Banking Sector Systemic Risk in Selected Central European Countries

Review of: Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovakia

Stefan Kawalec

Warsaw 1999
Table of Contents

Foreword
Executive summary and recommendations

1. Dealing with the legacy of a socialist economy
   1.1. Market structure
   1.2. Bad loans in the early stage of transition
   1.3. Banks and real economy: specifics of early transition stage
   1.4. Transition in the real sector: hypothetical grouping of countries

2. Banking sector systemic risk comparison
   2.1. Notions of a banking crisis and banking sector systemic risk
   2.2. Other attempts at an international comparison of sector systemic risk
       Standard&Poor’s risk categories
       J.P. Morgan’s focus on loan growth and economy’s financial leverage
       Applicability of S&P’s and J.P. Morgan’s approaches
   2.3. Comparison table and methodology

3. Overview of specific countries
   3.1. Bulgaria
   3.2. Czech Republic
   3.3. Hungary
   3.4. Poland
   3.5. Romania
   3.6. Slovakia

4. Key challenges and policy recommendations
   4.1. Crisis resolution – dealing with bank capital deficiencies and bad debt restructuring
   4.2. Bank privatization
   4.3. Strengthening of regulatory and institutional framework
   4.4. Year 2000 systemic liquidity risk

Bibliography

About the Author

ABSTRACT

Charts
2. Share of Industry in GDP
3. Extent of Privatization
5. Credit/GDP
6. Deposits/GDP
7. M2/GDP
8. Credit and GDP Real Change in Poland 1992-1997

Tables – Main Economic Indicators
1. Bulgaria
2. Czech Republic
3. Hungary
4. Poland
5. Romania
6. Slovakia
Foreword

The Asian crisis brought much attention to banking sector systemic risk, understood as the potential macroeconomic consequences of the condition of the banking sector. In spite of growing interest, there is no widely accepted robust measures of this risk as it depends on a number of macroeconomic, microeconomic and institutional factors difficult to measure and compare internationally. This paper is an attempt at a comparative overview of banking sector systemic risk in six Central European countries concluding with some policy recommendations. The countries covered by the paper are specific by the fact that in the early 1990's they moved from a socialist to a market economy and the legacy of a socialist economy still has an important influence on the shape of their banking sectors.

The paper consists of four sections. The first section describes the experience of the six countries in dealing with the legacy of a socialist economy. The second section discusses the methodology used in the analysis of systemic bank risk and present Comparison Table with risk indicators and author's assessments. The third section describes in more detail the situation in the specific countries. The fourth and concluding section describes key challenges and policy recommendations. An Overview of the paper's findings is presented in the executive summary on pages 4-6.

I gathered data for the analysis mostly in the summer and autumn of 1998 and only some information was updated later. Comparative analysis and risk assessment is presented as of end of 1997. Latest developments are sometimes taken into account but not on a regular basis.

This paper is the result of the author’s research visit to the European I Department of the International Monetary Fund. I have benefited from discussions with the staff of the European I and Monetary and Exchange Affairs Departments of the International Monetary Fund, the Private and Financial Sector Development Department, Europe and Central Asia Region of the World Bank as well as Messrs. Krzysztof Bledowski, Maciej Krzak and Slawomir Sikora, although I was not able to address all issues raised and incorporate all valuable suggestions. I would also like to express thanks to Mr. Krzysztof Kluza for his help in the quantitative analysis and to Ms. Teresa Pinski for editing the text.

Responsibility for the paper, data, estimates and opinions as well as possible mistakes in it should not be attributed to any institutions or persons other than the author.
Executive summary

Past and present situation

- In the early 1990s, after jumping into a market economy and liberalizing their banking sectors, Central European countries underwent severe banking crises and spent significant budgetary resources to deal with them.
- The banking crises in Hungary and Poland have been resolved without system destabilization. Now, the banking sectors in these two countries are relatively robust although small in relation to GDP. Measures taken to deal with banking crises in the remaining four countries were not effective.
- The banking crisis in Bulgaria ended with a major destabilization, dramatic downsizing of banking assets and a deep recession.
- Romania, the Czech Republic and Slovakia have yet to deal with their continuing banking crises which still constitute a danger for economic stability and development.

Concise Comparison Table (Including developments until 1997)**/

<table>
<thead>
<tr>
<th>Assessment of the Transition of the Industrial Sector</th>
<th>Bulgaria</th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
<th>Romania</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Government Credit/GDP (1997)</td>
<td>Suspended</td>
<td>Slowdown</td>
<td>Steady</td>
<td>Steady</td>
<td>Suspended</td>
<td>Slowdown</td>
</tr>
<tr>
<td>Soundness of Banking Practices</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Banking Sector’s Capital Deficiency 1997E/GDP</td>
<td>-</td>
<td>8.8%</td>
<td>0%</td>
<td>2.2%</td>
<td>8%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Government Debt Adjusted by Banking Sector’s Capital Deficiency/GDP</td>
<td>82%</td>
<td>22%</td>
<td>63%</td>
<td>49%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>Author’s Overall Assessment of Banking Sector Systemic Risk</td>
<td>Short Term</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Medium Term</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

*/ Full table followed by explanatory notes is on page 16.
**/ A (best in the region), B (medium in the region) and C (weakest in the region).
***/ The scale extends from 1 –very low risk to 5 – very high risk.

Key challenges and policy recommendations

Key challenges

- Improvement in the shape of the banking sector in Czech Republic, Slovakia and Romania as well as its future soundness in Bulgaria are dependent on changes in the microeconomy and progress in restructuring the industrial sector. On the other hand, a change in bank behavior is necessary for real restructuring of the industrial sector.
In Hungary, Poland and Bulgaria a key issue is how to ensure the soundness of banking sector in the medium and longer term in a likely period of growing monetization and dynamic expansion of domestic credit and when costs of potential financial instability will increase significantly.

In the Czech Republic, Slovakia and Romania a key issue is how to resolve existing banking crises and avoid crisis repetitions.

In the medium term, all six countries will have to deal with the potential instability of international capital flows and risk of currency crisis.

In the very short term, all six countries will face a risk of a systemic liquidity crunch that may be triggered by the year 2000 problem.

Crisis resolution – dealing with bank capital deficiencies and bad debt restructuring (in the Czech Republic, Slovakia and Romania)

- Banking sector problems may cause major economic and political destabilization unless they are dealt with both decisively and in a way that supports, not undermines, confidence.
- Troubled banks that will not be liquidated should be recapitalized either by new owners or more likely by the government.
- Rehabilitation should focus on changing bank behavior. It should be connected with management changes and bank privatization.
- It would be advisable that bank rehabilitation contributed to industrial sector restructuring. To this end, carving out bad claims and transferring them to a government sponsored bank hospital is not a recommended solution.

Bank privatization

- The key aim of bank privatization should be to create the best conditions for long term development, soundness and efficiency of the privatized institution.
- In transition countries there is a lack of institutions that can become a reliable strategic investor. Fear that leading domestic banks will be taken over by foreign institutions and will lose their national character strongly affects privatization decisions in many countries. It often results either in delaying bank privatization for many years or privatization schemes that do not strengthen the bank.
- It is not unjustified for a government to seek privatization schemes that would ensure the autonomy and national character of some banks. However, one should be aware of and try to minimize the risk that the institution privatized without a strong strategic investor will not be able to withstand competition and will cause problems in the future.

Strengthening of regulatory and institutional framework

- Central European countries made great progress in incorporating the Basle Committee’s “Core Principles” on banking regulations into their legal systems. Enforcement, however, is lacking not only because of the shortage of trained staff in banking supervision but it is also hindered by important flaws in regulations.
- The main flaws are related to differences between domestic and international accounting and auditing standards including lack of overriding “substance over form” and “truth and fairness” rules as well as the frequent implementation of
regulations on a solo rather than a consolidated basis. These flaws also affect the transparency of IAS reports published by banks.

- The usefulness of IAS auditor reports would increase if international standards on loan classification and provisioning requirements were implemented.
- Foreign indebtedness of commercial sector should be monitored and statistical data should be published on a monthly or quarterly basis.
- Financial authorities should have the ability to introduce measures to discourage short-term capital inflows if the stock of such inflows becomes significant in relation to foreign reserves.
- Currency risk exposure should be reported in audited financial reports published by all companies above a certain size.
- Guidance (indicative limits) on foreign currency exposures for companies should be established.
- Companies with short foreign exchange positions exceeding the regulatory limits should be banned from external borrowing.
- The capacity and efficiency of banking supervision could improve dramatically if public disclosure requirements are strengthened and responsibilities of auditors deepened and extended.

Systemic risk of the Year 2000

- Widespread anxiety among bank customers about the Year 2000 problem could be more damaging than the technological issue itself.
- Banking supervision should eliminate banks that have not addressed the Year 2000 problem adequately or do not meet minimal solvency and liquidity standards.
- Banks that stay in the system should if needed receive quick liquidity support by the end of 1999 from the central bank to allow them to repay deposits and timely execute customer payment orders.
- Implementation of these steps to contain year 2000 systemic liquidity risk may be more problematic in the Czech Republic, Romania and Slovakia where some major banks do not meet solvency and liquidity standards, and in Bulgaria where currency board arrangement limits the central bank's flexibility.
Section 1.
Dealing with the legacy of a socialist economy

The way countries have dealt with the legacy of a socialist economy has an important if not decisive influence on the shape of banking sectors in Central European transition economies.

1.1. Market structure

Under the socialist economic system banking sectors in Central European countries were organized based on the Soviet model with one state bank (monobank) responsible for both currency issuance and provision of financing to the state enterprise sector. The monobank was supported by several specialized banks, mainly: a foreign trade bank and a savings bank.

A two-tier banking system was created in the last phase of the socialist system or after its end, by breaking up the monobank into a central bank and one or several commercial banks. At the beginning of transition, banking activity was deeply liberalized which preceded the building of an infrastructure of prudential regulations and banking supervision. A great number of new banks funded by domestic capital quickly emerged. In general, the record of these new start-ups has been weak and most ran into trouble because of incompetence and/or connected lending and other fraudulent practices by shareholders and managers. As a result, start-up banks, although initially numerous, did not change the market structure substantially. A number of foreign banks also started up operations. Their greenfield operations – although some were very successful – did not significantly change the market structure either.

Former state-owned banks (offspring of monobank or former specialized banks) still dominate banking sectors today. A number of these banks have been privatized. Privatization was often only partial with the state remaining the dominant shareholder. Only in Hungary most of the banking sector (weighted by assets) is now privately controlled. State-controlled banks hold half of the banking assets in Poland and the majority of the banking assets in the four remaining countries of our survey.

1.2. Bad debt problem in the early stage of transition

In a socialist economy and in a situation of permanent shortage, enterprises either had no problems with selling their products and were able to set prices covering all their costs or were given government subsidies. There was no phenomenon of bad debts and little need for banks to evaluate credit risk.

As enterprises were exposed to market forces and output collapsed, a large proportion of bank loans became non-performing and many of the major banks became technically insolvent. Central European countries recapitalized banks and restructured the bad debt portfolios of their banks in the early years of transition.

In Poland, a program of bank and enterprise financial restructuring as well as the prospect of bank privatization contained moral hazard and changed the behavior of banks, although privatization itself has been implemented slowly. Hungary learned from its experience with several recapitalizations of banks and ultimately changed bank behavior and bank/enterprise relations through privatization with sale to foreign strategic investors.
In Bulgaria, the Czech Republic, Romania and Slovakia bank rehabilitation programs were simply bail-outs of banks and did not result in a change in bank behavior and bank/enterprise relations. Banks in these four countries, freed from old bad loans, remained under state control and were subjected to political influence in their lending policies and extended new bad loans.

1.3. Banks and real economy: specifics of early transition stage

At the beginning of transformation former socialist economies were highly distorted. Since the end of central planning the real sector in transition economies underwent dramatic restructuring adjusting to the market. However, neither banks nor government agencies played a significant role in this process. Real sector restructuring was shaped by market forces. In the early stage of transition, bank credit and any government support were used across the region to finance the continuation of old activities and avoid or diminish the extent of difficult adjustments. Serious restructuring was triggered by the lack of funds to finance the continuation of previous activities.

Banks had little chance early on to direct credit in such a way as to contribute to real sector market-oriented growth. They could, however, contribute to market-oriented restructuring of the real sector by being cautious in lending policies, not wasting money and not lending money to enterprises that were trying to avoid restructuring.

In the most advanced transition economies such as Hungary and Poland, the initial transition collapse was followed by a 2-3 year period during which output increased while real credit to the economy declined or grew insignificantly.

1.4. Transition in the real sector: hypothetical grouping of countries

From the point of view of the depth and mechanism of the restructuring of industrial companies, the six Central European countries covered by this study may be grouped according to profiles defined by several indicators. Indicators such as: the relative change of labor productivity in industry, the change in industry’s share in GDP, extent of privatization, quality of privatization, share of classified loans and quality of macroeconomic policies over the transition period, justify in my view distinguishing three groups of countries. The first group composed of Hungary and Poland – countries where the industrial sector underwent the deepest restructuring – will be called “Steady Transition Countries”. The second group made up of Czech Republic and Slovakia will be called “Slowdown Transition Countries”.

1 / Only then did enterprises start to diminish excess employment and to sell or rent out unutilized pieces of equipment, buildings and other property. For instance, in Poland in the early stage of transition, the sale and renting out of pieces of movable and fixed assets by state enterprises constituted a key element of the privatization process in the Polish economy and contributed significantly to the growth of a grassroots private sector.

2/ The cumulative growth of real GDP in Poland in 1993 and 1994 was 9.1% while real credit increased by barely 1.3% and the unemployment rate increased by 3 percentage points (from 13.6% to 16.5%). The cumulative growth of real GDP in Hungary in the period 1994-1996 was 5.8% while real credit dropped by 24% and unemployment rate decreased by 1.6 percentage points (from 12.1% to 10.5%) - see charts 8 and 9.
and the third composed of Bulgaria and Romania will be called “Suspended Transition Countries”3/.

Indicators such as relative change in GDP over the transition period, credit to GDP ratio, extent of state enterprise autonomy under socialism system and extent of private sector activity under socialism system add to the group profiles as shown in the table below.

3/ It should be noted that not all studies could support such a grouping. A research study by G. Pohl and others (1997), based on financial and operating data from 1992 to 1995 for more than 6300 formerly state-owned industrial firms from seven countries (Bulgaria, Czech Republic, Hungary, Poland, Romania Slovak Republic and Slovenia), presents a number of indicators showing that industrial restructuring in the sample of Czech firms was actually much deeper than in other countries covered by the study. According to this study (p. 16) the proportion of industrial firms (weighted by employment) unable to service all their debts in the Czech Republic in the period 1992-1995 declined dramatically from 29% to 6%, while in other countries this share in 1995 was much higher: Hungary 16%, Slovakia 17%, Slovenia 19%, Poland 20%, Bulgaria 43% and Romania 60%. (G. Pohl, R. E. Aderson, S. Claessens and S. Djankov, “Privatization and Restructuring in Central and Eastern Europe. Evidence and Policy Options”, World Bank Technical Paper No 368, The World Bank Washington D.C. May 1997.)

The above numbers are not, however, easily compatible with Central Bank data showing that at the end of 1995 as much as 36% bank loans in the Czech Republic (33% if excluding bank hospital Konsolidacni Banka) were in arrears for more than 30 days (classified loans) with the majority of these classified loans being in arrears for more than 180 days (doubtful and loss categories) – see: Standard&Poor’s, “BankSystem Report. Czech Republic”, July 1998. p. 8-9.
Hypothetical Grouping of Countries

<table>
<thead>
<tr>
<th>Hypothetical Grouping of Countries</th>
<th>Steady Transition Countries</th>
<th>Slowdown Transition Countries</th>
<th>Suspended Transition Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries</td>
<td>Hungary, Poland</td>
<td>Czech Republic, Slovakia</td>
<td>Bulgaria, Romania</td>
</tr>
<tr>
<td>Labor productivity in industry 1997 versus 1989</td>
<td>High increase</td>
<td>Low or no increase</td>
<td>Low or no increase</td>
</tr>
<tr>
<td>Industry Share in GDP</td>
<td>Low or steadily declining</td>
<td>Slowdown or reversal of declining trend</td>
<td>Slowdown or reversal of declining trend</td>
</tr>
<tr>
<td>Extent of Privatization</td>
<td>High (Hungary) or significant (Poland)</td>
<td>Very high</td>
<td>Low</td>
</tr>
<tr>
<td>Quality of Privatization</td>
<td>High</td>
<td>Low</td>
<td>-</td>
</tr>
<tr>
<td>Real GDP in 1998 in Relation to 1989 Level</td>
<td>Range 95-117%</td>
<td>Range 96-99%</td>
<td>Range 65-80%</td>
</tr>
<tr>
<td>Credit to GDP ratio</td>
<td>Low</td>
<td>High</td>
<td>Declining to very low level</td>
</tr>
<tr>
<td>Share of Classified Loans</td>
<td>Steadily declining with 1997 level in the range of 8-10%,</td>
<td>Stubbornly high with 1997 level in the range of 33-35%</td>
<td>Growing to exceed 70% in 1995</td>
</tr>
<tr>
<td>Macroeconomic Policies over the Transition Period</td>
<td>Relatively stable and sound</td>
<td>Relatively stable and sound</td>
<td>Unsound and unstable</td>
</tr>
<tr>
<td>Extent of State Enterprise Autonomy under Socialist System</td>
<td>Some</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Extent of Private Sector Activity under Socialist System</td>
<td>Some</td>
<td>Marginal</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

Change in labor productivity

It is estimated that labor productivity in industry in 1997 relative to 1989 was 152% in Hungary, 142% in Poland, 114% in Czech Republic and around or below 100% in Bulgaria, Romania and Slovakia (see: chart 1). Thus this indicator distinguishes clearly a group of Steady Transition Countries from remaining countries.

