have been caused by the problems with transformation of assets into liabilities that are strongly influenced by international capital flows. Since Poland (along with other Central European countries) is still classified by the international financial community as an "emerging market economy", its financial markets are strongly susceptible to contagion effects of international financial crises and to highly unpredictable directions of international capital flows. After easing restrictions on capital account transactions in 1999, Polish banks may profitably engage in speculative currency transactions, taking advantage of delays in exchange rate and interest rate adjustments.

It is essential to strengthen the foundations of prudent banking in Poland. Fink, Haiss, Orłowski and Salvatore (1999) claim that gains from non-prudent banking in transition economies are mainly accrued by dominant stakeholder groups, such as owners (including the State), managers and high-ranked employees. In the presence of lax supervision, there is a strong tendency that insiders shift to non-prudent banking to exercise large gains from risky opportunities, while shifting possible losses from these undertakings to the outsiders. Their study calls for policies aimed at achieving privileged interfirm/bank relationships along the continental Europe's model of universal banking. In the European model, banks often dominate business supervisory boards by holding equity stakes in companies, or through proxy rights, that is, by granting voting rights by the shareholders of these companies when they purchased the shares from the bank. In this way, banks have an expanded access to information about business activities and they extend influence over managerial decisions involving corporate restructuring activities. The close cooperation between banks and firms may lower the cost of credit due to lower transaction and information costs. This environment can consequently lead to aggressive investment and to increasing productivity in existing business organizations.

There have been several painful episodes of imprudent banking in Poland in the 1990s. The sale of IPO shares of Bank Śląski to its employees at a deep discount with a simultaneous delay in the delivery of shares to other investors led to the strong surge in the price of BS stock on the Warsaw Stock Exchange right after privatization. The surge

allowed bank employees to reap benefits of its privatization. Another setback to the development of the banking system was the bankruptcy of the Polish Agrobank in 1994. By withdrawing USD 25 million from the bank, the government induced serious liquidity problems ultimately forcing the bank to bankruptcy. Furthermore, the practice of deposit protection in the recent period remains highly questionable. Depositors of the State Savings Bank PKO have enjoyed full deposit protection, while deposits at other banks are guaranteed only up to USD 5000. Furthermore, in preparations for its future privatization, PKO fuelled a lending frenzy in 1997 leading to highly unusual and questionable action by NBP. In an attempt to stop this lending frenzy, central bank engaged in offering deposit accounts at preferential rates. Finally, the 1997 sale of PBK (Powszechny Bank Kredytowy) caused a great deal of controversy. South Korean Samsung initially won the open tender to buy the bank, but the government yielding to calls for "retaining a national identity of a Polish institution" cancelled the tender and sold the bank to a Polish consortium led by Warta for a knock-down price. These egregious episodes are stumbling blocks on the road of institutional development of the Polish banking system and, by all means, they shall be avoided in the future.

Despite the numerous difficulties, the institutional progress of the Polish banking system has been undeniable. One of the reasons for improvement is the gradually expanding role of strategic, particularly foreign investors. As of mid-1999, there are five major banking institutions with the majority or near-majority share of foreign strategic investors. They are: (1) Bank Śląski SA privatized in 1994 with the 54 percent ownership by the Dutch-based ING, (2) Wielkopolski Bank Kredytowy SA privatized in 1993 with 60 percent ownership by the Allied Irish Bank (AIB), (3) Bank Rozwoju Eksportu SA privatized in 1992 with 49 percent stake by Commerzbank, (4) Pekao SA privatized in June 1999 with 53 percent owned by UniCredito Italiano and Allianz Poland, and (5) Bank Zachodni SA privatized in June 1999 with 80 percent-share owned by AIB. The overall share of foreign investors in total assets of Polish banks rose to 38.4 percent after Pekao SA and BZ privatizations. By comparison, their share was only 4.4 percent at the end of 1995. The strategic investors have had a visible impact on modern technologies and management strategies of Polish banks. This influence can be perhaps best reflected by the fact that in 1998 BZ that was still owned by the Polish Treasury had a six times lower profit than WBK (owned mainly by AIB) while total assets of both banks had a comparable size. Banks with foreign capital participation in Poland outperform the overall efficiency of the country's banking system. They reported a 6.6 percent return on assets (ROA) and a 50.1 percent return on equity (ROE) in 1997 [Zaręba, 1998]. By a sharp contrast, the mean ROA of the top thirty Polish banks was 1.8 percent and the mean ROE 16.4 percent.

A stronger role of foreign financial institutions in Poland is highly desirable for the following reasons:

1. Foreign banks are capable of lowering operating costs and narrowing interest rate margins due to their large size and the ability to exercise the economies of scale.
2. Their reputation, the record of solvency and trustworthiness are important for Polish firms or even households.
3. They have a greater access to international capital markets, thus a much wider spectrum of venues of risk management.

The most recent trends in the Polish banking system prove a superiority of performance of independent banks, particularly those with a foreign capital participation. According to the survey conducted by *Gazeta Bankowa* (May 29, 1999) none of the best performing Polish banks was a spin off from the NBP. Only two of the leading ten banks improved their profitability positions in 1998, with BRE being the best performer in this respect. Difficult profitability conditions of the Polish banks in 1998 stemmed primarily from:

- the erosion of interest earnings as a result of rate cuts by the NBP,
- the buildup of bank reserves aimed at hedging the impact of international financial contagion,
- direct contagion effects of the Russian payments crisis of August 1998.

Furthermore, the state-owned PKO BP, the second largest bank by the size of total assets, experienced erosion of profitability due to the increase in reserves in preparation for the bank privatization scheduled for the year 2000.

The advancement of risk management and modern techniques of asset and liability management in the Polish banking system are investigated in the study by Zawalińska (1999) based on a survey of 34 financial institutions. The surveyed banks are showing a large dispersion of ROA ranging from 0.30 to 11.50 percent, as well as the diffusion of ROE between 2.9 to 40.2 percent in 1998. The majority of banks (32) have formal asset/liability committees (ALCOs) but their functions are much diversified, focusing not only on liquidity management, risk strategy and interest rate management, but also on a variety of operational tasks that do not belong with such committees. The banks report being most concerned about liquidity risk, followed by credit risk among a spectrum of financial risk categories. Volatility of interest rates is identified as the most dominant factor contributing to risk, followed by the overall income performance of the national economy.