Industry share in GDP

Socialist economies were over-industrialized with underdeveloped service sectors. In the early stage of transition, the share of industry in GDP dropped in all of the countries (see chart 2). However, in 1994-1996 this share was steadily decreasing only in Poland. An increase of this ratio in Hungary from 22.1% in 1994 to 23.5% in 1995 is not significant, since it is much
lower than in all our countries including Poland. However, the containment or reversal of the declining trend in the four other countries can be interpreted as a reflection of a slowdown or even reversal in real sector restructuring under market conditions. This interpretation may be supported by a look at Belarus - a country where market economic reforms were reversed by administrative decisions and the share of industry in GDP increased in 1994-1996 by 4.5 percentage points (from 30.9% to 35.3%). By contrast this share had been steadily dropping in Poland and fell in 1994-1996 by 5 percentage points (from 32.2% to 27.1%). In the same period in Romania and Czech Republic this share increased slightly (by 0.4 percentage points and by 0.2 percentage points respectively) and in Bulgaria and Slovakia it declined by less than 2 percentage points (1.9% and 0.6% respectively). The share in GDP in all of these four countries was higher than in Hungary and Poland.

This indicator also distinguishes Hungary and Poland from the remaining countries.

Extent and quality of privatization

The extent of privatization is the highest in Slowdown Transition Countries (Czech Republic and Slovakia). However, the quality of privatization in these countries is regarded to be low as a result of the domination of voucher privatization, little participation of strategic investors, strong influence of partly privatized and still state controlled banks and their investment funds, low transparency and weak protection of minority shareholders rights. In comparison, the formal extent of privatization in Steady Transition Countries is either comparable (Hungary) or lower (Poland), however the quality of privatization is regarded to be much better.

Suspended Transition Countries (Bulgaria and Romania) are distinguished by the lower extent of privatization than in the other countries (see chart 3).

Real GDP in 1998 in relation to 1989 level

Real GDP in 1998 relative to 1989 was 117% in Poland (a Steady Transition Country), 96-99% in the Slowdown Transition Countries and 65-80% in the Suspended Transition Countries. However, Hungary (the second of the Steady Transition Countries) is an anomaly with a 95% ratio which is lower than in the Czech Republic and Slovakia and closer to Romania than Poland (see: chart 4).

Credit to GDP ratio

This ratio clearly distinguishes three groups of countries. It is interesting that Steady Transition Countries have low credit to GDP ratios at about 21-22%. This ratio had been declining since 1991 and started to increase only in 1996 or 1997. Slowdown Transition Countries have much higher credit to GDP ratios in the range of 56-73%. Suspended Transition Countries have ratios that fluctuated and have declined to a very low level of 13-14% in 1997 (see: chart 5).

Share of classified loans

"Classified loans" are loans classified to all quality categories below "standard". Number of days in arrears is the dominant criterion of loan classification in Central European Countries. Classified loans encompass loans overdue for more than 30 in the Czech Republic, Hungary,
Poland, and Slovakia; - loans overdue for 7 or more days in Romania and any overdue loans in Bulgaria.

Data on classified loans demonstrate the very distinctive features of the three groups as described in the table “Hypothetical Grouping of Countries” above.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td></td>
<td>70%</td>
<td></td>
<td>15-20%</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>40%</td>
<td>36.1%</td>
<td>34.4%</td>
<td>33.9%</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>29.8%</td>
<td>21.3%</td>
<td>16.1%</td>
<td>12.9%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Poland</td>
<td>31%</td>
<td>28.5%</td>
<td>20.9%</td>
<td>12.7%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Romania</td>
<td>64.3%</td>
<td>83.2%</td>
<td>88.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td></td>
<td>40%</td>
<td>35%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 2.
Banking sector systemic risk comparison

2.1. Notions of a banking crisis and banking sector systemic risk

Banking crisis is defined here as a situation where the high share of non performing assets in the banking system threatens the liquidity or solvency of a significant part of the banking sector.

A banking crisis affects the economy in various ways. It undermines overall confidence in the economy and causes misallocation of resources. It may result in a major banking destabilization when major banks lose liquidity and/or there is a bank panic resulting in downsizing of the banking sector's balance sheet. Such destabilization is likely to be connected with a drop in GDP as in Bulgaria in 1996 and 1997. Even if a one-off destabilization is avoided, an unresolved banking crisis undermining confidence in banks, threatening their liquidity may contribute to the systematic erosion of banking balance sheet as it happened in Romania. Prolonged banking crisis even if it neither destabilizes nor erodes banking sector is likely to ultimately have a deep negative impact on economic growth as in the Czech Republic and Japan. If a banking crisis is dealt with both decisively and in a way

that supports confidence, the disruptive impact on economic growth may be minimized. The recapitalization of banks, however, usually requires significant budgetary resources.

Banking sector systemic risk can be defined as the estimated future macroeconomic impact of banking sector problems weighted by the probability of different variants of future events.

2.2. Other attempts of an international comparison of banking sector systemic risk

The Asian crisis brought much more attention to banking sector systemic risk and resulted in some attempts to assess and compare this risk on an international scale. I briefly discuss two such attempts.

**Standard & Poor’s risk categories**

Standard & Poor’s (S&P) assumes that in a banking crisis bad loans in the banking sector constitute contingent liability of the government and a proxy for direct and indirect fiscal costs. S&P classifies banking systems of selected countries into five risk categories. Rankings “reflect Standard & Poor’s appraisal of factors such as financial sector management and regulation, the pace of change in the regulatory and operation environment, the degree of macroeconomic volatility, and the extent of moral hazard and information deficiencies within the country”.

Each category is described by percentage range of domestic credit to non-government (private sector and non-financial public enterprises), that may become problematic in a period of reasonably worst-case economic slowdown or recession. This percentage is estimated taking into account experience from banking crises in the world in 1980s and 1990s.

<table>
<thead>
<tr>
<th>S&amp;P risk category</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rank</strong></td>
<td><strong>Percentage of domestic credit to non-government (private sector and non-financial public enterprises), that may become problematic in a bad economic downturn</strong></td>
</tr>
<tr>
<td>1</td>
<td>5%-15%</td>
</tr>
<tr>
<td>2</td>
<td>10%-20%</td>
</tr>
<tr>
<td>3</td>
<td>15%-30%</td>
</tr>
<tr>
<td>4</td>
<td>25%-40%</td>
</tr>
<tr>
<td>5</td>
<td>35%-60%</td>
</tr>
</tbody>
</table>

If the above estimation of the percentage of problem loans for a given country is multiplied by non-government credit to GDP ratio, one receives an estimation of direct and indirect fiscal costs (as percentage of GDP) to support banking sector in a worse case situation.

**Calculation of Worst Case Government Contingent Liability to Support Banking Sector’s/GDP (Based on S&P risk categorization)**

<table>
<thead>
<tr>
<th></th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
<th>Romania</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Credit to Become Problematic in a Worst Case Scenario (S&amp;P risk categorization)</td>
<td>25% - 40%</td>
<td>15% - 30%</td>
<td>15% - 30%</td>
<td>35% - 60%</td>
<td>25% - 40%</td>
</tr>
<tr>
<td>Credit to Non Government /GDP 1997</td>
<td>73%</td>
<td>21%</td>
<td>22%</td>
<td>13%</td>
<td>56%</td>
</tr>
<tr>
<td>Worst Case Government Contingent Liability to Support Banking Sector’s/GDP</td>
<td>18% - 29%</td>
<td>3% - 6%</td>
<td>3% - 7%</td>
<td>5% - 8%</td>
<td>14% - 22%</td>
</tr>
</tbody>
</table>

*/ Bulgaria is not included in S&P’s risk classification.

**J.P. Morgan’s focus on loan growth and economy’s financial leverage**

Looking at systemic banking risk in emerging economies J.P. Morgan focused on two indicators:
1) private sector credit growth relative to GDP growth
2) overall leverage of the economy (or loan penetration) expressed as credit to non-government to GDP ratio.

“*Our main conclusion is that excessive rates of loan growth in already leveraged economies have created high risk situations, especially in markets that have enjoyed long, sustained periods of prosperity. During such times, banks – in both developed and emerging economies – often become complacent, with the result that growth objectives become paramount, credit standards tend to become too lax, and loans are frequently mispriced, underestimating the risk of the borrower or project.*”

J.P. Morgan notes that in an economy with very low level of financial leverage, which is deepening, loan growth rate should be naturally much higher than GDP growth. However, as loan penetration increases loan growth should gradually decrease relative to GDP growth. “Beyond the point at which financial leverage exceeds 100% of GDP, we should expect growth in loans roughly approximate the growth of nominal GDP”.

J.P. Morgan draws a “hypothetical curve” which can be interpreted as an upper limit above which credit growth rate is excessive for a given level of financial leverage of the economy.

J.P. Morgan analyzes 29 emerging markets for the period 1990-1996. The most risky were Asian economies: Thailand, Malaysia, Taiwan, Korea and to a lesser extent Philippines. The

---

first four of these countries represent a combination of high leverage (loans to GDP ratio in the range 130%-150%) and high credit growth. Philippines has lower leverage (below 60%) but its credit growth is excessive for its leverage level.

Five central European countries included in the analysis Czech Republic, Hungary, Poland, Romania and Slovakia are in a safe range with credit growth rates much below upper limits set by the hypothetical curve.

“Surprisingly, our analysis shows that banking systems in Latin America and Eastern Europe are much less vulnerable than those in East Asia. Even in Brazil and Russia, countries of much current concern, the economies have lower levels of exposure to banking system problems that in almost all East Asian countries. This does not mean that a banking crisis is unlikely outside Asia, but rather that severity of a potential crisis is lower and, most importantly, the spillover effect on the rest of the economy is likely to be less.”

Applicability of S&P’s and J.P. Morgan’s approaches

In this paper I focus on a smaller number of countries than the studies by S&P’s and J.P. Morgan. Our group of six Central European countries is specific in the fact that in the early 1990s they moved from a socialist to a market economy. An important element of this analysis is that half of these countries are in the midst of banking crises and a key task is to assess their extent, possible consequences and remedies. The approaches taken by S&P’s and J.P. Morgan have only limited applicability here.

A common element of my analysis and the approaches of S&P’s and J.P. Morgan is that financial leverage of the economy is a key factor in evaluating banking sector systemic risk. The potential fiscal cost of banking sector problems ceteris paribus depends on the sector's relative size. One may also expect that macroeconomic consequences of a major banking system destabilization are deeper when the economy is more leveraged. However, in 1996-1997 Bulgaria proved that a banking system destabilization in an economy with modest financial leverage may cause a very sharp drop in output.

J.P. Morgan's focus on loan growth in relation to the economy's financial leverage has limited applicability to explain the current shape of banking sectors in our six countries, since this shape is not a result of excessive credit growth in the last several years but rather the result of the unsolved legacy of the socialist system. J.P. Morgan's approach is likely to be more relevant to assess banking sector risk in Central European countries in the future, once the process of deepening of their economies takes on momentum.

Although I do not rely on S&P's of risk categories, I use a somewhat similar categorization of soundness of banking practices which play a less central role in my analysis.

2.3. Comparison table and methodology

The Comparison Table below presents a summary of banking sector systemic risk evaluation in the six countries. The table is followed by explanatory notes.

Comparison Table

<table>
<thead>
<tr>
<th>Assessment of the Transition of Industrial Sector</th>
<th>Bulgaria</th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
<th>Romania</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Government Credit/GDP (1997)</td>
<td>14%</td>
<td>73%</td>
<td>21%</td>
<td>22%</td>
<td>13%</td>
<td>56%</td>
</tr>
<tr>
<td>Soundness of Banking Practices</td>
<td>B</td>
<td>B</td>
<td>A</td>
<td>A</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Banking Sector’s Capital Deficiency 1997E/GDP</td>
<td>-</td>
<td>8.8%</td>
<td>0%</td>
<td>2.2%</td>
<td>8%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Banking Sector’s Capital Deficiency 1997E/M2</td>
<td>-</td>
<td>13%</td>
<td>0%</td>
<td>5%</td>
<td>44%</td>
<td>15%</td>
</tr>
<tr>
<td>Government Debt Adjusted by Banking Sector’s Capital Deficiency/GDP (1997)</td>
<td>104%</td>
<td>22%</td>
<td>63%</td>
<td>49%</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>Non government credit/deposits 1997</td>
<td>79%</td>
<td>123%</td>
<td>69%</td>
<td>75%</td>
<td>85%</td>
<td>102%</td>
</tr>
</tbody>
</table>

Author’s Overall Assessment of Banking Sector Systemic Risk

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Medium Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Explanatory notes

a) Assessment of the Transition of the Industrial Sector until 1997

Hypothetical grouping of countries is described in paragraph 1.4.

b) Non Government Credit/GDP (1997)

Non Government Credit is credit to private sector and non-financial public enterprises. Data are from tables with main macroeconomic indicators (enclosed in annexes)

c) Soundness of Banking Practices

Based on opinions of external analysts (rating agencies and investment banks) and my own observations and discussions with experts I grouped our six countries into three categories ranked according to the relative Soundness of Banking Practices. Category A (best in the region) is assigned to Hungary and Poland. Category B (medium in the region) is assigned to Bulgaria, Czech Republic and Slovakia. Category C (weakest in the region) is assigned to Romania.

d) Banking Sector’s Capital Deficiency

Banking sector capital deficiency is an assessment of additional capital that should be injected into the banking sector in order to create adequate provisions against loan losses and increase the sector’s capital to the adequate level. Capital deficiency in 1997 is calculated in the following steps:

1) I take official data on classified loans.
Comment. Number of days in arrears is the dominant criterion of loan classification in Central European Countries. "Classified loans" are loans classified to all quality categories below "standard". In particular countries, classified loans are grouped into 3 or 4 categories depending on the number of days in arrears. Criteria to distinguish specific classified categories differ among countries more than criterion to distinguish the standard loans from classified loans. In the Czech Republic, Hungary, Poland and Slovakia classified loans encompass loans overdue for more than 30 days, and in Romania - loans overdue for 7 or more days. Thus the definition of classified loans is pretty uniform in our group of six countries. Relying on official data on classified loans is, however, sensitive to misrepresentation of actual performance of loans in bank reports to supervisory authorities and to "evergreening" phenomenon. It is difficult to assess such risk. Hiding significant amounts of problem loans through "evergreening" is difficult when real interest rates are high and the credit portfolio doesn't grow fast. Looking at the dynamic of credit to GDP (see chart 7) one can say that there was significant potential room for "evergreening" in Slovakia in 1995-1997, and to a much smaller extent in the Czech Republic and Poland and very little room in Hungary and Romania. However, I know neither of indicators nor anecdotal evidence suggesting that misrepresentation of actual performance of loans and "evergreening" dramatically change the picture in our group of countries.

2) To calculate required provision level I assume that a minimum adequate amount of provisions is 60% of gross value of classified loans (i.e. loans in arrears for more than 30 days) regardless of reported collateral value.

Comment. In any banking system a provision level is adequate if it is rational to expect that the gap between the value of problem loans and the value of provisions will be covered by future payments from the debtors and/or by recovery of collateral. Assuming uniform 60% required provision to classified loans ratio I disregard potential differences in probability of repayment and recovery. This approach may actually lead to an underestimation of provision needs in countries such as Czech Republic where a high proportion of classified loans are loans in the loss category overdue for a couple of years and still carried on books because of very restrained write-off regulations. It is justified to require a higher provision ratio for such loans, taking into account the poor record of collateral recovery and limited liquidity of the property market in transition economies. On the other hand uniform 60% required provision ratio is likely to overestimate provision needs in a country such as Hungary where most of classified loans are just loans "under observation" with relatively high probability of repayment. However, not having enough reliable data on the structure of classified loans in all six countries I think it is better to apply a uniform 60% required provision ratio for all countries.

3) I compare required provision level with actual reported level to calculate provision gap

11/"Evergreening" probably existed on a large scale in Postabank – a Hungarian bank that distinguished itself in the sector with very high credit growth and ultimately ran into troubles – see: Postabank case and quality of supervision in paragraph 3.3., page 27
4) I take officially reported capital base of commercial bank sector and deduct provision gap and other justified deductions from reported capital base to calculate actual capital base.

5) To calculate required capital base of commercial bank sector I assume that the minimum Basle capital adequacy ratio (capital to risk weighted exposures ratio) is 12%\(^{12}\). In cases where there is an insufficient base for calculating capital adequacy, I take capital to non-weighted assets ratio of 8% as a proxy for the 12% Basle capital adequacy.

6) I compare the required capital base with the actual capital base to calculate the sector’s capital deficiency.

The value of the banking sector’s capital deficiency is shown in relation to GDP and M2.

e) Government Debt Adjusted by Banking Sector’s Capital Deficiency /GDP

This indicator is important to judge government fiscal flexibility to deal with the banking sector capital deficiency.

f) Non government credit/deposits 1997

This indicator is important to judge structural liquidity of the banking sector.

g) Overall Assessment of Banking Sector Systemic Risk

Banking Sector Systemic Risk could be defined as the estimated future macroeconomic impact of banking sector problems weighted by the probability of different variants of future events. The score of Banking Sector Systemic Risk constitutes a non mathematical relative assessment of a country’s banking sector systemic risk against the background of other countries in the region, according to the following scale:

1 – very low risk
2 – low risk
3 – significant risk
4 – high risk
5 – very high risk

Section 3.
Overview of specific countries

3.1. Bulgaria

\(^{12}\) / 12% capital adequacy was assumed as minimum level in the Polish bank and enterprise financial restructuring program in 1993. Later 12% level was recommended by Basle Committee to transition economies.
Following the crisis of 1996 and the dramatic downsizing of banking assets, the risk of destabilization in the short term is very low. In the medium term, risk is significant with risk factors being:

- State ownership control over banking and danger of delaying privatization.
- Still weak institutional framework and bank management skills
- Government pressure on banks to increase lending “to support economic growth”
- High expense level and relative attractiveness of loans versus government securities fueling credit growth
- Conversion of State Savings Bank into commercial bank
- Danger of slowdown or reversal of reforms started in 1997.

The score of the Banking Sector Systemic Risk assigned to Bulgaria is 1 (very low risk) for the short term and 3 (significant) for the medium term.

**Banking crisis 1996**

Bulgaria underwent a dramatic banking crisis in 1996. The crisis had its roots in bad loans made during 1991-1995 as a result of appalling credit policies. At the end of 1995, 70% of bank loans were classified and the banking system as a whole had negative net worth in the order of 10% of GDP.

As it often happens, it took some time until the insolvency of the banking system was reflected in liquidity problems. Serious liquidity problems appeared in the second half of 1994 and in 1995 in some big state and private banks. Significant refinancing from the central bank (Bulgarian National Bank – BNB) and from the State Savings Bank (SBB) was necessary to keep the system afloat.

Confidence in the banking system declined through 1995 and broke down completely in 1996 with a run on banks. In the first phase of the crisis the central bank (BNB) was providing liquidity to troubled banks to keep them afloat. Between September 1995 and May 1996, BNB injected in the system an equivalent of 5.8% of GDP.

In the midst of the crisis, in May 1996, special measures were introduced in a rush to allow amore comprehensive dealing with the problem. Amendments to the banking law allowed the BNB to place a group of five banks under conservatorship and trigger bankruptcy proceedings. A depositor protection scheme was also established providing full protection for household deposits and 50% coverage for enterprise deposits. In addition a recapitalization scheme for seven state owned banks was implemented.

May 1996 actions were not sufficient to contain the crisis. Between May 1996 and September 1996 the BNB had to further inject the equivalent of 2% of GDP. In September 1996 the BNB initiated conservatorship and bankruptcy for another 9 banks including three state-owned banks. Additional measures to close banks and recapitalize the weakest surviving state-owned bank were taken in the first half of 1997.

Out of 39 banks (10 state-owned and 29 privately owned) existing in early 1996, 18 banks, accounting for 32% of total deposits, collapsed and were closed by June 1997. Closures included 4 state-owned banks while the remaining 6 state-owned banks survived, receiving capital injections.
The run on banks in Bulgaria triggered a deep macroeconomic crisis with long lasting consequences. Inflation soared from 33% in 1995 to 2040% in 12 months ending March 1997. The cumulative drop of real GDP in 1996 and 1997 amounted to 18%. Broad money to GDP declined to one third of the pre-crisis level: from 70% in December 1994 and 60% in December 1995 to 23% in June 1997. The domestic currency money to GDP ratio declined even more: from 47% in December 1994 and 44% in December 1995 to 8% in March 1997 and 9% in June 1997.

An IMF supported program that included the introduction of a currency board in July 1997 stabilized the economy. In 1998 inflation dropped to 1% and real GDP grew by 3.5%. The broad money to GDP ratio recovered only slightly to 30% (i.e. less than half of 1994 level) in December 1998. The domestic currency money to GDP ratio recovered to 18% of GDP (i.e. 40% of 1994 level) in December 1998.

Current situation of the banking sector

The banking sector was downsized. The deposits to GDP ratio declined from 55% in 1994 to 50% in 1995, 39% in 1996 and then dropped to 18% (see: chart 6). Non-government credit dropped respectively from 44% of GDP in 1994 to 34% in 1995, 35% in 1996 and 14% in 1997 (see: chart 5).

In mid-1998 banks – with the exception of a few smaller institutions - were reported to be solvent and liquid. However, auditor reports according to International Accounting Standards (IAS) were not available.

The reported solvency and liquidity of the system were restored as a result of:

- elimination of a number of insolvent banks
- recapitalization of state-owned banks
- huge foreign exchange gains of banks (having mostly long foreign currency positions in the time of dramatic depreciation of local currency)
- shift in bank portfolios from credits to liquid assets, as banks became credit risk averse.

In the short term, it seems that there is no major risk of destabilization of the banking sector in Bulgaria. The prospect for the medium term is, however, unclear because of the existence of several risk factors. The institutional framework as well as bank management skills are still weak. Banks are state controlled and privatization prospects are uncertain. Bank lending to the enterprise sector may grow fast under political pressure from the government and because of banks’ need for higher income in order to cover high general expenses. There is therefore a considerable risk that in the medium term Bulgarian banks may again become overburdened by bad debt. Significant risk is also connected with the transformation of the State Savings Bank into a commercial bank.

Institutional framework

Although major legal and regulatory improvements took place in 1997 and 1998, the institutional framework remains weak and implementation and enforcement are untested.
Banking skills

Banking sector skills, including capacity to manage risk under market conditions, proved to be inadequate in the past and will need time to achieve a satisfactory level.

State control and privatization prospects

At the end of 1998 five state and municipally controlled banks accounted for about 60% of sector’s assets. Three of these banks were in the privatization pipeline and two others under restructuring to prepare them for privatization.

Political pressure to increase lending

In 1998 the authorities have expressed their frustration with the reluctance of banks to extend new credit in support of economic growth and were reported to consider, as a remedy, relaxing prudential regulations especially those relating to collateral requirements and large loan exposure.

The belief that more bank credit is necessary to support economic growth is also expressed by external observers such as a leading US investment bank Goldman Sachs\(^\text{13}\). I believe, however, that a call for more bank lending in order to support economic growth is misplaced in the current situation of the Bulgarian economy. Bulgaria is a case of suspended transition where, after bold market reforms at the beginning of transition further reforms were delayed and the old enterprise base was kept in existence through accommodating fiscal and monetary policies as well as loans from state-owned banks. As a result, restructuring of the economy under market conditions has been suspended which is also reflected in the dynamics of the share of industry in GDP. This share in Bulgaria was 32.7% in 1993 which was almost the same as in Poland (32.9 percent). In the following three years, until 1996, this share declined in Poland by 5.8 percentage points (to 27.1 percent) while in Bulgaria it decreased by only 1.1 percentage point (to 31.6 percent). (See: graph 2).

Experience in transition economies shows that banks can best contribute to real sector development if they are cautious in their lending policies as not to waste money and if they do not finance enterprises that should restructure. With prudent macroeconomic policies and the necessary institutional and structural reforms, real GDP in Bulgaria may grow for the next two or three years without increase of real credit to the economy, as it happened in Poland in 1993-1994 or in Hungary in 1994-1996 (see: Section 1.3. Banks and real economy: specifics of early transition stage). Bulgarian banks also need to upgrade their credit risk management. Time is also needed to strengthen regulations as well as supervisory framework and skills. Pressure on banks to support economic growth through more lending may undermine macroeconomic policies, slow down structural changes and result in the renewal of problems in the banking sector.

Non-sustainability of income sources versus high expense level

\(^{13}\) “A risk to economic growth is the insufficient lending to the real sector. Although credit growth has started to turn positive in real terms in the second quarter, current credit growth will not allow for sustainable economic growth.”, Goldman Sachs, “Emerging Market Economic Quarterly”, Volume 2, Issue 2, July 1998, Regional Reports: Bulgaria by Svetoslav Nikov, pp. 100-103, p. 101.
The banking sector was profitable in 1997 because of windfall profits from foreign exchange gains while net interest earnings were too low to cover operational expenses. This highlights the inefficiency of the system which may result in future losses and depletion of capital or in undertaking more risk in hope of higher revenues.

**High credit growth**

As a result of the high liquidity of the banking sector and prudent fiscal stance, yields on treasury bills diminished which increased the relative attractiveness of loans. Search for income sources resulted in high credit growth starting in the second half of 1997. In the first three quarters of 1998 loans to non-financial sector increased by about 18% in real terms with annualized rate of growth of about 24%.

**State Savings Bank**

The State Savings Bank (SBB) is in the process of transformation from a specialized savings institution into a commercial bank. The transition period is to last another two years until the state’s full deposit guarantee is lifted. SBB accounted for about 12% of banking sector assets and for 37% of local currency deposits at the end of 1997. In the past, SBB’s assets were held in government securities and deposits in other banks. Since the banking crisis of 1996 interbank deposits have been greatly reduced. SBB started to build rapidly a portfolio of loans (mostly consumer) in search for higher revenues fuelled by the necessity to cover a high expense base. Since end-December 1996 to end-September 1998 SBB’s loan to assets ratio has grown from a negligible 3% to 54% - twice as high as the sector average of 27%.

The dynamic transformation of a state savings institution into a commercial bank and high credit growth is very risky as the experience of many countries has demonstrated and is likely to result in the deterioration of loan portfolios.

### 3.2. Czech Republic

- With a bank deposits to GDP ratio of 60% and credit to non-government to GDP ratio of 73%, banking sector penetration in the Czech Republic is the highest among transition economies. High financial leverage makes the Czech economy very exposed to banking system risk.
- Share of non-performing loans is stubbornly high and there is a significant provision gap.
- Non-government credit to deposit ratio of 123% shows structural liquidity imbalance of the banking sector.
- However, the government is seen to stand behind major banks and has enough fiscal flexibility to support the banks to the necessary extent.
- The origins of banking sector problems can be found in the lack of comprehensive privatization and industrial restructuring as well as the dominance in both the banking

---

sector and the economy of big state controlled banks having strong direct and indirect cross-ownership ties with industrial enterprises. These factors cannot be dealt with quickly although they have been diagnosed and are being addressed by the authorities.

The score of the Banking Sector Systemic Risk assigned to Czech Republic is 4 (high risk) for both the short and medium term.

Restructuring of pre-1991 debt, subsequent government intervention to support banks

In 1991-1997, the Czechoslovak and subsequently Czech governments spent about US$ 4.7 billion - equivalent of about 12% of GDP of Czech Republic in 1994 - to restructure banks that are now in the Czech Republic. More than 50% of this amount or about US$ 2.9 billion was provided in 1991 and 1992 when the newly created bank hospital Konsolidaci Banka took over pre-1991 bad debts. About US$ 1.1 billion was spent in subsequent years on the consolidation program of small banks while the resolution of Agrobanka cost about US$ 0.6 billion 15/.

Formal privatization of major banks

The three biggest banks (Komercni, Ceska Sporitelna and Investicni) were officially privatized in 1992 by the exchange of more than 50% of their shares for privatization coupons. The government retained a controlling stake of 40-45% in the banks. At the same time, the banks were actively participating in the coupon privatization of companies, establishing the largest investment funds by amassing privatization coupons. Through these funds the banks became indirect holders of their own shares and have a significant stake in companies that are also their customers 16/.

Reemergence of bad debt problem

As opposed to the developments in Hungary and Poland where following government sponsored restructuring of old debts the quality of bank loan portfolios improved significantly over time, in Czech commercial banks room created by transferring old bad debts to the bank hospital was soon filled by new bad loans.

In 1997, credits in arrears for more than 30 days (classified credit) accounted for 34% of total credit portfolio of the Czech banking sector (27% if excluding bank hospital Konsolidaci Banka) while this share was 8.6% in Hungary and 10.1% in Poland 17/.

Origins of the problems

The opinion prevailing now among observers is that Czech bank problems are related to the lack of far-reaching privatization and industrial restructuring as well as the dominance in both the banking sector and the economy of big state controlled banks having strong direct and indirect cross-ownership ties with industrial enterprises.

Banks, painlessly freed from old bad loans, started to lend again to the same companies without pressing strongly enough for their restructuring and extended loans to support small privatization. It is estimated that the problem loans that are now in the commercial bank portfolios were mostly extended in the early years of transformation. About 60% of problem loans are exposures to industrial companies. As much as 30-35% of problem loans are credits to trade, catering and accommodation sectors, extended in 1991-1993, likely with some political pressure on state-owned banks to support the small-scale privatization program. New (post 1990) loans were extended with little evaluation of the repayment ability of borrowers. Instead they were secured with collateral on real property with significant book value but negligible, if any, market value.

Several factors contributed to the behavior of bank managers:
• state control over banks, lack of further privatization prospects (until late 1997) and the feeling that the government – in spite of liberal free market rhetoric – is interested in keeping big troubled companies afloat and avoiding painful redundancies.
• banks’ equity interests in major companies and connected lending
• moral hazard created by repeated government bail-out operations
• weak regulations and supervision that allowed banks to report that non-performing and lowly provisioned loans are secured by collateral. At least until the end of 1997 both the banks and the supervisory authority, the Czech National Bank, pretended that classified loans are adequately provisioned.
• reliance on hugely overstated collateral value additionally diminished banks’ eagerness to undertake a more active approach to bad debtors since actions such as seizure and trying to realize collateral or filing for bankruptcy would have unveiled that provisions are too low and must be increased.

Provision gap

Provisions against bad debts created by Czech banks in 1997 amounted to 33% of the gross value of classified loans or to 48% of their risk weighted classification. The provision gap (short of 60% coverage) in Czech banks in September 1997 amounted to 27% of the total value of classified loans or 9% of total bank credit which translates into 7.3% of GDP or US$ 3.2 billion.

Reported capital adequacy

Apart from the above estimation of the provision gap, the average capital adequacy level reported by the Czech banking sector is low given the risk faced by a transition economy. The sector’s reported capital adequacy was 10.5% in 1997. An increase of the sector’s capital adequacy by 1.5 percentage point to 12% would require a capital injection of about 1.5% of GDP (approximately USD 750 million).

20 / Weighted 20% for substandard, 50% for doubtful and 100% for loss category.
21 / See: comment to point 2) of the explanatory note on the calculation of Banking Sector Capital Deficiency (page 17).
Total capital deficiency

Total capital deficiency to fill the provision gap and to increase the sector’s capital adequacy to a safe level of 12% is about 9% of GDP or US$ 4 billion in September 1997.

Vulnerability to economic downturn

High credit to GDP ratio makes the Czech banking system very vulnerable to an economic downturn. The financial situation of the enterprise sector and the quality of bank loan portfolios are likely to deteriorate as a result of the recession in 1998.