The survey proves a higher degree of sophistication in terms of risk management and a greater competitive leverage of large, private banks while the methodology of risk management in state-owned banks is less advanced. The methods of risk management applied by banks include in a descending order: duration analysis, interest rate swaps, financial futures, and to a lesser extent, currency swaps.

The surveyed banks have identified a number of threats to their future profitability and viability, including:

- narrowing profit margins due to more intense competitiveness, primarily from foreign banks operating at lower costs, thus taking advantage of the economies of scale,
- fierce competitiveness stemming from bank consolidation through mergers and acquisitions,
- declining profits on foreign exchange transactions,
- widely, and perhaps prematurely, expected imposition of foreign exchange taxes (the Tobin tax),
- a limited experience and sophistication in risk management (reported by several smaller-size banks).

The concerns and difficulties identified by the bankers lead to a conclusion that only the strongest, the most solvent and best-managed banks will survive the competitive environment of the increasingly open financial system in Poland. In order to improve their viability, Polish banks need to find ways to apply technology-based cost savings and to improve net interest margins (defined as the difference between interest income and interest expenses). Falling interest rates usually are favorable for the improvement of a bank's net interest margin since the bank is able to reduce the interest rate that it pays for deposits before the average rate of return earned on loans and investments declines. Therefore, the bankers in Poland ought to take advantage of the declining interest rate environment and improve interest rate margins and profitability of their institutions.

Additional chances for the institutional development of the Polish banking system stem from the existing legislation that permits banks to engage in a wide variety of commercial and investment activities. Therefore, the legislative framework promotes creation of universal banks capable of offering diversified assets and liabilities. The advancement of the legislative framework of the banking system in Poland will be continuously aligned with EU laws and regulations as the country engages in active preparations for the EU accession.

4. The Legal Environment of the Financial System

The legislative framework of the Polish financial system is examined in the project by Tomczyńska (1999) and by Sadowska-Cieślak (1999). Tomczyńska's paper elaborates adjustments in the banking system regulations in line with the requirements

of the EU accession. A special attention is given to the analysis of the degree of compliance between the Banking Law of August 29, 1997 and the Union's rules and regulations (*acquis communautaire*) in the area of banking and financial services. At the same time, the study attempts to address whether the new regulatory environment supports the openness of the Polish banking system and whether it may facilitate its integration with the EU.

In compliance with the EU rules and regulations, the new banking legislation is aimed at providing the banking system with a sufficient degree of security. Concurrently, it is aimed at enhancing transparency of financial institutions and at expanding their public confidence. A successful harmonization of the Polish banking law with the EU regulations is conditioned upon a number of factors, including: the institutional development of financial markets, unrestrained competition in the financial services market, highly qualified personnel, and an efficient system of bank monitoring and supervision. These prerequisites for the EU accession have been largely accomplished in Poland, however, at an uneven scale. There are several flaws and barriers to the examined harmonization that include: a shortage of capital, the narrow scope of existing banking services, qualified personnel problems, and the instability of financial institutions along with a precarious public confidence.

According to the White Paper of the EU Eastern Enlargement adopted at the June 1995 Union's Summit in Cannes, preparations of the financial services sector for the accession is expected to follow a two-stage process. During the first stage, the candidate countries need to develop stable and sound financial institutions through the achievement of an efficient system of bank monitoring and supervision. Additional tasks at this stage include: legislation determining banks own capital, establishing capital adequacy standards (in compliance with the 8 percent tier I capital to risk weighted assets ratio), the inception of a deposit insurance system, and laws against money laundering.

The second stage encompasses five key tasks aimed at strengthening the security and solvency of the banking system. Establishing a system of bank licenses, minimum capital requirements for new banks and a transparent, uniform accounting system play a critical role at this stage. Further tasks include: common rules of preparation and distribution of bank balance sheets and financial statements, application of capital adequacy directives with respect to various risk categories, limits on concentration of single bank's credits, and specific rules of banking supervision.

Tomczyńska's review of the EU accession requirements and the existing banking legislation in Poland concludes that the August 29, 1997 Banking Law establishes a necessary legal framework for the integration of Polish financial institutions with the Union. Nevertheless, the laws need to be followed by their practical implementation.

Polish banks have a long way ahead to accomplish the institutional standards expected from them prior to the EU accession.

The study by Sadowska-Cieślak (1999) elaborates the regulatory framework and the expected economic consequences of the capital account liberalization in Poland. It examines the evolution of current account and capital account liberalization during the years of the economic transformation. The analysis concludes that in the beginning of 1999 Poland does not fully meet the requirements of capital account liberalization of the Article VIII of the IMF status and the OECD Code on Capital Account Transactions. There are still a number of impediments to the zloty convertibility on the capital account. For instance, Polish residents can satisfy foreign currency payables in Polish Zlotys (PLN) for imported goods only by placing PLN on special foreign accounts in Polish banks. The amount in PLN can be only converted into 24 currencies monitored by the NBP. Moreover, foreign residents can purchase land and real estate in Poland and they can sell it, but they cannot repatriate the profits from the sale abroad. Foreign residents can have only specific PLN account at Polish banks (so called "free foreign accounts") restricted by the limits on the scope of transactions. Finally, purchases of PLN with foreign currencies abroad by the residents are still restricted. There is still a prohibition of investment by the residents in non-OECD countries and investment in financial instruments with maturity not exceeding one year.