Government commitment and ability to support the banking sector

There were numerous bank failures in the Czech Republic although all except for Agrobanka involved small banks. Treatments of all these failures supported the perception that the government stands firmly behind the banking sector. This government attitude creates a moral hazard but shows confidence in the banks. Rating agencies assume a very strong likelihood that Czech banks, the four largest in particular, would receive government support if necessary22/.

The Czech government is seen to have enough fiscal flexibility to support the banks to the necessary extent because of its low 13% ratio of general government debt to GDP and modest 44% ratio of total economy foreign debt to GDP. Among our six Central European countries, the Czech Republic has the highest rating from major rating agencies, based on its steady macroeconomic policy stance23/.

Addressing the problems

Following the May 1997 currency crisis, the authorities started to address weaknesses in the capital market and banking regulations more vigorously in order to improve transparency. More stringent loan classifications and provisioning rules were introduced, effective from January 1, 1998. A further step was an announcement in June 1998 by the Czech National Bank of new loan loss provisioning requirements. New regulation phases out the possibility of diminishing required provisions for loss loans (in arrears for more than one year) by the value of real estate collateral. By the end 1998 banks are obliged to provision the full value of loans in arrears of four or more years and by the end of 2000 all loss loans regardless of collateral24/.

In late 1997, the government announced plans to sell controlling stakes in the four largest banks - Komercni, Ceska Sporitelna, Investicni a Postovni and CSOB - to foreign strategic investors by the end of 1998. Renowned international investment banks were hired to advise on the privatization of these banks. So far, Investicni a Postovni bank has been sold to the Japanese investment house Nomura, but privatization prospects for the remaining three banks - and especially Komercni and Ceska Sporitelna - are uncertain. Important issues include whether these banks should be privatized on a stand alone basis or their bad debt portfolios

should be restructured prior to privatization. Another issue is whether the government will want to find a sole strategic investor for each of the banks or will it be looking for more dispersed ownership.

3.3. Hungary

The Hungarian banking sector poses the lowest systemic risk among banking sectors in Central Europe with stability factors being:
- the best asset quality in the region
- strong capital adequacy
- low deposit to GDP and credit to GDP ratios
- domination of control by foreign strategic investors.

The potential risk factor in the future is OTP (National Savings Bank). OTP controls the bulk of retail deposits and is the main supplier of funds to the interbank market but may be non-competitive in the medium term and has no effective ownership control. A significant budget deficit, sizable public debt and total country external debt leaves little flexibility for use of fiscal resources to deal with potential banking problems.

The score of the Banking Sector Systemic Risk assigned to Hungary is 1 (very low risk) for the short term and 2 (low risk) for the medium term.

Market structure

Hungary established a two-tier banking system in 1987. Ten years later, there were 43 commercial banks, 243 savings cooperatives, and 8 specialized credit institutions. Six former state-owned banks accounted for 55% of the sector’s assets. The savings cooperatives collectively had 5% of the sector’s assets. The biggest foreign start-up bank had 6% of the sector’s assets which constituted the fifth largest market share.

At the end of 1997, foreign investors had 61% of the sector’s subscribed capital and state ownership constituted 20%.

Bank recapitalization

In 1992 - 1994 the government spent about USD 3 billion, or 7-8% of country’s annual GDP to recapitalize state-owned banks in three consecutive operations known as loan, debtor and bank consolidation programs. These programs also brought relief to enterprises since their debt owed to recapitalized banks and to the state agencies could be rescheduled, reduced and/or converted into equity. The need to repeat recapitalization was partly a result of the piecemeal approach since the first stage was to bring banks’ capital adequacy to zero, the second to 4% and only the third to 8%. It seems, however, that the lack of proper incentives and unchecked moral hazard could have contributed to the high cost of the programs. Enterprises got a free lunch in the form of relief on their debt to banks and the state. Banks were also better off since they reduced non-performing credits and received government

securities instead. Since full costs were born by the state, banks and enterprises were interested in program repetitions.

Bank privatization

The experience of the very costly recapitalizations that had not fundamentally changed banking culture had an impact on bank privatization strategy afterwards. The government decided to ensure proper bank governance through the sale of majority stakes in state banks to foreign strategic investors. Most major state-owned Hungarian banks were sold to foreign financial institutions in 1994-1997. Two important exceptions were banks dominating retail banking: National Savings and Commercial Bank (OTP) and Postabank (the cases discussed below).

Asset quality the best in the region. No capital deficiency

The share of classified loans (in arrears for over 30 days) in the gross loan portfolio of Hungarian banks has declined from 30% in 1993 to 8% in 1997 and is the lowest in the region. Provision coverage of classified loans is 21% and thus the provision gap short of 60% coverage amounts to about 3.1% of gross loans or 0.7% of GDP.

Reported capital adequacy of Hungarian banking sector was 16.1% in 1997. Capital cushion in excess of 12% amounted to 1.7% of GDP and exceeded estimated provision gap by 1% of GDP.

Postabank case and quality of supervision

Postabank – the fourth largest bank - had 6% of the sector’s assets and about 1/10 of retail deposits as of the end of 1996. The bank was partially privatized. Although state agencies or government related institutions dominated in its shareholder structure the bank was effectively controlled by the management. The bank pursued very aggressive credit expansion with some analysts attributing this aggressiveness to the need to generate income to cover the high overhead costs that Postabank incurs in using the facilities of the Post office. Dynamic expansion combined with inadequate credit control led to trouble. The bank experienced a run on deposits in early 1997 and was subsequently bailed out by the government which together with other participants put in 24 billion forints (about USD 130 million). An especially bad signal was the fact that the government effectively bailed-out the bank’s owners by not requiring a write down of capital prior recapitalization. The bank became 70% owned by state institutions and the government has been seeking a strategic investor to take control over the bank.

The Postabank case is evidence of limited efficiency of banking regulations and supervision. Banking supervision is located in a separate agency – the Hungarian Banking and Capital Market Supervision (SSA). The head of SSA is appointed by the Minister of Finance for a 6 year term. SSA was criticized for being too permissive in tackling Postabank’s problems as well as moving too late in case of two smaller banks PK Bank and Realbank. Some experts mention the lack of expertise at SSA as a cause for insufficient measures. SSA, on the other hand, blames ineffective legal powers of banking supervision. Some measures can only be

\[26/\text{See: comment to point 2) of the explanatory note on the calculation of Banking Sector Capital Deficiency (page ...)}.\]
taken if it is documented that the bank’s capital adequacy ratio is below half of the required value. This is often too late to take preventive action and in addition, Hungarian accounting regulations in some cases allow a bank to avoid consolidation with its group although non-consolidated accounts misrepresent risk and real capital of the institution. Banking supervision decisions may be effectively challenged by banks and invalidated by courts. In practice, if there is no cooperation from bank management or owners, SSA is unable to force a bank to change its course or dismiss incompetent or fraudulent managers until it is too late to take preventive action. Notwithstanding these arguments it seems clear that in the Postabank case, strong political clout of the bank’s private owners was hindering the SSA from a decisive intervention.

**OTP**

OTP - with 24% of the sector’s assets and 56% of retail deposits – is the biggest bank and the main supplier of funds to the interbank market. It was privatized in 1995 through a public offering including a GDR issue and has a dispersed ownership structure. A “golden share” held by the state and special provisions in the articles of association prevent any potential strategic investor from taking control over the bank. OTP is now a blue chip stock in Central European banking. However, growing competition, the lack of strategic investor, difficulties in containing high expenses as well moral hazard created by its perceived “too big to fail” position may potentially lead to future difficulties.

*Little fiscal flexibility but also low worst case contingent liability*

Hungary has a significant budget deficit (4.9% in 1997), sizable public debt/GDP ratio (67%) and total economy foreign debt/GDP ratio (48%) which limit flexibility for the use of fiscal resources to deal with potential banking problems. S&P included Hungary to a category of countries where potential contingent liability of the government to support banking sector “in a reasonable worst-case scenario” may be between 15% and 30% of loans to the non-government sector. With non-government credit to GDP ratio of 21%, maximum contingent liability would amount to about 6% of GDP which would be manageable.

**3.4. Poland**

The Polish banking sector poses low systemic risk with stability factors being:
- strict regulations, high transparency and the best in the region banking supervision
- successful restructuring of the bulk of bad debt portfolio from the early years of transformation in a way that changed bank management culture and addressed borrower health
- relatively good asset quality
- high level of provision coverage
- low deposit to GDP and credit to GDP ratios.

There are important problems that still need to be addressed including the restructuring and privatization of PKO BP (State Savings Bank) and BGZ (Bank of Food Economy). There are significant government contingent liabilities related to the old housing loan portfolio of State Savings Bank as well as to the capital deficiency of the country’s dominant insurer PZU.
Government contingent liability to support banking sector can be manageable taking into account the country’s fiscal and external positions.

The score of the Banking Sector Systemic Risk assigned to Poland is 1 (very low risk) for the short term and 2 (low risk) for the medium term.

Market structure

At the end of 1997 state controlled banks had 50% of assets, 44% of customer loans, 58% of customer deposits and 32% of equity of the Polish banking sector. Out of 81 commercial banks, 28 were majority owned by foreign investors. Majority foreign owned banks had 27% equity and 15% of assets of the banking sector.

Bank restructuring and recapitalization

Poland implemented an innovative bank and enterprise restructuring program in 1993-1994 that focused on nine state-owned regional banks. Seven of these banks were recapitalized to enable them to create adequate loan loss provisions and achieve at least 12% capital adequacy. The 1993 law on financial restructuring of enterprises and banks created a mechanism that encouraged and ultimately compelled recapitalized banks to undertake specific actions against bad debtors. One such action could be a conciliation agreement between a debtor and creditors including the possibility of debt relief and/or debt equity swaps to support the debtor’s restructuring efforts. The program was instrumental in restoring bank solvency, contributing to restructuring and privatization of some enterprises, changing bank culture and containing moral hazard.

In 1993-1996, the government also recapitalized three big specialized banks: PKO BP – state savings bank, Pekao S.A. – former foreign currency deposits bank, and Bank of Food Economy (BGZ). Although the framework of the law on financial restructuring of enterprises and banks was partly used, the approach to the recapitalization of these specialized banks was not comprehensive and imposition of disciplinary measures was weak.

In total, between 1993 and 1996 the government recapitalized 10 state-owned banks providing them with treasury bonds with a nominal value of about PLN 4.7 billion (USD 2.3 billion) or 2.4% of an annual GDP, of which 45% in real terms was spent on the Bank of Food Economy (BGZ).

While the government bore the cost of capital injections for state-owned banks directly, the Central Bank bore the direct and indirect costs of rehabilitation or liquidation of a number of smaller private banks. Some of these banks were taken over by the Central Bank and then sold after restructuring. Some were taken over by other banks with Central Bank support such as long-term soft financing and/or waiver for mandatory reserve requirements. Total costs of Central Bank intervention – including the waiver for mandatory reserve given to BGZ - were not disclosed but could have been about 0.5% of GDP.

In 1993-1997, 14 foreign banks applying for banking licenses in Poland were required by the Central Bank to spend about PLN 170 million to support troubled small banks (by taking over a bank or providing a bank with preferential subordinated financing or providing soft financing for another bank that was taking over a troubled institution)\(^\text{28}^\text{/}\). The average price for a license came out to approximately USD 5 million.

**PKO and BGZ capital deficiencies**

PKO – the state savings bank - has a 23% share in banking assets and 35% in retail deposits. 12% of PKO’s assets constitute old housing loans where interest is capitalized and repurchased from the bank by the government on a regular basis. The auditors’ opinion in the Annual Report for 1997 emphasizes that this support is indispensable to ensure the continuity of PKO’s operations. The value of old housing loans in the amount of PLN 5.7 billion (USD 1.6 billion) in fact constitutes a hidden liability of the government. In order to prepare PKO for privatization, the old housing loan portfolio may be taken over by a government agency (a specialized state-owned bank) and PKO would in return receive government securities.

BGZ – Bank of Food Economy – has a 6% share in banking assets. After the huge recapitalization mentioned above, it had only PLN 0.1 billion capital at the end of 1997 with PLN 12.3 billion of assets. Auditors stated in their opinion that there is substantial doubt whether BGZ would be able to continue as a going concern. The capital deficiency to achieve capital assets ratio of 8% (a proxy for 12% risk weighted capital adequacy) was PLN 0.9 billion.

**Capital deficiency of the banking sector**

As of the end of 1997, classified loans (in arrears for more than 30 days) constituted 10.1% of gross loans in the Polish banking sector or about 2% of GDP. Provision coverage of classified loans was about 52%. The provision gap to achieve 60% coverage amounted to PLN 0.8 billion or 0.2% of GDP.

It is estimated that the capital adequacy of the banking sector in Poland is about 10% which is above the internationally accepted level of 8% although below the 12% recommended for transition countries by the Basle Committee. Capital shortage to reach 12% is estimated to be about PLN 3.6 billion or about 0.7% of GDP.

Given the value of PKO’s old housing loan portfolio, the sector’s provision gap and the capital necessary to increase capital adequacy from 10% to 12%, the total capital deficiency of the sector can be estimated to be around PLN 10 billion or 2.2% of GDP.

**Government ability to deal with the problems**

The government’s contingent liability to support the sector is easily manageable taking into account the limited size of the liability and adequate fiscal flexibility.

---

\(^{28}\) S. Kubielas, “Rola banków zagranicznych w prywatyzacji i konsolidacji polskiego sektora bankowego” (Role of foreign banks in the privatization and consolidation of Polish banking sector), paper for Nicom Consulting Ltd. and “Gazeta Bankowa” conference, Warsaw, September 21, 1998.
3.5. Romania

The Romanian banking sector is in extremely poor shape. The main reasons are the lack of privatization and restructuring of enterprises and banks combined with accommodating macroeconomic policy over most of the 1990s.

The score of the Banking Sector Systemic Risk assigned to Romania is 5 (very high risk) for both the short and medium term.

Suspended transition

Big state enterprises were kept running through the generous supply of credit from major state-owned banks which until 1997 were continuously refinanced by the Central Bank. As a result, restructuring of the economy under market conditions has been suspended which is also reflected in the fact that in 1993-1996 the share of industry in GDP not only had not been decreasing but had actually increased from 33.8 to 36%. By contrast in the same period in Poland, this share had declined from 32.9% in 1993 to 27.1% in 1996.29/

Financial situation of enterprises and banks in 1996

Although accommodating macroeconomic policy and direct credit windows kept the post-socialist industrial organizations alive, the financial situation of the enterprise sector in 1996 was already extremely poor. This was reflected in the quality of bank loan portfolios. Loans classified as non standard constituted 89% of total credit to non-government 30/ or about 22% of GDP. Loan loss provisions constituted 10.6% of classified loans value. Provision gap short to achieve 60% provision coverage of classified loans was lei 11.7 trillion or 11% of GDP.

The sector’s reported capital/assets ratio was 9.4%. Capital deficiency to create adequate provisions and maintain capital assets ratio of 8% (proxy for 12% risk weighted capital adequacy ratio) was about lei 11 trillion or 10% of GDP.

Dramatic deterioration in 1997-1998

The authorities initiated a program aimed at stabilizing the economy and implementing deep institutional and structural changes in March 1997. Monetary policy was tightened and special credit windows of the Central Bank were closed. Authorities lacked the determination to complete the program’s implementation. Steps in the area of institutional reforms and privatization were largely not taken. After several months, monetary policy was eased - although special credit windows were not reopened. The program’s goals were not achieved and costs of this half-hearted approach have been very high. Real GDP declined by 6.6% in 1997 and about 7.3% in 1998. The cumulative drop in output was 13.4% over the two years 1997-1998. Such a significant drop in real GDP resulted in the dramatic deterioration of the financial condition of the enterprise sector and consequently in the deterioration of the quality of loan portfolios of the commercial banks. Two major banks Bank Agricola and Bankorex, faced significant liquidity problems in 1997 and were supported by capital injection

29/ In the period 1993-1996 in both countries real GDP was growing with average annual rate 4.1% in Romania and 5.5% in Poland.
amounting to about 3.5% of GDP. In the meantime, high inflation in 1997 diminished the loans to GDP ratio from 19% to 13%.

*Sector capital deficiency may amount to 7% of GDP in 1997*

The sector's capital deficiency as of the end of 1996 was estimated to be about 10% of GDP or 52% of the value of the gross loan portfolio. The drop in real GDP of 6.6% in 1997 is expected to have resulted in the deterioration in the financial condition of the enterprise sector and consequently in the deterioration of the quality of bank loan portfolios. In the meantime, however, high inflation in 1997 diminished the loans to GDP ratio from 19% to 13% and two major banks were supported by capital injections amounting to about 3.5% of GDP.