In addition to the analysis of legal aspects of capital account liberalization, Sadowska-Cieślak examines synchronization of the PLN convertibility with the exchange rate policy. She sees a rationale for application of the crawling peg, and after May 1995, the crawling band as instruments of defending the current account position in the presence of the expanding PLN convertibility. Rightfully, she insulates the recent current account deficit problems from the PLN convertibility attributing them to the strong domestic aggregate demand and to difficulties in maintaining fiscal discipline. The growing current account deficit had to be restrained by a highly restrictive monetary policy. The study also elaborates the issue whether Poland is ready for a full currency convertibility and liberalization of its financial sector under the circumstances of the current account deficit and the transmission of contagion effects of the Asian financial crisis. Despite these difficulties, the liberalization process ought to advance. After all, it contributes to increasing competition in financial markets thus it should promote cost cutting and institutional efficiency of financial institutions.

Although Poland maintains a number of restrictions on capital account transactions, most of them can be easily by-passed in practice, as proven by Rybiński (1999). Demands by various lobby groups to impose foreign exchange taxes are not justifiable and could be potentially harmful to the stability of the fragile financial market in Poland.

5. Integration with Foreign Financial Markets and Susceptibility to Financial Contagion

The contagion effects of the Asian and the Russian financial crises of 1997–1998 added to volatility of still very fragile financial markets in Poland [Orłowski, 1999]. Large swings in market indexes and the uncertainty about their future path cooled off the capital intermediation, individual and business investors generally preferred to allocate their savings in the banking system instead. The apparent susceptibility to financial contagion proved that Polish financial markets are by no means autonomous, they are strongly correlated with foreign interest rates, exchange rate and overall market expectations. They are subject to large, and perhaps increasing, deviations between current market information and previously determined expectations. The scale of these deviations may well be a key impediment to their future growth.

Sensitivity to "information clustering", that is, to deviations between actual information from market expectations, along with other impediments to the developments of Polish financial markets are examined within the project by Rybiński (1999). The study argues that the foreign exchange market in Poland was severely distorted by the NBP practice of exchange rate fixing, phased out only in summer 1999. The NBP used to determine the USD and the DEM per PLN fixed rates on a daily basis at which commercial banks were able to square their foreign exchange positions. The rate was arbitrarily set upon the buy/sell orders received by the NBP from commercial banks. The practice contributed to severe distortions of PLN exchange rates against key international currencies, especially in the presence of growing volatility in international foreign exchange markets in 1997–1998. Rybiński concludes that the Polish foreign exchange market became considerably more mature and less controlled by the central bank when sensitivity of PLN exchange rates to international currency movements considerably expanded, particularly in the aftermath of the Asian and the Russian financial crises. Rybiński uses GARCH (generalized autoregressive conditional heteroscedasticity) model to substantiate the results. Orłowski and Corrigan (1999) fully support these findings, using recursive residuals tests for trend functions of daily exchange rates of PLN (and other Central European currencies) against the USD and DEM. Indeed, at the time of contagion effects of the Asian and the Russian crises, the PLN exchange rate elasticity in USD against the DEM in USD considerably increased, proving that the PLN became stronger aligned with the DEM value. Therefore, Rybiński correctly concludes that any attempt to fix the exchange rate in the presence of increasing sensitivity of PLN

movements, particularly in terms of the DEM and presently the euro (EUR), may be highly distortive and harmful to the stability of the Polish foreign exchange market.

Rybiński further identifies other serious flaws in the development of Polish financial markets. He explains the bank practices to circumvent mandatory reserve requirements. Commercial banks in Poland successfully avoid paying the reserve by offering to their customers so-called "inter-decade-deposits" (since the required reserves for commercial banks in Poland are computed in ten-day intervals). It is a special form of repurchase agreements where a bank accepts deposit for nine days from a customer and on the reserve reporting day it offers a "buy-sell back" one-day transaction, thus avoiding the mandatory reserve requirement.

The provisions in the present foreign exchange law prohibiting a short sale of PLN can be also easily circumvented. Rybiński proves that the use of currency swaps is popular and widespread. It is aimed precisely at bypassing the short-term PLN sale prohibition. Foreign investors can always borrow PLN from a Polish bank and use the amount to speculate on zloty depreciation. If the market in Poland were large, the PLN spot rate would eventually adjust to the forward rate erasing potential for speculative profits. But in reality, such potential exists due to a relatively shallow market. Rybiński estimates that in late 1997 currency swap transactions at resident banks able to deal swaps were not larger than USD 860 million, thus small in relation to USD 24 billion of central bank's foreign currency reserves.

In conclusion, Rybiński argues strongly against currency fixidity in any form and against legal attempts aimed at restraining foreign exchange transactions. Financial markets in Poland, as they are presently everywhere, are always at least a step ahead of the regulators in terms of their efficiency and innovation. Investors and speculators can effectively circumvent any administrative attempts aimed at containing their actions.

The degree of cointegration of the Polish financial market with foreign markets is examined within the project by Linne (1999), who uses Johanssen and Augmented Dickey Fuller (ADF) cointegration tests to substantiate his findings. The study shows a relatively strong correlation between the Polish WIG 20 and the world portfolio approximated by the MSCI (Morgan Stanley Capital International world index). By contrast, other Central and East European stock markets investigated by Linne show a considerably weaker correlation with this index. A somewhat puzzling result is that the two examined Polish indexes, namely WIG 20 and WIGG, do not show any evidence for a cointegrating relationship with each other, although they essentially depict the same market. The insulation of their movements might stem from the technical difference between both indexes. The WIGG is a return index that covers all shares on the equity market, while the WIG 20 is a pure price index that comprises the 20 leading companies on the market. In essence, Linne's research proves an increasing correlation of Polish equity markets with

changes in world financial markets which makes the Polish market increasingly volatile, unpredictable and relatively immune to domestic restrictions and regulations. Polish financial markets are, therefore, increasingly susceptible to contagion effects of crisis episodes in world financial markets. Their resistance and immunity can be accomplished in the environment of macroeconomic stability and further systemic reforms consistent with transition to a competitive market economy.

6. Developing Effective Defense Mechanisms Against Financial Contagion

Poland's transition economy may draw a series of conclusions from the Asian and the Russian financial crises of 1997/98 [Orlowski, 1999]. In the discussions on the appropriate exchange rate policies, monetary policy targeting systems, institutional reforms in the financial sector, policy-makers need to elaborate lessons to be learned from the Asian crisis. In response to the Russian crisis, policy makers may focus on the development of effective defense mechanisms that will distance and shield their economies from the disastrous consequences of the lack of reforms in selected former Soviet Union states.

The key lesson of the Asian crisis for economies in transition is the necessity to put in place institutions and policies to manage and reduce risks associated with large capital inflows. These inflows seem to be inevitable since the three analyzed transition economies have all become members of the OECD, thus committed themselves to satisfying the OECD Codes of Capital Account Liberalization. At the same time, they are pursuing accession to the EU, gradually opening their financial markets to the European competition. Due to their fast economic growth by far outperforming the growth rates in both industrial countries and other emerging market economies, they have become an attractive place for foreign portfolio and direct investments. Therefore, developing a solid institutional base for capital account liberalization needs to be the primary objective of the next stage of their transition reforms. Furthermore, they cannot afford to postpone capital account liberalization for the purpose of aligning it more effectively with the progress in the development of the institutional and regulatory framework for the financial sector due to the firm commitments to liberalize rather quickly stemming from the OECD membership and from plans for the EU accession. The new convertibility law in Poland effective January 1, 1999 eliminates most of restrictions on convertibility of their currencies for capital transactions. However, Poland is retaining some restrictions on investments in non-OECD countries and by their residents and maintains limits on

foreign borrowing by domestic financial institutions. Investments in the country's financial markets by OECD residents and institutions are fully permitted.

There is no "way back" from capital account liberalization for the Central European countries in transition. However, within the limitations of international agreements, Poland may consider adoption of minimum safety standards for capital transactions. The permissible regulations may include:

- low, positive spreads between foreign currency and domestic currency deposits,
- minimum one-month maturity requirements for forward transactions,
- some restrictions on direct portfolio investments by domestic residents in non-OECD countries,
- a disposition at the hands of ministries of finance or central banks of extraordinary restrictions on capital outflows that can be applied exclusively in extreme emergencies.

The legally permitted extraordinary measures at the hands of monetary authorities may include: limitations with regard to parties involved in foreign exchange transactions rather than domestic residents, limits on non-trade related swap transactions, limits on offshore borrowing, restrictions on foreign exchange positions by banks, and unremunerated deposit requirements at central banks. Needless to say, the actual application of these measures shall be strictly restrained to the cases of drastic erosion of foreign exchange reserves, and of the eminent threat to the stability and integrity of the domestic financial system.

In practice, none of the capital restrictions can be fully implemented and effective. There are many ways to by-pass any of them [Rybiński, 1999]. Restraints on non-OECD investments cannot apply to foreign mutual funds based in OECD countries and including non-OECD securities. Shorter than one-month forward transactions can still be accomplished through various cross-hedging techniques, the money-market hedge, and swaps.

More drastic restrictions on capital inflows or outflows shall be avoided by all means. The above-mentioned, extraordinary measures shall be restrained only to emergency situations. This pertains also to the "Tobin tax" – a small tax on foreign exchange transactions – which imposition would send "signal effects" to financial markets indicating problems with either excessive inflows or outflows, thus triggering undesirable reactions of investors. In the case of dangers related to large outflows, the foreign exchange tax is likely to alter the equilibrium exchange rate contributing to high unpredictability of exchange rates and interest rates and providing strong signals for additional outflows. Moreover, investors expecting large currency depreciation, for instance in the order of 50 percent, would be always more than willing to pay a small, one-percent tax on foreign exchange transactions.

In mid-1999, there is still a dominant perception among the leading players in world financial markets that Central Europe is an attractive area for the direct and portfolio investments. The main factors attracting capital inflows to Central Europe's transition economies include:

- Improved creditworthiness, attributed primarily to the continuous buildup of foreign exchange reserves,
- Capital account liberalization,
- Strong, positive interest rate differentials over corresponding rates in highly developed industrial economies,
- A positive outlook for economic growth and profitability performance of businesses,
- Plans for the EU accession and efforts to pursue structural and institutional reforms in preparations for the EU integration.

The effective protection of Central European countries, still being considered "emerging market economies" can be accomplished through the creation of liquidity or the buildup of foreign exchange reserves as a secured, ready source of foreign currency loans [Feldstein, 1999]. Large foreign currency reserves held by central banks are essential for alleviating a devastating impact of speculative attacks and bank runs on banking systems in crisis-affected countries. When speculative attacks take place, the banking system is likely to incur large withdrawals of deposits that need to be replenished by liquidity provided by central banks. The infusion of bank reserves, that is, the growth of central bank liabilities needs to be matched by the corresponding increase in assets. This can be accomplished by a growth of domestic credit or by an increase in the domestic currency value of foreign exchange reserves. Consequently, it becomes essential that central banks in the economies affected by financial crisis have large foreign currency reserves in relation to the broad money supply. Domestic currency value of these reserves will significantly increase as a result of devaluation or a steep depreciation of domestic currency. The depreciation effect may follow an enactment of greater exchange rate flexibility. This suggests that a crisis-infected economy will be well protected in the presence of a relatively low ratio of broad money (M2) to foreign exchange reserves, meaning that the reserves are sufficient to cushion a liquidity crisis in the banking system.