I do not have data on loan classification and provision coverage in 1997. It may be hypothetically assumed that recapitalization counterbalanced the impact of the recession and the sector’s capital deficiency also stayed at the level of 52% of the value of gross loan portfolio at the end of 1997. This would mean a sector capital deficiency of about 7% of GDP in 1997.

*Potential increase of bank losses*

S&P included Romania in the category of countries where potential contingent liability of the government to support banking sector “in a reasonable worst-case scenario” may be between 35% and 60% of loans to the non-government sector. 60% of loan portfolio would equal about 8% of GDP. According to our estimation, banking sector capital deficiency in 1996 and 1997 already amounted to 52% of the value gross loans to the non-government sector which was very close to S&P’s upper limit for a worst case scenario. The increase of the sector’s capital deficiency to this limit or even slightly beyond in 1998 is possible.

*Government ability to deal with the problems*

With credit to GDP ratio of 13% and deposits to GDP ratio of 16% government contingent liability to support banking sector could be manageable even in the worst scenario, since the general government debt to GDP ratio of 33% and total economy foreign debt to GDP ratio of 23% are modest. However, a significant fiscal deficit (5% in 1998E) and the recession limits fiscal flexibility. In addition, Romania’s external position became very tight. The current account deficit was 7.2% of GDP in 1997 and was estimated at 5.3% in 1998. In the aftermath of Russian crisis spreads on Romania’s Eurobonds (over US Treasury bonds or German Central Bank bonds) skyrocketed from 3.6% - 3.9% until mid August 1998 to 19% - 57% in the second half of September 1998. In these circumstances the current account's dramatic improvement is likely to be forced out by the inability to finance the deficit.

Government ability to address origins of the banking problems is uncertain in light of the failure of the 1997 program.

**3.6. Slovakia**

Slovakia is highly exposed to banking sector systemic risk term since:

- Non-government credit to GDP ratio of 56% is significant.
• Major state controlled banks are overburdened by non-performing loans and some of these banks are dramatically eroded by lending to related parties.

• Government policy of using the funds of the country’s biggest insurer to support a major troubled bank as well as transferring control over this insurer to a cash thirsty industrial company spreads contagion from the banking to the insurance sector, increasing government contingent liability to support financial sector.

• High current account deficit is financed mostly through short term borrowings. As a result of loss of investment grade and the Russian crisis, the unavailability of financing is likely to force out dramatic current account improvement. Significant currency depreciation may cause severe losses for enterprise sector because of exposure to currency risk.

• The expected economic slowdown as a result of diminished access to foreign financing, the consequences of the Russian crisis and the Czech economic slowdown will result in further deterioration of bank loan portfolios.

The score of the Banking Sector Systemic Risk assigned to Slovakia is 5 (very high risk) for both the short and medium term. Banking sector problems may cause major economic and political destabilization unless they are dealt with both decisively and in a way that supports, not undermines, confidence.

The market structure

The 28 banks and 2 branches of foreign banks that operated in Slovakia in 1997 can be divided into two groups. The first consists of three state-owned or former state-owned banks - Slovenska Sporitelna (SS), Vseobecna Uverova Banka (VUB) and Investicna a Rozvojova Banka (IRB) – that are in the process of being restructured (called restructured banks further on). The second group encompasses all other banks.

The restructured banks have a common history with major Czech banks as they were carved out from the same the Czechoslovak banking system. Slovak banks benefited from measures undertaken by Czechoslovak government in 1991 and 1992 to clean up bank assets. This includes about US$ 1.2 billion provided in 1991 and 1992 to Slovakian Vseobecna Userova Banka (VUB) when the newly created bank hospital Konsolidacni Banka took over pre-1991 bad debts. Two of the restructured banks VUB and IRB were partially privatized in the coupon privatization in former Czechoslovakia with the controlling stake remaining in the hands of the state.

The share of the three restructured banks in the banking assets fell from about 72% in 1993 to about 50% at the end of 1997. The restructured banks had 68% of banking sector's assets in 1997 measured on a risk weighted basis and the majority of deposits and credits of the system.

The other banks, especially foreign and joint-venture banks, have been growing fast. However, their share in total assets (about 50% in 1997) exceeded significantly the share in risk weighted assets (of 32%) and share in credits and deposits. This is partly because total assets of other banks are inflated by the activity of foreign banks artificially increasing their foreign assets and liabilities to comply with awkward foreign currency regulations (see segment Macroeconomic stability below).
Foreign capital participation in banking sector capital was reported to be 39% in September 1997. However, since the main country of origin of foreign capital was the Czech Republic, it seems that a part of this foreign capital participation are just shares of Czech Government institutions inherited from former Czechoslovakia.

The shape of the three restructured banks that dominate the sector

SS – a state savings bank – has 23% of banking sector assets and the bulk of retail deposits, and is the dominant provider of funds to the interbank market.

Majority state-owned VUB has 22% share in the sector’s assets. It dominates corporate banking with about 33% share in total sector’s lending and is a net borrower on the interbank market. Loans and guarantees provided by VUB to related parties amounted to Sk 21 billion or US$ 600 million as of the end of 1997 which exceeded several times over the bank’s reported equity.

IRB which has a 5% share in the sector’s assets was placed under the Central Bank administration in December 1997.

In the case of VUB and IRB auditors qualify their opinions presented in 1997 annual reports stating that the banks may not be able to continue normal operations as going concerns in the future unless several conditions are met including continued co-operation and support of the National Bank of Slovakia and relevant government institutions.

Loan provision gap in the restructured banks

The provision gap is estimated mostly based on data from 1997 annual reports of the restructured banks and additional hypothetical assumptions.

At the end of 1997, gross loan portfolio of the restructured banks amounted to about Sk 218 billion, of which 54% belonged to VUB, 30% to SS and 16% to IRB. For VUB, the exact amount of classified loans (i.e. loans in arrears for more than 30 days) was disclosed in the Annual Report and constitutes 61.6% of its gross loan portfolio. I assume that the share of classified loans in the portfolios of SS and IRB is the same giving a total amount of Sk 137 billion of classified loans in the three banks.

Consequently, the estimated required amount of provisions in the restructured banks should be about Sk 82 billion. Actual provisions were Sk 50 billion, which gives a loan provision gap in the restructured banks of Sk 32 billion.

32 / High share of classified loans in SS is very likely since 72% of loans of this saving bank has been extended to corporate sector and other legal entities. Experience of the Polish counterpart of SS (PKO BP) in the early 1990s shows that a former specialized savings banks entering commercial banking in a transition economy may have a significantly bigger share of bad loans in their corporate portfolio than banks that formerly specialized in financing enterprises (see: S. Kawalec, “Reshaping Former Savings Banks: Options and Risks”, Paper for the Policy Seminar “On selected Topics in Banking System Development and Reform”, Organized by the World Bank in association with the National Bank of Ukraine and the Association of Ukrainian Banks, Puscha Ozernaya, Kiev, Ukraine, November 1-3, 1996). IRB because of high share of non-performing loans encountered liquidity problems and had to be taken under central bank administration in December 1997.
Other justified deductions from reported capital base

In addition to the loan provision gap I believe some other deductions from the reported capital base of the restructured banks to be justified. In the case of SS, I deduct Sk 1.3 billion of unrealized gains on dealing securities where the market is dominated by SS33/. In the case of VUB and IRB, I deduct the aggregate amount of Sk 11.1 billion constituting 50% value of loans and exposures of these banks to related parties34/.

Aggregated capital deficiency of restructured banks

Taking into account the reported capital base of restructured banks, the loan provision gap and other justified deductions from the reported capital base described above, I believe aggregated capital deficiency that for the restructured banks (to fill provision gap and increase capital/assets ratio to 8%) amounted to Sk 58 billion (USD 1.7 billion) as of end of 1997.

Capital deficiency of other banks

I have less information on other banks. According to the Central Bank, predicted uncovered losses in other banks as of end of 1997 were less than ¼ of those in the restructured banks (18.6% and 81.4% respectively of total predicted uncovered losses of the sector). I assume that this proportion applies to the loan provision gap as well. Thus the loan provision gap in other banks is estimated to be Sk 9.3 billion. I assume that apart from the above loan provision gap the other banks are adequately capitalized (Having risk weighted assets lower than restructured bank, the other banks have reported capital almost three times higher than the restructured banks: 73 % and 27 % of the sector’s reported capital respectively).

Total capital deficiency of Slovak banks

Summing up above estimates of capital deficiency of the restructured banks and of the other banks, we come out with the amount of Sk 74 billion - the equivalent of USD 1.9 billion or 9,6% of Slovakia’s DGP – as the total capital deficiency of Slovak banks as of the end 1997.

IRB case – contagion spreads to insurance sector

IRB was 35% owned by government bodies until VSZ, a Slovak steel maker, took control of 40% IRB’s shares in 1996 through direct and indirect shareholdings gaining effective control against the will of the Central Bank. IRB would have failed in 1997 if it had not been given a huge liquidity injection from the Central Bank. Since VSZ refused to increase the capital of IRB, the bank was placed under the Central Bank administration in December 1997. The Central Bank declared that IRB would be quickly privatized through a sale to a strategic investor. Ultimately, a controlling stake in IRB was sold for Sk 2 billion (USD 58 million) at the end of 1997 to Slovenska Pojistovna (SP) – a state-owned insurer which has 60% of the country’s insurance market. SP also placed deposits of Sk 4 billion to support IRB liquidity. It

33/ Dealing securities in question include: municipal, corporate and bank bonds, promissory noted and shares. See: Slovenska Sporitelna. Annual Report 1997, pp. 36,42 and 44.
34/ I assume that in VUB and IRB it is justified to require 50% provision for standard category related parties loans and 100% for classified related parties loans. Annual reports of these two banks do not provide information on what (if any) percentage of related parties loans is classified and what (if any) amount of provisions is created against these exposures. There is a possibility of some double counting in my calculation if a significant part of related parties loans is classified and even more if provision coverage for these loans is significant.
means that in the last weeks of 1997 SP disbursed a total of Sk 6 billion (USD 173 million) - about 2/3 of its annual revenues - to support IRB.

IRB reported negative capital amounting to Sk 4 billion (USD 116 million) at the end of 1997. Total liabilities of IRB were Sk 39.2 billion (US$ 1.1 billion) of which 58% were owed to the Central Bank. The second biggest source of funds was the new shareholder SP whose deposit constituted 10% of total liabilities and 48% of customer deposits. The third biggest financier was the savings bank Slovenska Sporitelna whose deposit constituted 8% of total liabilities and 84% of interbank funds generated by IRB. In total, these three state controlled institutions (the Central Bank, SS and SP) accounted for 76% of IRB’s funding while the bank hardly had a significant genuine customer deposit base. IRB’s loan and other exposures to VSZ and companies connected to VSZ were reported to amount to Sk 0.8 billion (USD 23 million).

VSZ acquired a controlling stake in IRB’s new dominant shareholder SP in 1998. It happened through a new share issue which enabled VSZ to replace the government as the major shareholder of the insurer. The transaction was later cancelled.

The involvement of Slovenska Poistovna and Slovenska Sporitelna in a bank with questionable business viability and the subsequent involvement of VSZ in SP creates serious concern. Sk 3 billion deposit placed in IRB constitutes 1.8% of SS’s assets and about half of its reported equity. The disbursement of about 2/3 of SP’s annual revenues to support IRB is likely to have a very serious impact on the financial viability of the Slovakia’s main insurer. In the case of an insurance company, as long as premium collection grows from year to year, insolvency may not translate itself into illiquidity. It seems likely that VSZ took control over the insurer to be able to tap its liquidity. These developments may lead to further losses and increase of government contingent liability in banking and insurance sector.

Macroeconomic stability

Slovakia’s external position looked very vulnerable in 1996 and 1997 in light of indicators such as a high current account deficit, significant fiscal deficit, an appreciated real exchange rate, a weak banking sector, high external debt with rising proportion of short term debt and a modest level of foreign reserves.

One important indicator, the ratio of short term foreign debt to foreign reserves – which at the end of 1997 was at an alarming level above 100% - can be misleading. The level of short term foreign borrowings is inflated by activities of foreign banks in Slovakia triggered by the awkward construction of regulation introduced in 1996. According to this regulation the value of foreign assets of a bank have to constitute at least 80% of the value of foreign liabilities. Foreign banks in Slovakia borrowed therefore extensively from abroad.

35/ During 1997 IRB’s liabilities to the central Bank increased by SK 8 billion.
38/ Regulation introduced in July 1996 obliged the banks to achieve a ratio of foreign currency assets to foreign liabilities of at least 65% by the end of 1996. This floor was subsequently increased up to 80% effective since July 1, 1997. In the calculation of this ratio only foreign currency assets to non-residents are included while the denominator includes foreign exchange liabilities to both residents and non-residents as well as local currency liabilities to non-residents.
increasing their foreign currency liabilities, and reinvested 80% or so of these borrowings abroad (presumably in liquid assets) to meet regulatory limits while having sizable residual amount of foreign liabilities financing domestic assets. Since the regulation was introduced in mid-1996 until September 1997, short term foreign debt by banks Slovakia increased from USD 0.5 billion to USD 2.6 billion\(^{39}\). As a result, at the end of 1997 the bulk of the Slovak economy's short term foreign debt were borrowings made by banks offset by liquid foreign assets.

There are also other factors of stability: low level of foreign investment with negligible portfolio flows limits room for currency speculation; restrictions on internal convertibility of Slovak koruna (eliminated in 1998) prohibited massive conversion of domestic savings into foreign currencies\(^{40}\).

Slovakia’s used to have an investment grade rating but was downgraded to a speculative grade in 1998. Later in the year, in the aftermath of Russian crisis spreads on Slovakia’s Eurobonds (over US Treasury bonds) skyrocketed from around 4% in mid August 1998 to above 12% in the second half of September 1998 and declined to 5-6% in March 1999. During the Russian crisis Slovakia had to change its exchange rate arrangements but the depreciation of the Slovak koruna was relatively modest (about 15% in nominal terms from early August 1998 until the end of March 1999).

The future of Slovakia’s external position remains very uncertain. Significant currency depreciation may cause severe losses for the enterprise sector because of exposure to currency risk. The recession in Czech Republic and the crisis in Russia\(^{41}\) will contribute to the aggravation of a likely economic slowdown.

The expected economic slowdown will result in further deterioration of bank loan portfolios.

*Potential increase of bank losses*

S&P included Slovakia in the category of countries where potential contingent liability of the government to support banking sector “in a reasonable worst-case scenario” may reach up to 40% of loans to the non-government sector. In December 1997, credit to the non-government sector amounted to 52% of Slovakia’s GDP; 40% of the credit portfolio would equal 21% of GDP. With our estimation of banking sector capital deficiency of 9.6% of GDP in 1997, deterioration by an additional 11% of GDP (or even more) in 1998 and 1999 is not an impossible to imagine bad case scenario.

*Government ability to deal with the problems*

So far, the government’s contingent liability to support the banking sector could be manageable since general government debt is at a modest level of 28% of GDP. However, a


\(^{40}\) M.Krzak, op.cit. p.42.

\(^{41}\) In 1997, exports to the Czech Republic amounted to 16% of Slovakia’s GDP and exports to CIS countries amounted to 3% of GDP.
significant budget deficit (4% in 1998) limits fiscal flexibility. In addition, the rapidly growing total economy foreign debt reached quite a significant level of 56% of GDP in 1998.

Section 4.

Key challenges and policy recommendations

All six countries underwent banking crises in the 1990s and spent significant budgetary resources to deal with them. Crises have been overcome without system destabilization only in Hungary and Poland. Now, the banking sectors in these two countries are relatively robust although small in relation to GDP.

In Bulgaria a banking crisis ended with a major destabilization, dramatic downsizing of banking assets and a deep recession. Presently, the banking sector is reported to be liquid and solvent and the potential for asset quality deterioration is limited for some time.

Romania, the Czech Republic and Slovakia have yet to deal with their continuing banking crises which still constitute a danger for economic stability and development. The deep banking crisis in Romania has been undermining confidence in banks, threatening their liquidity and eroding banking balance sheet. So far, persistent banking crises in the Czech Republic and Slovakia have not destabilized their banking systems. This is because of the stable macroeconomic stance and the perception that the governments is committed and able to support major banks.