The comparative analysis of the ratios of M2 money to foreign exchange reserves for the Asian economies and Poland in the period 1995–1998 is presented in Table 3. These ratios grew to dangerously high levels in Indonesia, Korea and the Philippines until the eve of their financial crisis. Clearly, when speculative attacks and bank runs persisted, these countries could not provide liquidity to the ailing banking systems. The only feasible response was a higher degree of exchange rate flexibility and a currency devaluation that cut these ratios to more manageable levels. By comparison, the ratio in Poland remains

Table 3. Ratios of M2 Money to Foreign Exchange Reserves (end-of period data)

	1995	1996	1997	1998
Indonesia	6.90	6.39	4.51	3.12
South Korea	6.08	6.21	5.90	4.13
Malaysia	3.12	3.43	3.40	2.79
The Philippines	5.75	4.49	5.14	4.49
Thailand	3.65	3.86	3.51	4.50
Poland	2.86	2.60	2.45	2.38

Source: Own calculations based on the data from IMF: International Financial Statistics – various editions, updated from quarterly and monthly reports of the National Bank of Poland

within "the safety limits". In our opinion, a growth of these ratios above 3 would indicate a warning zone and above 4 would imply insufficient reserve coverage of domestic broad money. The excessive growth of this ratio would signal difficulties of banking systems in the event of speculative attacks and bank runs. In essence, the Poland and other Central European countries need to build up foreign currency reserves while experiencing a desirable and unstoppable fast growth of monetization of their economies at the present time. For this reason, they need to keep relatively high interest rate margins over the corresponding rates in highly developed industrial economies.

An essential tool of building the immunity to financial crisis is a real progress of the economic transformation based upon maintaining fiscal and monetary discipline. The macroeconomic stability shall be further supported by an increasing competitiveness and profitability of businesses, by privatization involving solid strategic investors, and by a solid regulatory foundation for financial markets, institutions and business organizations. In essence, the effective resistance to financial crisis shall be accomplished through the "natural process", not accompanied by extraordinary and highly distortive policy measure in the form of capital controls.

In order to avert a situation of multiple equilibria and possible contagion effects of the Asian-style crises in the future the financial sectors in transition economies need to be able to cope with abrupt changes in asset prices and directions of capital flows. They cannot have a weak banking system in the presence of an open capital account. Otherwise, their banks will develop liquidity problems and "bank run" situations similar to those in five Asian economies most affected by the recent crisis. In this instance, the banking systems of Central Europe have shown considerable improvements. Notably, classified (substandard, doubtful, and lost) loans in relation to total bank loans in Poland had gradually fallen from the peak of 31.2 percent in 1993 to 10.5 percent in 1998.

In addition to the need for developing a solid institutional and regulatory base for capital account liberalization, the Asian crisis teaches the transition economies that by all

means their companies shall avoid a heavy reliance on high debt to equity ratios [Stiglitz, 1998; Eichengreen and Mussa, 1998]. A country cannot have a large volume of foreign currency denominated public and private short-term debt that makes it particularly vulnerable to speculative attacks. A currency crisis may be precipitated by foreign creditors who may be unwilling to rollover the existing debt if they detect a strong vulnerability to financial contagion. Moreover, a subsequent fall in the value of domestic currency will significantly increase costs of servicing the foreign currency debt. The Asian crisis, particularly in Korea, proved that industrial companies and financial institutions were nearly broke when interest rates rose abruptly on the eve of the crisis and in response to contagion effects from financial jitters in other emerging market economies. High debt-to-equity financing in Asia stemmed from full currency convertibility in the presence of excessive interest rate differentials in affected economies over the rates in the countries where they have borrowed, namely, Japan, Singapore and Taiwan. This led to the build up of vulnerability, especially in the form of short-term, dollar and yen-denominated debt. The expansion of the private debt in Asia may resemble the path of current trends in Poland where companies have strong incentives to borrow abroad at much lower interest rates [Orlowski, 1998b]. In these terms, the lessons from Asia are more useful for Central European transition economies than the debt problems of Latin American countries in the 1980s. The key factor triggering the Asian crisis was the out-of-control expansion of the private debt, while the main cause of Latin American instability was the mismanagement of the public debt [Stiglitz, 1998]. Nevertheless, high debt-to-equity ratios are presently inevitable in Central Europe's transition economies since their capital markets are still underdeveloped and unstable and will remain so in the foreseeable future. Consequently, fast-growing companies will have to continue their reliance on bank credit and corporate debt as an external source of business fixed investments.

Since Poland is currently experiencing a fast expansion of domestic credit, its interest rates are very high, aimed at preventing inflationary consequences of the monetary expansion. Such high interest rates in the presence of capital account liberalization may lead to the unfavorable risk structure of capital inflows, that is, to the advantage of short-term portfolio over the long-term portfolio and direct investments. In the presence of capital account convertibility, this situation creates strong incentives to borrow abroad, in the Euro-zone, at much lower interest rates and invest at home. Excessive interest rate differentials along with the nominal appreciation of the Polish currency in USD and DEM terms in 1998 provided strong incentives for financing Polish exports with money market hedging, that is, immediate borrowing by Polish exporters in foreign currency at low interest rates, swapping the foreign currency into zlotys, investing zlotys at high domestic interest rates and repaying the foreign debt by export receivables [Orlowski, 1998b].

Widespread applications of both interest rate swaps and money market hedging contributed to large net inflows of short-term capital to Poland in 1998, despite the existing formal restrictions. Therefore, for the purpose of avoiding the unfavorable pecking order, or the unfavorable risk structure of capital inflows (that is the advantage of short-term portfolio over long-term direct and portfolio investments) it is essential that transition economies align their domestic interest rates with foreign rates to the level of uncovered interest rate parity conditions. Specifically, at the end of 1998, Poland's one-month Warsaw Interbank Offer Rate could well be 14 percent, instead of the 18 percent officially applied operational target of the National Bank of Poland. The estimate is based on our calculations of uncovered interest parity taking into consideration the 0.5 crawling devaluation of the zloty at the end of 1998, the 6.8 percent year-to-year Polish inflation and the 1.9 percent EU average inflation. If this distortion continues in 1999, Poland will be exposed to large and perhaps destabilizing inflows of short-term portfolio capital. The high domestic interest rate is also supported by the existing rate of crawling devaluation of the PLN against the EUR/USD basket (55% EUR and 45% USD) at a monthly rate of 0.3 percent as of March 1999. Eliminating the crawling devaluation would be a desirable policy decision that would allow reducing interest rates and diminishing incentives for large short-term capital inflows. In addition to large, excessive domestic interest rates high debt-equity ratios result from inadequate tax, regulatory and banking practices [Stiglitz, 1998]. Lending to institutions that have high debt-equity ratios involves high, systemic risk. In order to control these lending practices, the countries in transition may consider levying high, progressive capital gain taxes proportionate to the risk associated with these loans. Further efforts can be made to increase an equity base for the emerging corporate sector. Pension reforms and employee stock option programs may well serve this purpose, thus lead to lowering debt-equity positions. At the same time, these programs are likely to strengthen the social safety net and to improve social cohesion that are essential for more effective preparations for the EU accession.

Another important lesson from the Asian crisis is the need to monitor the excessive growth of investment (primarily in the non-tradable sector) that would surpass national savings by a large margin. The share of gross domestic investment in GDP reached 23 percent in Poland at the end of 1997. Correspondingly, the ratio of gross national savings-to-GDP was only 19.7 percent. However, both investment and savings ratios were still considerably lower than the corresponding ratios among the Asian tigers. In both the Asian and the Central European cases, the national savings lagged behind investments by several percent of the GDP. When the countries in transition boost national savings to the level of approximately one-fourth of the GDP, a further enhancement of investment can be mainly financed by external savings and foreign capital inflows. This situation may generate at least two negative effects. It may contribute very little to the income growth

in the national economy and it may make these countries more vulnerable to contagion effects of world financial markets. Therefore, controlling the expansion of investment through tax programs and through a gradual, prudent approach to privatization may improve these countries immunity against shocks related to world financial crisis.

There are, however, some reservations to the role of macroeconomic stability in providing an effective cushion against negative effects of the financial crisis expressed by Wyplosz (1998). The argument is that fiscal and monetary policies may be counterproductive when the financial crisis involves multiple equilibria, has a self-fulfilling nature. Specifically, if the crisis propagation is induced by structural deficiencies in a given economy, contractionary monetary and fiscal policies may further aggravate rising unemployment and destabilize the government. If the crisis is triggered by a weak banking system, similar policies aimed at defending high interest rates and the currency stability may precipitate further bank failures.

One of the most critical elements of reducing vulnerability to external financial instability is the achievement of transparency of the entire monetary and financial system in individual emerging market economies [Stiglitz, 1998]. The lack of transparency and adequate information was the common factor that triggered and propagated the Mexican crisis of 1994/95, the Asian crisis and the Russian crisis. In all of these cases investors were misled about the levels of reserves and about the exposure of these countries to short-term debt thus to vulnerability of financial shocks. Governments failed to encourage the transparency needed for financial markets to recognize such problems as: unreported mutual guarantees, insider relations, non-disclosure by banks and companies of their true financial positions. In reality, reserves were much smaller and the short-term debt much higher than investors estimates. Consequently, the financial crisis caused a massive withdrawal of both short-term, speculative capital, and long-term portfolio capital. The Asian crisis brought a need for new, relevant economic information. The previously applied indicators of financial vulnerability focusing almost exclusively on measures fiscal and monetary convergence would not adequately predict the crisis in the five affected Asian states. The new measures brought by this crisis included debt-equity ratios, non-performing assets of financial institutions, actual reserve indicators and the risk structure of capital inflows.

In order to avoid similar problems, Poland has a plethora of tasks ahead to improve transparency and information about the state of their financial markets and institutions. The present state of exhaustive information about balance of payments conditions, bank asset and liability positions, detailed reporting of central bank assets and liabilities in these economies is still inadequate. Specifically, the banks still need to follow common reporting standards on capital adequacy measures, and to eliminate discrepancies in current account data between the customs, the NBP, and the Ministry of Finance that are still excessive. These discrepancies impair credibility of the official macroeconomic data.

Monetary policy transparency can be improved by a forward-looking direct inflation targeting system [Orłowski, 1998b]. Until the end of 1997, the central banks of Poland, Hungary and the Czech Republic followed a backward-looking, discretionary policy of interest rate targeting, occasionally changed into monetary targeting. The Czech National Bank switched to the system of core inflation targeting since the beginning of 1998 and the National Bank of Poland applied direct targeting of CPI inflation as of January 1, 1999. The new system of direct inflation targeting requires publication of future inflation targets by a central bank and relies on a close dialogue between monetary authorities and financial institutions.

Direct inflation targeting offers several features that are very helpful for developing an effective cushion against contagion effects of a world financial crisis. The central banks that have applied this system, particularly the Reserve Bank of New Zealand, the Bank of England, the Bank of Sweden and the Bank of Canada, prove that they have been able to manage very effectively the episodes of world financial jitters in the 1990s. Direct inflation targeting allows for smoothing out large swings in the demand for money, as proven by the United Kingdom since it applied the system in the aftermath of the pound crisis in September 1992. For this reason, the application of direct inflation targeting by central banks of transition economies in 1998 was appropriate and rational. The Asian and the Russian crisis generated high instability of monetary aggregates in these countries in 1998. Gearing monetary policy to the future inflation target injects a sense of stability to financial markets and has a smoothing impact on demand for liquid assets. In addition, direct inflation targeting is more disinflationary than alternative policy regimes. It allows indexation of prices, wages and interest rates to be geared to much lower, forecasted inflation. The backward-looking policies of interest rate targeting were based on adaptive expectations and consistent with indexation mechanisms adjusted to the high, historical inflation [Orłowski, 1998b]. Finally, the system is consistent with flexible exchange rates. Therefore, it helps to prevent an excessive real appreciation of domestic currencies and, consequently, it supports a rational risk structure of capital inflows.

As the Central European transition economies prepare for their integration with the European Union, they build into their accession strategy measures of strengthening their immunity to financial contagion. As discussed above, the programs and preparations for the EU accession have played a critical role in defending Central European transition economies from the financial problems of Russia. These programs outlined by the EU Agenda 2000 and by the European Commission 1998 position reports on preparations of the candidate countries, emphasize the institutional strength of these economies. The EU accession provides solid incentives for preparations of Central European banking systems for open competition with large, experienced international banks. The candidate economies require developing prudential regulation and an effective system of bank

monitoring and supervision. Therefore, the accession programs outline directions for developing an effective cushion against possible future external financial crisis situations.