Key challenges

- Improvement in the shape of banking sector in Czech Republic, Slovakia and Romania as well as its future soundness in Bulgaria are dependent on changes in the microeconomy and progress in restructuring the industrial sector. On the other hand, a change in bank behavior is necessary for real restructuring of the industrial sector.

- In Hungary, Poland and Bulgaria a key issue is how to ensure the soundness of banking sector in the medium and longer term in a likely period of growing monetization and dynamic expansion of domestic credit and when costs of potential financial instability will increase significantly.

- In Czech Republic, Slovakia and Romania a key issue is how to resolve existing banking crises and avoid crisis repetitions.

- In the medium term, all six countries will have to deal with the potential instability of international capital flows and risk of currency crisis.

In order to face these challenges sound macroeconomic policies should be pursued. Three policy areas should be addressed in particular:

- crisis resolution – dealing with bank capital deficiencies and bad debt restructuring (in the Czech Republic, Slovakia and Romania)
- bank privatization (in all countries except Hungary)
- strengthening of regulatory and institutional framework (in all countries).
These policy areas are discussed in this Section. A separate section is devoted to systemic liquidity risk connected with the Year 2000 problem.

4.1. Crisis resolution – dealing with bank capital deficiencies and bad debt restructuring

Restructuring and recapitalization

Banks which are not to be liquidated should be adequately restructured to restore solvency, liquidity and profitability. The key element of restructuring an insolvent bank is recapitalization. It should allow the bank to create adequate provisions against bad exposures and assure that after creating the necessary provisions the bank would reach capital adequacy with a safe cushion above the minimum regulatory level.

Who should recapitalize

If the bank has negative capital and the government does not want its liquidation, the rights of former non-state shareholder should be cancelled and the bank should be recapitalized either by the government or by new private owners.

It would be good if a troubled bank could be quickly sold to a strong, fit and proper strategic investor ready to inject new capital and restructure the institution. However, this solution is often unfeasible. There may be no acceptable buyers willing to inject money into an insolvent bank or the government may not be ready to accept their terms. Trying to sell quickly in this type of situation without previous restructuring may in fact result in delaying both restructuring and privatization.

How to deal with bad debt and bad borrowers

In the Czech Republic, Slovakia, and Romania, the shape of the banking sector is related to the poor shape of the microeconomic situation. Lack of restructuring of the industrial sector is reflected in the poor quality of loan portfolios and the high share of bad loans. At the same time, the lack of restructuring of the banking sector and the behavior of banks allow big inefficient companies to delay restructuring and continue inefficient activities. For this reason, improvement in the banking sector is dependent on changes in the microeconomic situation and progress in restructuring the industrial sector. On the other hand, a change in bank behavior is necessary for real restructuring of the industrial sector.

Taking into account that major state-controlled banks have already benefited from the government support, bad debt resolution should focus on changing banks’ behavior and should be connected with bank privatization.

42 / In trying to transfer a big insolvent bank to a strategic investor the government may be forced to accept no or only a token payment, give a free hand to the buyer allowing divestiture or liquidation of less interesting parts of the institutions and staff reductions. In addition, buyers may demand government guarantees (such as limiting maximum size of losses on an existing portfolio) and direct or indirect subsidies and privileges to diminish risk and improve the economics of their investment.
It would also be advisable if bank rehabilitation contributed to industrial sector restructuring. To this aim bad borrowers should not receive easy debt relief because it could allow them to continue previous activities. Carving out bad claims and transferring them to a government sponsored bank hospital - be it an existing one like Konsolidacni Banka or a newly created institution - is not a recommended solution either. Experience shows that this type of institution - especially in transition economies - is subject to political pressure, lack proper motivation and therefore are unlikely to vigorously and effectively recover bad debt and/or force debtor restructuring.

A solution could be considered in which banks are properly recapitalized, create adequate provisions against bad debts and bad debt is separated within the banks and subject to management of special work-out units. Safeguards against financing bad debtors with new loans should be introduced. Banks could be obliged to restructure bad debts within defined time period – for instance one year. One possible way of restructuring bad debts by banks could be the public sale of the debt on secondary market. One potential group of buyers could be the firms with the financial obligations vis-a-vis bad debtors.43/

An alternative solution could be that bad debts are carved out of bank balance sheets and taken over by the government in exchange for interest bearing bonds. However, under an agency agreement banks continue to administer these loans and are responsible for their restructuring with proceeds from any recovery being shared between a bank and the government44/.

4.2. Bank privatization45/

The key objective of bank privatization should be to create the best conditions for long term development, soundness and efficiency of the privatized institution.

*Formal versus genuine privatization*

It is essential to differentiate between actual privatization where control of the company is transferred to private investors and purely formal privatization where the state sells over 50% of shares to private investors but retains the controlling stake. Formal privatization can be the first step toward authentic privatization but in itself can only make limited qualitative changes since the management of the bank remains dependent on state administration. The developments in the Czech banking sector in the 1990s discussed earlier shows the limited effects of formal privatization.


44 / Solution adopted in the restructuring of the Universal Bank of Latvia in 1993.

45 / In this paragraph I draw heavily from the paper: S.Kawalec, A. Nieradko and C. Stypulkowski, „In search of compromise on contradictory privatization goals: The case of Bank Handlowy”, *Central European Banker*, February 1999.
**Genuine privatization does not have to guarantee success**

Experience shows, however, that the act of genuine privatization alone does not necessarily create a strong and sound bank. The experiences of Chile and Israel in the 1980's and of Mexico in the 1990's are proof enough. All three countries were at first proud of the rapid privatization of the largest banks but soon after they were forced to spend vast budgetary funds to rescue the recently privatized banks.

**Appropriate owners are indispensable for success of bank privatization**

The weakness of prudential regulations and poor bank supervision contributed to the post-privatization banking crises in Israel, Chile and Mexico. Appropriate prudential regulations and accounting principles, the requirement to publish financial information, independent audits and efficient bank supervision can significantly increase the safety of the banking system. However, improvement in the efficiency of legal and institutional infrastructure in this respect cannot take place overnight. Furthermore, regulations and bank supervision cannot replace a qualified management and shareholders with understanding of the banking business.

**Issue of strategic investor and search of alternative privatization schemes**

The development and safety of the bank could be best ensured through the right strategic investor capable of efficiently controlling the bank, transferring know-how and of financial support in a crisis situation. In transition countries were the economy has a relatively short history of operating under market conditions there is a lack of institutions that can become a reliable strategic investor. Foreign institutions are often the only potential candidates for the role.

Thus quick privatization through strategic foreign investors can lead to a situation when all major banks in a country are subsidiaries or branches of foreign banks. This would not be acceptable for most industrial countries and no wonder that it may create resistance in transition economies. Fear that leading domestic banks may be taken-over by foreign institutions and will lose their national character strongly affects privatization decisions in many countries. It often results either in delaying bank privatization for many years, or in formal privatization where the state retains the controlling stake, in transferring control to domestic private investors who are unable to strengthen the bank or in a search for alternative privatization schemes.

In Hungary, the National Savings and Commercial Bank (OTP Bank) that holds the majority of the country’s retail deposit was privatized in such a way as to assure dispersed ownership and exclude foreign control. The bulk of shares were sold to portfolio investors. The Articles of Association restricted the maximum stake of any one non-Hungarian shareholder to no more than 5% of share capital and voting rights. OTP is now a blue chip stock in Central

---

46 / The fact that foreign strategic investors are more competent that local ones is important but does not always have to be the decisive factor. For instance, the fact that in a number of countries key government positions are filled with people without adequate professionalism does not lead everyone to the conclusion that the government should be run by more competent foreign professionals.

European banking. However, growing competition and no effective ownership control may potentially lead to future difficulties.

In the case of Bank Handlowy (a leading Polish corporate bank privatized in 1997) the State Treasury retained special participating convertible bonds (passive shares) and has a 29% stake in the current and future market value of the Bank but only 7% of voting rights. A group of core shareholders made up of three renowned financial institutions representing different areas of financial services and geographical regions (J.P. Morgan, Zurich Insurance Company and Sparbanken Sverige -Swedbank) secured 26% of voting rights that, given the dispersion of the remaining shareholders, provides dominant influence on the bank. The core shareholders signed cooperation agreements on supporting the bank in specific areas of financial services. The ownership structure was complemented by international portfolio investors and by domestic individual investors attracted by special incentives. The bank preserved its identity and Polish character.

Some recommendations

It is advisable to sell most state-controlled banks to foreign strategic investors. However, it is not unjustified for a government to look for privatization schemes that may ensure the autonomy and national character of one or two major banks. One should be aware of and try to minimize the risk that the institution privatized without a strong strategic investor will not be able withstand competition and will cause problems in the future.

Only strong and sound banks that meet the following conditions may be privatized without the participation of a strategic investor. These banks should:
1) easily meet bank capital adequacy requirements,
2) be capable of generating profits,
3) have a management capable of ensuring the future of the institution.

It would be advisable, however, to find a group of core shareholders to exercise ownership control to avoid a situation in which control of the bank falls in the hands of irresponsible investors. It is important that the ownership structure after privatization is transparent so that the banks have access to capital markets if the need for a capital increase arises.

Banks that do not meet even one of these criteria should be privatized with the participation of a strategic investor.

It must be said that these recommendations are not always easy to follow.

4.3. Strengthening of regulatory and institutional framework

Progress with regulations – problem with enforcement

There are significant differences among our six countries in the quality of regulatory and supervisory regimes, with Poland and Hungary having the strongest systems and other countries lagging behind. There are, however, common problems that concern all of the countries to a lesser or greater extent.

48 / A research on five Eastern European countries invited to EU accession negotiations underlines that banking regulation and supervision in the Czech Republic requires further strengthening. “Poland and Hungary on the
Although Central European countries have made great progress in incorporating the Basle Committee’s “Core Principles” on banking regulations into their legal systems there are problems with the effective enforcement of these principles.

Enforcement is lacking not only because of the shortage of trained staff in banking supervision but is also hindered by important flaws in regulations that weaken transparency and make the task of supervisors much more complicated and difficult. These flaws are related to differences between domestic and international accounting and auditing standards including lack of overriding “substance over form” and “truth and fairness” rules as well as the frequent implementation of regulations on a solo rather than on a consolidated basis.

Accounting and auditing standards

Central European countries made great progress in bringing their national accounting and auditing standards broadly in line with International Accounting Standards (IAS) and International Standards on Auditing (ISA). There are, however, still material differences between national and international standards.

Consolidated basis

A very important weakness of prudential regulations, reporting and auditing standards in Central European countries is the lack or insufficient level of consolidation requirements. This makes it difficult for banking supervision to supervise on a fully consolidated basis and some problems may be swept away by banks into affiliates. Without full consolidation not only the public and supervisors may be misled but also bank managements may not properly understand the risks borne by their institutions.

Application of “substance over form”

One of the most important failings of accounting regulations in Central European countries is the precedence of the legal form of a transaction over its commercial substance. According to Peter Cunningham of Price Waterhouse: “The application of >> substance over form << is one of the most important tools by which unfair reporting practices can be reduced or even eliminated ...”.

49 / “...the implementation of these regulations on solo rather than a consolidated basis enables banks to bypass the spirit whilst operating within the ‘letter of the law’ should they so choose.” FITCH IBCA, “The Czech Banking System and Prudential Regulations”, May 1998, p.2


51 / Concept of “substance over form” left out of accounting legislation is usually recognized in tax legislation, see op. cit.
The introduction of the “substance over form” rule will become more urgent as transactions become more complicated and their economic substance is changed by derivative instruments. Presentation of accounts based on the legal form of transactions may often be misleading. In these circumstances banking supervisors – who may always have difficulties with catching up with innovations in the commercial sector - would find it difficult to assure adequate enforcement of the substance of prudential regulations.

**Truth and fairness**

Auditing regulations in Central European countries emphasize compliance with regulations and do not provide the auditor with an overriding principle of "truth and fairness" which is key in ISA and constitutes an important tool to counter practices which formally comply with but are against the spirit of the regulations.

**Impact of national accounting standards on transparency of IAS accounts**

Major banks usually present their annual IAS accounts as well. IAS accounts are typically compiled by auditors based on book records kept according to national standards. Such compilation is not only costly and time consuming but in addition may not always be of the best quality. Thus differences between national standards and IAS may hinder the transparency of banks' IAS financial statements.

**Need for international standards on loan classification and provisioning**

There is no international standards on loan classification and provisioning requirements. This is an important flaw which diminishes the usefulness of IAS auditors reports. It would be advisable if such standards are established (this is a role for BIS and international auditing companies).

**Monitoring and supervising foreign indebtedness and currency risk of banks and enterprises**

In the medium term, Central European economies will be exposed to growing risk of excess foreign indebtedness and currency mismatches of the commercial sector. Interest rate differentiates (with local currency rates in Central European countries higher than in international USD and Euro markets) and underestimation of local currency depreciation risk may encourage companies to build dangerous open short foreign exchange positions. This may happen both by direct foreign borrowings as well as by taking foreign currency denominated loans from local banks.

In order to control these risks:

---

52/ An opinion on Czech accounting system can also be applied to other countries in the region:

"The quantifiable differences between Czech accounting principles and IAS (...) should not impact on the presentations of IAS financial statements by banks. However they do have an impact, since the accounting records of the bank are primarily set up to provide statutory reporting and not IAS format. This is a legal requirement. In setting local rules which closely approximate IAS, management can fairly easily convince most counterparties, investors and auditors that the differences are not material, so can be overlooked. I stress that in my view the differences can be great and thorough analysis is needed to ascertain the true position of these banks." Op. Cit.
Financial authorities should monitor foreign indebtedness of the commercial sector on a regular basis and statistical data should be published on a monthly or quarterly basis.

Financial authorities should have the ability to introduce measures\(^{53}\) to discourage short-term capital inflows in case the stock of such inflows becomes significant in relation to foreign reserves. Such measures are not emergency measures to be introduced in a crisis situation. They should be introduced early enough to prevent the build-up of excessive stock of volatile inflows and if inflow pressure persists. It may also be justified to keep these measures for a longer period.

Currency risk exposure should be reported in audited financial reports published by all companies above a certain size.

Guidance (indicative limits) on foreign currency exposures (relating open foreign exchange position to capital) for companies should be established.

Companies with short foreign exchange position exceeding limits should be banned from external borrowings.

*Strengthening the quality of banking supervision with more reliance on private sector and market*

The task to protect the stability of the banking sector creates high requirements for supervisors. To create efficient supervisory institutions, recruit, train and preserve good staff is difficult especially in transition economies. If supervisors try to rely on themselves, their task may be too extensive to be fulfilled adequately taking into account their capacities. Having problems with recruiting quality staff, banking supervision can not be able to perform competent and deep on site inspections frequently enough.

In order to become more effective banking supervision should put as much responsibilities as possible on the private sector with market discipline being much more focused:

Public disclosure requirements should be strengthened in terms of frequency and content of information. All banks should publish quarterly reports with an obligation to have financial statements audited every six months.

Responsibilities of auditors should be expanded to include the assessment of observance of prudential regulations and the assessment of the quality of risk control systems and reporting to supervisory authorities on important irregularities.

Banking supervision should concentrate on developing prudential regulations, reporting and disclosure requirements as well as issuing guidance for auditors, controlling auditors’ work through on-site inspections and dealing vigorously with troubled cases.

If public disclosure requirements are strengthened and responsibilities of auditors expanded, banking supervision's capacity and efficiency may improve dramatically.

\(^{53}\) For instance obligatory interest-free deposits for one year of x percent of any foreign borrowings regardless of maturity - a combination of the Chilean solution and Tobin tax idea.
4.4. Year 2000 systemic liquidity risk

There is a risk of a systemic liquidity crunch in the banking system and the whole economy at the end of 1999 and the beginning of 2000. The original cause of this risk is a technological problem which may endanger the operations of unprepared computer systems once the year 2000 starts. However, widespread anxiety about the Year 2000 problem could be more damaging than the technological issue itself.

The widespread build-up of liquidity reserves and emergency cash reserves by banks as well as corporate and retail clients as insurance against any problems with settlements and access to cash may result in a liquidity crisis at the end 1999 before any problems with computer systems occur or even if no significant failures take place at all.

The liquidity crunch may be magnified since in the last period of 1999 and the beginning of 2000 foreign banks and companies are likely to diminish significantly their exposure limits to Central European partners, taking into account the risk of a liquidity crunch in their domestic markets and the perception that in Central European countries the risk of a Year 2000 critical business failure may be higher.