7. Optimal Choice of the Exchange Rate Regime

Immunity against the financial contagion can be certainly strengthened through the achievement of macroeconomic stability. Most importantly, inflation needs to be brought down to sustainable lower single digit levels. A critical role for achieving macroeconomic stability and for the purpose of more effective, non-inflationary management of capital inflows is played by a proper choice of an exchange rate regime. The pattern of exchange rate adjustments during the Polish economic transition in comparison to other Central and East European countries is examined within the project by Tomczyńska (1998). Her study elaborates various approaches to the so-called "exit strategies" from the currency peg applied at an initial stage of the economic transformation. It concludes that early departures from fixed exchange rates were generally more favorable to the institutional development of financial markets. Expanded exchange rate flexibility allows pursuing autonomous monetary policies focused on domestic goals of price stability. It is a more favorable solution for increasing financial intermediation and avoiding real appreciation of domestic currency, thus easing potential problems with large current account deficits. These exit strategies followed by period of more flexible exchange rates will have to eventually terminate when Poland and other EU candidates come closer to accession to the Union and, at a later time, to the European Monetary Union.

In preparations for the EU integration, Poland and other countries in transition may choose going in two different directions. Preferably, they may expand exchange rate flexibility. Alternatively, they may move into a currency peg by an early application of a shadow, unilateral peg to the euro before the official accession to the European Union and the corresponding, permissible entry to the ERM II.

Expanding flexibility of exchange rates in the presence of large capital inflows will result in the nominal appreciation of domestic currencies. The nominal appreciation may be decreased by the diminishing interest rate differentials over the corresponding rates in the Euro-zone. As a result, domestic currencies of transition economies will not experience real appreciation thus balance of payments positions in these countries may not deteriorate. More flexible exchange rates are likely to diminish expectations of a real currency appreciation. Consequently, they may result in lower inflows of speculative, short-term capital in relation to more stable long-term portfolio and direct investment. Flexibility of exchange rates is a critical instrument of management of large capital inflows since it leads to a favorable risk structure

(advantage of long-term over the short-term capital) of these inflows. Therefore, they diminish the risk of sudden reverse outflows at the time of external financial crisis and diminish vulnerability of these economies to financial contagion. For these reasons, they are a preferred, more viable policy option for transition economies than a currency peg.

Alternatively, the Central European transition economies may opt to speed up their currency pegging to the euro. Before becoming members of the EU, they can choose to apply unilateral, shadow pegging of their currencies to the euro. After the accession, they will be expected to join the European exchange rate mechanism II (ERM II) where they will peg their national currencies to the EU common currency in bilateral arrangements. But fixing the exchange rate to the euro in the presence of inflation exceeding the EU inflation by an excessive margin would entail a sizeable real appreciation of the candidate countries' currencies and a loss of their competitive position. Expanded capital account convertibility under fixed exchange rates may generate the Asian-style expectations of a further real appreciation and intensified short-term, speculative capital inflows. These inflows will have to be sterilized in order to avoid additional inflationary pressures and further expectations of real appreciation. However, the sterilized intervention cannot be effective on a sustained basis since it leads to high interest rates, thus invites more inflows, and it involves high fiscal costs that could jeopardize fiscal stability.

Orłowski (1998a) argues that flexible rates at the present stage of transformation in Central Europe are a superior choice to an early peg to the euro. However, the peg will be inevitable at some future point since the transition economies will have to apply it, at least as a part of a post-accession strategy when they begin preparations to enter the European Monetary Union. At that future time, the candidate countries may have an option to apply temporary capital controls in response to the peg to the euro and as a tool of managing large capital inflows, in order to alleviate possible strong pressures on the currency. They may opt to apply temporary prudential measures such as the Chilean-style unremunerated reserve requirements on foreign currency holdings.

8. A Final Note: Future Tasks for Poland's Financial Markets in Transition

Stability and institutional advancement of Poland's financial markets in the future will depend upon the overall macroeconomic stability and a continuous growth of the national economy that will enhance financial intermediation. There will be an increasing competition in the banking system and in all financial markets that will ultimately reshuffle

the leadership position among banks, mutual fund companies, pension funds, venture capital firms and all small and large investors. Only the most efficient institutions capable of applying modern technologies and managerial techniques and able to cut costs will survive the increasingly competitive environment.

The most urgent tasks for the banking sector aimed at strengthening its competitiveness include:

1. Completion of the privatization process of banks, with a stronger role of experienced strategic investors.
2. Improvement in transparency of financial institutions, along with a higher degree of transparency of the NBP and the Ministry of Finance.
3. Continuous consolidation of financial institutions.

The overall improvement of transparency and accountability of both monetary authorities and all financial institutions is absolutely essential for generating a more stable financial environment, for reducing volatility of interest rates and exchange rates and, ultimately, for expanding the time horizon and improving the risk structure of investment. Banks and other Polish financial institutions will be well advised to give up calls for regulation stating a need for preserving "national identity" of their organizations. Such calls eventually lead to inefficiency and hamper competitiveness of self-confident institutions and may question their future viability.

The overall macroeconomic stability is essential for the future growth of financial markets. In order to accomplish desirable price stability, monetary authorities need to continue pursuing a high degree of fiscal and monetary discipline. Lax fiscal policies will have to be accompanied by excessive monetary tightness that will make domestic credit more expensive than foreign borrowing in the environment of open financial markets. This disproportion may prove to be harmful to domestic financial institutions. Furthermore, price stability is essential for achieving higher domestic savings that is absolutely critical for easing the present problems with large, expanding current account deficit in Poland (expected to reach close to 7 percent of the GDP at the end of 1999). Higher saving is indispensable for financing the strong growth of demand for investment that will naturally continue to expand in the Polish economy in transition. A growing gap between the national investment and the national savings is a key factor contributing to the current account deficit that is emerging as a single, most critical danger to the economic transition. Therefore in the coming period, a success of Poland's economic transition will strongly depend upon its ability to generate a favorable environment for boosting national savings. Fiscal discipline, price stability and the institutional growth and efficiency of financial markets are crucial for enhancing public confidence in the stability of the national currency and for increasing national savings.