In increasing its liquidity reserves, a bank may become less responsive to liquidity limitations against which it can never be fully insured. In case of a deep systemic crisis and a banking panic it can lose liquidity even if it created reasonable reserves and its computer system did not fail. The accumulation of liquidity and cash reserves by banks and their clients to minimize risk may be a factor in creating a liquidity crisis in the system.

Banking supervision and central banks should play an important role in counteracting a systemic risk related to liquidity.

Banking supervision should be required to verify systems and monitor the status of preparations. Banks that have not addressed the Year 2000 problem adequately or do not meet minimal solvency and liquidity standards (required by regulations) should be eliminated from the system early enough before the end of 1999.

In order not to provoke a serious liquidity crisis in the banking system, situations in which clients cannot withdraw their deposits should be avoided. The central bank should execute all necessary transfers to other banks in order to avoid a domino effect of conveying liquidity problems onto other banks.

The year 2000 creates a specific systemic risk. It is important that the central bank makes sure it is capable of providing for all withdrawals of deposits and settlement of payments. The central bank should clearly define its responsibilities and be technically and organizationally ready to react. Special cash reserves and emergency contingency plans should be established.

The lack of liquidity support from the central bank can result in a deep liquidity crisis in the banking system. This in turn would threaten the solvency of the enterprise sector which can
result in more serious and long-term effects on the economy than the potential effects of computer system failures.\footnote{54/}

The implementation of these steps to contain year 2000 systemic liquidity risk may be problematic in the Czech Republic, Romania and Slovakia where some major banks do not meet solvency and liquidity standards, and in Bulgaria where currency board arrangement limits the central bank flexibility. However, there is a need for a clear contingency plan in each country.

\footnote{54/It is worth noting the words of Paul A. Samuelson:

"No banking system with fractional reserves - i.e., none which keeps less than 100 per cent of its deposits in cash - can ever turn all its deposits into cash at a moment's notice. So every fractional reserve system would be "fair-weather system" if government didn't stand ready to back it up. If panic ever again came, Congress, the President, the Secretary of the Treasury, and the Federal Reserve Board chariman would all act. They'd say: "If the panicky American people all insist on taking their money out of the banks, we'll print as much money as is needed to meet the emergency."

Had this been said and done back in the black days of the earlyt 1930's, history would have been different, Our country would have been spared the epidemic of bank failures that created fear and crisis and that almost brought the capitalistic system down."

Bibliography


31. International Monetary Fund, “Directions of Trade 1997”
32. International Monetary Fund, “International Financial Statistics” (various issues)
33. International Monetary Fund, “World Economic Outlook” (various issues)


41. Kawalec, Stefan, Artur Nieradko and Cezary Stypułkowski, „In search of compromise on contradictory privatization goals: The case of Bank Handlowy”, Central European Banker, February 1999.


58. OTP Bank (National Savings and Commercial Bank Ltd), Information Memorandum, 11 July 1995.


About the Author

Stefan Kawalec has been the Chief Advisor to the Management Board of Bank Handlowy w Warszawie S.A. since 1994. As General Director in the Ministry of Finance and the Chief of Economic Advisors to Deputy Prime Minister and Minister of Finance Leszek Balcerowicz (1989-1991) he was involved in designing and implementing the Polish stabilization and transformation program. As Vice Minister of Finance (1991-1994) he was responsible for restructuring and privatization of banks and headed the preparation and implementation of the law on financial restructuring of enterprises and banks. On various occasions he served as a consultant at the World Bank, International Monetary Fund and Harvard Institute of International Development on issues of financial system reforms and bank privatization in various Central and East European countries. He has a degree in mathematics from the University of Warsaw.
ABSTRACT

The paper is an attempt at a comparative overview of banking sector systemic risk in six Central European countries as of the end of 1997 concluding with some policy recommendations.

**Banking crisis** is defined here as a situation where the high share of non performing assets in the banking system threatens the liquidity or solvency of a significant part of the banking sector.

**Banking sector systemic risk** can be defined as the estimated future macroeconomic impact of banking sector problems weighted by the probability of different variants of future events.

The countries covered by the paper are specific by the fact that in the early 1990's they moved from a socialist to a market economy and the legacy of a socialist economy still has an important influence on the shape of their banking sectors.

All six countries underwent banking crises in 1990s and spent significant budgetary resources to deal with them. Crises have been overcome without system destabilization only in Hungary and Poland. Now, the banking sectors in these two countries are relatively robust although small in relation to GDP. In Bulgaria a banking crisis ended with a major destabilization, dramatic downsizing of banking assets and a deep recession. Presently, the banking sector is reported to be liquid and solvent and the potential for asset quality deterioration is limited for some time. Romania, the Czech Republic and Slovakia have yet to deal with their continuing banking crises which still constitute a danger for economic stability and development.

The paper consists of four sections. The first section describes the experience of the six countries in dealing with the legacy of a socialist economy. The second section discusses the methodology used in the analysis of systemic bank risk and present Comparison Table with risk indicators and author's assessments. The third section describes in more detail the situation in the specific countries. The fourth and concluding section describes key challenges and policy recommendations.
Chart 1.

**Change in Labor Productivity in Industry in 1989-1997**

(1989 = 100)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1989=100</td>
<td>106,1</td>
<td>113,6</td>
<td>152,3</td>
<td>142,2</td>
<td>95,8</td>
<td>93,2</td>
</tr>
</tbody>
</table>

Chart 2.

**Share of Industry in GDP**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>40,4%</td>
<td>37,9%</td>
<td>40,2%</td>
<td>37,4%</td>
<td>37,9%</td>
<td>40,2%</td>
<td>37,4%</td>
</tr>
<tr>
<td>1992</td>
<td>30,9%</td>
<td>38,3%</td>
<td>34,9%</td>
<td>40,5%</td>
<td>35,4%</td>
<td>34,0%</td>
<td>34,0%</td>
</tr>
<tr>
<td>1993</td>
<td>30,8%</td>
<td>33,8%</td>
<td>33,6%</td>
<td>35,0%</td>
<td>35,4%</td>
<td>32,9%</td>
<td>32,1%</td>
</tr>
<tr>
<td>1994</td>
<td>31,4%</td>
<td>35,6%</td>
<td>33,1%</td>
<td>32,1%</td>
<td>30,6%</td>
<td>32,2%</td>
<td>32,7%</td>
</tr>
<tr>
<td>1995</td>
<td>35,3%</td>
<td>34,6%</td>
<td>34,1%</td>
<td>32,7%</td>
<td>32,2%</td>
<td>30,2%</td>
<td>30,0%</td>
</tr>
<tr>
<td>1996</td>
<td>35,6%</td>
<td>36,0%</td>
<td>33,8%</td>
<td>30,2%</td>
<td>29,2%</td>
<td>31,0%</td>
<td>28,2%</td>
</tr>
<tr>
<td>1997</td>
<td>35,0%</td>
<td>35,6%</td>
<td>35,0%</td>
<td>29,4%</td>
<td>27,1%</td>
<td>28,2%</td>
<td>27,1%</td>
</tr>
</tbody>
</table>
Chart 3.

**Extent of Privatization**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>50%</td>
<td>7%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>75%</td>
<td>93%</td>
</tr>
<tr>
<td>Hungary</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>Poland</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>Romania</td>
<td>60%</td>
<td>12%</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td>75%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Chart 4.

**Real GDP Change 1989-1998**

(1989=100)

<table>
<thead>
<tr>
<th>Country</th>
<th>1989=100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>65</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>96</td>
</tr>
<tr>
<td>Hungary</td>
<td>95</td>
</tr>
<tr>
<td>Poland</td>
<td>117</td>
</tr>
<tr>
<td>Romania</td>
<td>80</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td>99</td>
</tr>
</tbody>
</table>
Chart 5.

![Credit* / GDP Chart](image1)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>61.1%</td>
<td>65.3%</td>
<td>58.3%</td>
<td>43.5%</td>
<td>34.3%</td>
<td>35.1%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>37.3%</td>
<td>31.8%</td>
<td>26.9%</td>
<td>24.3%</td>
<td>21.6%</td>
<td>19.1%</td>
<td>21.3%</td>
</tr>
<tr>
<td>Poland</td>
<td>19.1%</td>
<td>19.1%</td>
<td>18.5%</td>
<td>17.7%</td>
<td>17.1%</td>
<td>18.5%</td>
<td>21.5%</td>
</tr>
<tr>
<td>Romania</td>
<td>39.7%</td>
<td>24.5%</td>
<td>15.8%</td>
<td>13.9%</td>
<td>17.2%</td>
<td>18.6%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chart 6.

![Deposits* / GDP Chart](image2)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>47.6%</td>
<td>54.3%</td>
<td>56.1%</td>
<td>54.7%</td>
<td>50.0%</td>
<td>39.4%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>30.1%</td>
<td>33.9%</td>
<td>34.9%</td>
<td>32.7%</td>
<td>30.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>23.2%</td>
<td>22.6%</td>
<td>24.1%</td>
<td>25.2%</td>
<td>25.4%</td>
<td>26.6%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Romania</td>
<td>26.4%</td>
<td>18.5%</td>
<td>12.0%</td>
<td>11.3%</td>
<td>15.2%</td>
<td>17.5%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chart 7.

**M2 / GDP**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>53,9%</td>
<td>62,2%</td>
<td>39,7%</td>
<td>30,2%</td>
<td>33,7%</td>
<td>61,6%</td>
</tr>
<tr>
<td>1992</td>
<td>61,6%</td>
<td>64,6%</td>
<td>43,8%</td>
<td>29,3%</td>
<td>23,0%</td>
<td>59,7%</td>
</tr>
<tr>
<td>1993</td>
<td>63,9%</td>
<td>69,9%</td>
<td>44,9%</td>
<td>30,6%</td>
<td>15,3%</td>
<td>50,7%</td>
</tr>
<tr>
<td>1994</td>
<td>61,0%</td>
<td>72,5%</td>
<td>42,0%</td>
<td>30,8%</td>
<td>14,3%</td>
<td>60,1%</td>
</tr>
<tr>
<td>1995</td>
<td>55,4%</td>
<td>37,9%</td>
<td>37,9%</td>
<td>31,1%</td>
<td>19,0%</td>
<td>64,4%</td>
</tr>
<tr>
<td>1996</td>
<td>44,1%</td>
<td>36,9%</td>
<td>36,9%</td>
<td>32,6%</td>
<td>21,3%</td>
<td>62,2%</td>
</tr>
<tr>
<td>1997</td>
<td>21,8%</td>
<td>37,7%</td>
<td>34,6%</td>
<td></td>
<td>18,3%</td>
<td></td>
</tr>
</tbody>
</table>

Chart 8.

**Credit* and GDP Real Change in Poland in 1992-97**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP real growth</th>
<th>Credit real growth</th>
<th>Credit/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>2.6%</td>
<td>2.6%</td>
<td>19.1%</td>
</tr>
<tr>
<td>1993</td>
<td>3.8%</td>
<td>0.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>1994</td>
<td>5.2%</td>
<td>0.8%</td>
<td>17.7%</td>
</tr>
<tr>
<td>1995</td>
<td>7.0%</td>
<td>3.4%</td>
<td>17.1%</td>
</tr>
<tr>
<td>1996</td>
<td>6.1%</td>
<td>14.7%</td>
<td>18.5%</td>
</tr>
<tr>
<td>1997</td>
<td>6.9%</td>
<td>24.2%</td>
<td>21.5%</td>
</tr>
</tbody>
</table>
Chart 9.

Credit* and GDP Real Change in Hungary in 1992-97

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Growth (%)</th>
<th>Credit Growth (%)</th>
<th>Credit/GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>-3.1%</td>
<td>-17.4%</td>
<td>31.8%</td>
</tr>
<tr>
<td>1993</td>
<td>-0.6%</td>
<td>-16.1%</td>
<td>26.9%</td>
</tr>
<tr>
<td>1994</td>
<td>2.9%</td>
<td>-7.0%</td>
<td>24.3%</td>
</tr>
<tr>
<td>1995</td>
<td>1.5%</td>
<td>-9.6%</td>
<td>21.6%</td>
</tr>
<tr>
<td>1996</td>
<td>1.3%</td>
<td>-10.5%</td>
<td>19.1%</td>
</tr>
<tr>
<td>1997</td>
<td>4.3%</td>
<td>16.0%</td>
<td>21.3%</td>
</tr>
</tbody>
</table>
Table 6.