References

Eichengreen, Barry and Michael Mussa (1998). "Capital Account Liberalization and the IMF". Finance and Development, Vol. 35, No. 4, The International Monetary Fund, Washington, D.C., December, pp. 16–19.

Feldstein, Martin (1999). "Self-Protection for Emerging Market Economies". NBER Working Paper No. W6907, January. Cambridge, Massachusetts.

Fink, Gerhard, Peter Haiss, Lucjan Orłowski and Dominick Salvatore (1998). "Central European Banks and Stock Exchanges: Capacity Building and Institutional Development". European Management Journal, Vol. 16, No. 4, pp.431–446.

Fink, Gerhard, Peter Haiss, Lucjan Orłowski and Dominick Salvatore (1999). "Privileged Interfirm/Bank Relationships in Central Europe: Trigger or Trap for Corporate Governance?" Center for Economic and Social Research: Studies and Analyses No. 170, Warsaw, Poland.

Linne, Thomas (1998). "The Links Between Polish and International Financial Markets". Center for Economic and Social Research: Studies and Analyses No. 154, Warsaw, Poland.

Orłowski, Lucjan T. (1998a). "Exchange Rate Policies in Central Europe and Monetary Union" Comparative Economic Studies, Vol. 40, No. 3, pp. 58–78.

Orłowski, Lucjan T. (1998b). "Monetary Policy Targeting in Central Europe's Transition Economies: The Case for Direct Inflation Targeting" Center for Social and Economic Research and Central European University: Working Paper Series, No. 11, Warsaw and Budapest, August.

Orłowski, Lucjan T. (1999). "The Asian and the Russian Financial Crises: Propagation Effects and Policy Responses in Central Europe's Transition Economies" Halle Institute of Economic Research: Forschungsreihe, Halle, Germany, forthcoming.

Orłowski, Lucjan T. and Thomas Corrigan (1999). "Volatility of Central European Exchange Rates: Reaction to Financial Contagion and Policy Recommendations for EU Accession" Russian and East European Finance and Trade, forthcoming.

Rybiński, Krzysztof (1998). "Impediments to the Development of Polish Financial Markets". Center for Economic and Social Research: Studies and Analyses No. 154, Warsaw, Poland.

Sadowska-Cieślak, Ewa (1999). "Liberalizacja rynków kapitałowych w Polsce – stan i perspektywy" ("Liberalization of Polish Capital Markets – the Current State and Future Perspectives"). Center for Economic and Social Research: Studies and Analyses No. 145, Warsaw, Poland.

Stiglitz, Joseph (1998). "The Role of International Financial Institutions and the Current Global Economy" Address to the Chicago Council on Foreign Relations, Chicago, February 27. Available on <http://www.stern.nyu.edu/~nroubini/>

Tomczyńska, Magdalena (1998). "Exchange Rate Regimes in Transition Economies". Center for Economic and Social Research: Studies and Analyses No. 128, Warsaw, Poland.

Tomczyńska, Magdalena (1999). "Dostosowanie polskich regulacji systemu bankowego do wymogów Unii Europejskiej" ("The Adjustments in the Regulatory Environment of the Polish Banking System to the European Union Requirements"). Center for Economic and Social Research: Studies and Analyses No. 145, Warsaw, Poland.

Wyplosz, Charles (1998). "Globalised Financial Markets and Financial Crises" in: Teunissen, Jan Jost (ed.) "Regulatory and Supervisory Challenge in a New Era of Global Finance". Forum on Debt and Development (FONDAD). The Hague, The Netherlands, pp. 70–87.

Zaręba, Jadwiga (1998). "Globalizacja rynków finansowych a strategię banków w Polsce" (Financial Markets Globalization and Banking Strategy in Poland"). Center for Economic and Social Research: Seminar PBR-CASE No. 35, February 26, Warsaw, Poland.

Zawalińska, Katarzyna (1999). "Asset and Liability Management with a Special Focus on Risk Management in Commercial Banks in Poland". Center for Economic and Social Research: Studies and Analyses, Warsaw, Poland, in preparation.

CASE-CEU Working Papers Series

- 18 Yuri Yegorow: Dacha Pricing in Russia: General Equilibrium Model of Location

- 19 Andreas Simonovits: A Comparison of The Local Stability of Rational and Naive Expectations

- 20 Andrzej Baniak, Jacek Cukrowski,: Information processing in Decision-making; Effects of Technological Change on Efficient Structures

- 21 Andrzej Bratkowski, Irena Grosfeld and Jacek Rostkowski: Investment and Finance in de novo Privte Firms: Empirical Rslts from the Czech Republic, Hungary and Poland

- 22 Mateusz Walewski: Wage-Price Spiral in Poland and other Postcommunist Countries

- 24 Barbara Liberda, Tomasz Tokarski: Determinants of Savings and Economic Growth in Poland in Comparision to the OECD Countries

- 25 Przemysław Woźniak: Various Measures of Underlying Inflation in Poland 1995–1998

- 26 Jacek Rostowski: The Approach to EU and EMU Membership: the Implications for Macroeconomic Policy in Applicant Countries

- 27 Stanisław Gomułka, Marek Styczeń, Estimating the Impact of the 1999 Pension Reform in Poland, 2000–2050

- 28 P. Mihályi, R. Petru: Health Care in the Czech Republic, Hungary and Poland – the Medium-term Fiscal Aspects

- 29 Max Gillman: On Keyne’s Theory of the Aggregate Price Level in the Treaties: Any Help for Modern Aggregate Analysis

- 30 Nicholas Stern: What Tax Reform is Needed for Fast Economic Development?

- 31 Béla Greskovits: Consolidating Economic Reforms: the Hungarian Experience with Lessons for Poland

- 32 Andrzej Baniak: Unilateral Spillovers Between East and West and Quality Competition

- 33 Lucjan T. Orłowski: The Development of Financial Markets in Poland