**Bulgaria - Main Economic Indicators**

| Year | GDP (bln USD) | GDP real growth | Inflation - CPI (eop) | Unemployment | General government balance/GDP | Current Account/GDP | FDI net/GDP | CA, net of FDI/GDP | Credit real growth | Credit/GDP | Deposits/GDP | Currency outside banks/GDP | M2/GDP | Local currency share in M2 | Gross general government debt/GDP (eop) | Gross external debt/GDP | Debt service/Exports | Short term external debt/GDP | Short term external debt/Foreign reserves (minus gold) | Industry share in GDP | Official exchange rate (Leva per USD; eop) | Official exchange rate (Leva per USD; avg) |
|------|---------------|-----------------|-----------------------|--------------|---------------------------------|--------------------|-------------|-------------------|-------------------|-------------|---------------|----------------------------------|--------|------------------------|-------------------------------------------|---------------------|-------------------------|------------------------------------------|---------------------|------------------------|---------------------------------------------|
| 1990 | 20.7          | -6.5%           | 79.4%                 | 1.5%         | -1.4%                           | -8.3%              | 0.0%        | -8.2%             | -0.9%             | 61.1%       | 47.6%         | 7.5%                                            | 53.9%  | 88.0%                  | 48.0%                                              | 48.0%               | 61.0%       | 76.1%          | 3717.4%                                    | 37.4%   | 3.00                   | 17.79                                |
| 1991 | 7.6           | -11.7%          | 63.9%                 | 7.0%         | -12.8%                          | -1.0%              | 0.7%        | -0.3%             | -12.1%            | 65.3%       | 54.3%         | 7.3%                                            | 61.6%  | 66.6%                  | 149.3%                                             | 152.8%              | 24.0%       | 20.1%          | 1525.1%                                    | 40.5%   | 21.81                   | 23.34                                |
| 1992 | 8.6           | -7.3%           | 121.9%                | 13.3%        | -5.2%                           | -4.2%              | 0.5%        | -3.7%             | -24.1%            | 58.3%       | 56.1%         | 6.1%                                            | 63.9%  | 76.6%                  | 152.8%                                             | 130.6%              | 15.0%       | 150.9%         | 625.3%                                     | 35.0%   | 24.49                   | 27.34                                |
| 1993 | 10.8          | -1.5%           | 33.1%                 | 15.8%        | -10.9%                          | -10.2%             | 0.4%        | -9.8%             | -24.1%            | 43.5%       | 54.7%         | 11.0%                                           | 61.0%  | 79.7%                  | 152.8%                                             | 132.0%              | 10.0%       | 150.0%         | 39.4%                                      | 6.3%    | 32.71                   | 27.59                                |
| 1994 | 9.7           | 1.8%            | 311.4%                | 14.2%        | -6.9%                           | -0.3%              | 1.1%        | 0.8%              | -19.5%            | 34.3%       | 50.0%         | 5.7%                                            | 61.0%  | 79.7%                  | 130.6%                                             | 84.8%               | 15.0%       | 20.0%          | 53.4%                                      | 1.5%    | 66.02                   | 54.13                                |
| 1995 | 12.9          | 2.1%            | 578.3%                | 11.4%        | 3.5%                            | -0.2%              | 0.8%        | 0.6%              | -8.8%             | 35.1%       | 39.4%         | 1.5%                                            | 61.0%  | 79.7%                  | 84.8%                                              | 108.0%              | 15.0%       | 20.0%          | 6.9%                                       | 8.9%    | 70.70                   | 67.17                                |
| 1996 | 9.3           | -10.9%          | 9.0%                  | 11.1%        | -2.1%                           | 0.2%               | 1.5%        | 1.7%              | -21.1%            | 14.2%       | 18.0%         | 5.4%                                            | 61.0%  | 79.7%                  | 107.7%                                             | 98.6%               | 15.0%       | 150.0%         | 54.7%                                      | 9.5%    | 487.351776.50             | 177.891681.88     |
| 1997 | 10.2          | -6.9%           |                       | 14.0%        | -2.0%                           | 4.4%               | 4.9%        | 9.2%              | -62.5%            | 14.2%       | 18.0%         | 2.0%                                            | 61.0%  | 79.7%                  | 107.7%                                             | 87.1%               | 15.0%       | 20.0%          | 6.9%                                       | 2.0%    | 1674.15                  | 8776.15               |
| 1998F| 12.0          |                 |                       |             |                                 |                    |            |                   |                   |            |               |                                   |        |                        |                                         |                     |            |               |                                           |        |                        |                                         |                     |
Table 7.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (bln USD)</td>
<td>32.3</td>
<td>25.4</td>
<td>30.0</td>
<td>34.4</td>
<td>39.7</td>
<td>50.4</td>
<td>56.5</td>
<td>52.0</td>
<td>52.8</td>
</tr>
<tr>
<td>GDP real growth</td>
<td>-1.2%</td>
<td>-11.5%</td>
<td>-3.3%</td>
<td>0.6%</td>
<td>3.2%</td>
<td>6.4%</td>
<td>3.9%</td>
<td>1.0%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Inflation - CPI (eop)</td>
<td>18.4%</td>
<td>51.1%</td>
<td>12.6%</td>
<td>18.8%</td>
<td>9.6%</td>
<td>8.0%</td>
<td>8.6%</td>
<td>10.0%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.8%</td>
<td>2.9%</td>
<td>3.1%</td>
<td>3.0%</td>
<td>3.3%</td>
<td>3.0%</td>
<td>3.5%</td>
<td>5.2%</td>
<td>7.0%</td>
</tr>
<tr>
<td>General government balance/GDP</td>
<td>1.6%</td>
<td>-1.9%</td>
<td>-3.1%</td>
<td>0.5%</td>
<td>-1.2%</td>
<td>-1.8%</td>
<td>-1.2%</td>
<td>-2.1%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Current Account/GDP</td>
<td>-0.8%</td>
<td>3.6%</td>
<td>-1.0%</td>
<td>1.5%</td>
<td>-2.0%</td>
<td>-2.7%</td>
<td>-7.6%</td>
<td>-6.2%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>FDI net/GDP</td>
<td>3.3%</td>
<td>1.6%</td>
<td>1.9%</td>
<td>5.0%</td>
<td>2.5%</td>
<td>2.4%</td>
<td>2.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA, net of FDI/GDP</td>
<td>2.3%</td>
<td>3.1%</td>
<td>0.0%</td>
<td>2.3%</td>
<td>-5.1%</td>
<td>-3.7%</td>
<td>0.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit real growth</td>
<td>4.0%</td>
<td>9.0%</td>
<td>4.7%</td>
<td>3.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit/GDP</td>
<td>69.2%</td>
<td>69.7%</td>
<td>71.4%</td>
<td>72.0%</td>
<td>73.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits/GDP</td>
<td>57.0%</td>
<td>57.6%</td>
<td>59.8%</td>
<td>61.4%</td>
<td>59.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency outside banks/GDP</td>
<td>6.2%</td>
<td>7.0%</td>
<td>7.3%</td>
<td>7.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2/GDP</td>
<td>69.4%</td>
<td>62.2%</td>
<td>64.6%</td>
<td>69.9%</td>
<td>72.5%</td>
<td>67.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local currency share in M2</td>
<td>99.3%</td>
<td>94.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross general government debt/GDP</td>
<td>19.6%</td>
<td>17.2%</td>
<td>22.1%</td>
<td>17.9%</td>
<td>15.9%</td>
<td>15.0%</td>
<td>13.0%</td>
<td>15.3%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Gross external debt/GDP</td>
<td>17.0%</td>
<td>23.9%</td>
<td>23.0%</td>
<td>22.6%</td>
<td>24.2%</td>
<td>27.0%</td>
<td>33.1%</td>
<td>40.6%</td>
<td>43.9%</td>
</tr>
<tr>
<td>Debt service/Exports</td>
<td>20.0%</td>
<td>16.0%</td>
<td>12.0%</td>
<td>8.0%</td>
<td>14.0%</td>
<td>11.0%</td>
<td>13.0%</td>
<td>20.0%</td>
<td>14.0%</td>
</tr>
<tr>
<td>Short term external debt/GDP</td>
<td>7.3%</td>
<td>5.9%</td>
<td>5.5%</td>
<td>6.2%</td>
<td>7.9%</td>
<td>9.8%</td>
<td>12.6%</td>
<td>14.7%</td>
<td></td>
</tr>
<tr>
<td>Foreign reserves (minus gold)</td>
<td>64.5%</td>
<td>61.7%</td>
<td>41.8%</td>
<td>24.6%</td>
<td>19.8%</td>
<td>21.1%</td>
<td>29.6%</td>
<td>33.5%</td>
<td></td>
</tr>
<tr>
<td>Industry share in GDP</td>
<td>40.2%</td>
<td>34.9%</td>
<td>33.6%</td>
<td>34.1%</td>
<td>33.8%</td>
<td>35.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official exchange rate (Koruny per USD; eop)</td>
<td>28,00</td>
<td>27,80</td>
<td>28,90</td>
<td>29,96</td>
<td>28,05</td>
<td>26,60</td>
<td>27,33</td>
<td>34,64</td>
<td>30,18</td>
</tr>
<tr>
<td>Official exchange rate (Koruny per USD; avg)</td>
<td>29,50</td>
<td>28,30</td>
<td>29,15</td>
<td>28,79</td>
<td>26,54</td>
<td>27,15</td>
<td>31,70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 8.

#### Hungary - Main Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP (bln USD)</strong></td>
<td>32.9</td>
<td>33.4</td>
<td>37.3</td>
<td>38.6</td>
<td>41.5</td>
<td>44.7</td>
<td>44.8</td>
<td>45.1</td>
<td>47.1</td>
</tr>
<tr>
<td><strong>GDP real growth</strong></td>
<td>-3.5%</td>
<td>-11.9%</td>
<td>-3.1%</td>
<td>-0.6%</td>
<td>2.9%</td>
<td>1.5%</td>
<td>1.3%</td>
<td>4.4%</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>Inflation - CPI (eop)</strong></td>
<td>28.9%</td>
<td>35.0%</td>
<td>21.8%</td>
<td>21.1%</td>
<td>21.2%</td>
<td>28.2%</td>
<td>19.8%</td>
<td>18.4%</td>
<td>13.5%</td>
</tr>
<tr>
<td><strong>Unemployment</strong></td>
<td>1.9%</td>
<td>7.5%</td>
<td>12.3%</td>
<td>12.1%</td>
<td>10.4%</td>
<td>10.4%</td>
<td>10.5%</td>
<td>10.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td><strong>General government balance/GDP</strong></td>
<td>0.90%</td>
<td>-2.9%</td>
<td>-6.8%</td>
<td>-5.5%</td>
<td>-8.4%</td>
<td>-6.7%</td>
<td>-3.1%</td>
<td>-4.7%</td>
<td>-4.9%</td>
</tr>
<tr>
<td><strong>Current Account/GDP</strong></td>
<td>1.2%</td>
<td>1.2%</td>
<td>0.9%</td>
<td>-11.0%</td>
<td>-9.8%</td>
<td>-5.7%</td>
<td>-3.8%</td>
<td>-2.2%</td>
<td>-3.3%</td>
</tr>
<tr>
<td><strong>FDI net/GDP</strong></td>
<td>0.0%</td>
<td>4.4%</td>
<td>4.0%</td>
<td>61.0%</td>
<td>2.6%</td>
<td>10.0%</td>
<td>4.4%</td>
<td>3.7%</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>CA, net of FDI/GDP</strong></td>
<td>1.2%</td>
<td>5.6%</td>
<td>4.9%</td>
<td>49.9%</td>
<td>-7.1%</td>
<td>4.3%</td>
<td>0.7%</td>
<td>1.5%</td>
<td>-0.1%</td>
</tr>
<tr>
<td><strong>Credit real growth</strong></td>
<td>-17.4%</td>
<td>-16.1%</td>
<td>-7.0%</td>
<td>-9.6%</td>
<td>-10.5%</td>
<td>16.0%</td>
<td>37.3%</td>
<td>31.8%</td>
<td>26.9%</td>
</tr>
<tr>
<td><strong>Credit/GDP</strong></td>
<td>37.3%</td>
<td>31.8%</td>
<td>26.9%</td>
<td>24.3%</td>
<td>21.6%</td>
<td>19.1%</td>
<td>21.3%</td>
<td>9.9%</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>Deposits/GDP</strong></td>
<td>30.1%</td>
<td>33.9%</td>
<td>34.9%</td>
<td>32.7%</td>
<td>30.1%</td>
<td>30.1%</td>
<td>30.1%</td>
<td>30.1%</td>
<td>30.1%</td>
</tr>
<tr>
<td><strong>Currency outside banks/GDP</strong></td>
<td>9.9%</td>
<td>9.8%</td>
<td>9.0%</td>
<td>7.7%</td>
<td>6.7%</td>
<td>9.9%</td>
<td>9.8%</td>
<td>9.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>M2/GDP</strong></td>
<td>39.7%</td>
<td>43.8%</td>
<td>44.9%</td>
<td>42.0%</td>
<td>37.9%</td>
<td>36.9%</td>
<td>37.7%</td>
<td>39.7%</td>
<td>37.7%</td>
</tr>
<tr>
<td><strong>Local currency share in M2</strong></td>
<td>87.8%</td>
<td>85.7%</td>
<td>81.3%</td>
<td>79.6%</td>
<td>73.4%</td>
<td>87.8%</td>
<td>85.7%</td>
<td>81.3%</td>
<td>79.6%</td>
</tr>
<tr>
<td><strong>Gross general government debt/GDP</strong></td>
<td>67.6%</td>
<td>79.1%</td>
<td>80.9%</td>
<td>91.1%</td>
<td>81.0%</td>
<td>81.0%</td>
<td>68.0%</td>
<td>63.0%</td>
<td>67.0%</td>
</tr>
<tr>
<td><strong>Gross external debt/GDP</strong></td>
<td>64.0%</td>
<td>65.8%</td>
<td>59.1%</td>
<td>59.6%</td>
<td>64.0%</td>
<td>67.1%</td>
<td>65.9%</td>
<td>52.0%</td>
<td>52.1%</td>
</tr>
<tr>
<td><strong>Debt service/Exports</strong></td>
<td>40.0%</td>
<td>29.0%</td>
<td>28.0%</td>
<td>35.0%</td>
<td>42.0%</td>
<td>40.0%</td>
<td>36.0%</td>
<td>37.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>Short term external debt/GDP</strong></td>
<td>7.7%</td>
<td>6.0%</td>
<td>5.6%</td>
<td>5.3%</td>
<td>6.1%</td>
<td>7.2%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td><strong>Foreign reserves (minus gold)</strong></td>
<td>102.2%</td>
<td>53.4%</td>
<td>38.3%</td>
<td>32.4%</td>
<td>29.7%</td>
<td>30.1%</td>
<td>42.2%</td>
<td>41.4%</td>
<td>41.4%</td>
</tr>
<tr>
<td><strong>Industry share in GDP</strong></td>
<td>25.1%</td>
<td>23.4%</td>
<td>22.5%</td>
<td>22.1%</td>
<td>23.5%</td>
<td>25.1%</td>
<td>23.4%</td>
<td>22.5%</td>
<td>22.1%</td>
</tr>
<tr>
<td><strong>Official exchange rate</strong> (Forint per USD; eop)</td>
<td>61.45</td>
<td>75.62</td>
<td>83.97</td>
<td>100.70</td>
<td>69.139</td>
<td>47 164.93</td>
<td>203.50</td>
<td>216.05</td>
<td>216.05</td>
</tr>
<tr>
<td><strong>Official exchange rate</strong> (Forint per USD; avg)</td>
<td>63.21</td>
<td>74.74</td>
<td>78.99</td>
<td>91.93</td>
<td>105.16</td>
<td>125.68</td>
<td>152.65</td>
<td>186.79</td>
<td>186.79</td>
</tr>
</tbody>
</table>
Table 9.

Poland - Main Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (bln USD)</td>
<td>59,0</td>
<td>76,5</td>
<td>84,4</td>
<td>86,0</td>
<td>92,6</td>
<td>118,4</td>
<td>134,5</td>
<td>135,7</td>
<td>148,6</td>
</tr>
<tr>
<td>GDP real growth</td>
<td>-11,6%</td>
<td>-7,0%</td>
<td>2,6%</td>
<td>3,8%</td>
<td>5,2%</td>
<td>7,0%</td>
<td>6,1%</td>
<td>6,9%</td>
<td>4,8%</td>
</tr>
<tr>
<td>Inflation - CPI (eop)</td>
<td>249,3%</td>
<td>60,3%</td>
<td>44,4%</td>
<td>37,6%</td>
<td>29,5%</td>
<td>21,6%</td>
<td>18,5%</td>
<td>13,2%</td>
<td>8,6%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>6,3%</td>
<td>11,8%</td>
<td>13,6%</td>
<td>16,4%</td>
<td>16,0%</td>
<td>14,9%</td>
<td>13,2%</td>
<td>10,3%</td>
<td>10,4%</td>
</tr>
<tr>
<td>General government balance/GDP</td>
<td>0,7%</td>
<td>-6,7%</td>
<td>-6,7%</td>
<td>-3,1%</td>
<td>-3,1%</td>
<td>-2,8%</td>
<td>-3,3%</td>
<td>-3,1%</td>
<td>-2,5%</td>
</tr>
<tr>
<td>Current Account/GDP</td>
<td>0,9%</td>
<td>-2,8%</td>
<td>1,1%</td>
<td>-0,7%</td>
<td>2,4%</td>
<td>4,6%</td>
<td>-1,0%</td>
<td>-3,2%</td>
<td>-3,7%</td>
</tr>
<tr>
<td>FDI net/GDP</td>
<td>0,2%</td>
<td>0,4%</td>
<td>0,8%</td>
<td>2,0%</td>
<td>2,0%</td>
<td>3,1%</td>
<td>3,3%</td>
<td>2,3%</td>
<td>3,0%</td>
</tr>
<tr>
<td>CA, net of FDI/GDP</td>
<td>1,0%</td>
<td>-2,4%</td>
<td>1,9%</td>
<td>1,3%</td>
<td>4,4%</td>
<td>7,7%</td>
<td>2,3%</td>
<td>-0,9%</td>
<td>-0,7%</td>
</tr>
<tr>
<td>Credit real growth</td>
<td>2,6%</td>
<td>0,5%</td>
<td>0,8%</td>
<td>3,4%</td>
<td>14,7%</td>
<td>24,2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit/GDP</td>
<td>19,1%</td>
<td>19,1%</td>
<td>18,5%</td>
<td>17,7%</td>
<td>17,1%</td>
<td>18,5%</td>
<td>21,5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits/GDP</td>
<td>23,2%</td>
<td>22,6%</td>
<td>24,1%</td>
<td>25,2%</td>
<td>25,4%</td>
<td>26,6%</td>
<td>28,5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency outside banks/GDP</td>
<td>5,9%</td>
<td>5,8%</td>
<td>5,7%</td>
<td>5,3%</td>
<td>5,6%</td>
<td>5,9%</td>
<td>5,7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2/GDP</td>
<td>30,2%</td>
<td>29,3%</td>
<td>30,6%</td>
<td>30,8%</td>
<td>31,1%</td>
<td>32,6%</td>
<td>34,6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local currency share in M2</td>
<td>68,6%</td>
<td>75,3%</td>
<td>75,2%</td>
<td>71,2%</td>
<td>71,5%</td>
<td>79,6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross general government debt/GDP</td>
<td>95,0%</td>
<td>81,0%</td>
<td>85,0%</td>
<td>88,0%</td>
<td>70,0%</td>
<td>58,0%</td>
<td>51,0%</td>
<td>45,5%</td>
<td>47,0%</td>
</tr>
<tr>
<td>Gross external debt/GDP</td>
<td>74,0%</td>
<td>64,3%</td>
<td>57,7%</td>
<td>55,8%</td>
<td>49,4%</td>
<td>37,5%</td>
<td>32,3%</td>
<td>31,2%</td>
<td>30,7%</td>
</tr>
<tr>
<td>Debt service/Exports</td>
<td>29,0%</td>
<td>19,0%</td>
<td>16,0%</td>
<td>13,0%</td>
<td>15,0%</td>
<td>9,0%</td>
<td>8,0%</td>
<td>7,0%</td>
<td>9,0%</td>
</tr>
<tr>
<td>Short term external debt/GDP</td>
<td>4,0%</td>
<td>4,3%</td>
<td>5,0%</td>
<td>2,6%</td>
<td>0,7%</td>
<td>1,0%</td>
<td>1,1%</td>
<td>1,9%</td>
<td></td>
</tr>
<tr>
<td>Short term external debt/Foreign reserves (minus gold)</td>
<td>75,4%</td>
<td>94,5%</td>
<td>104,4%</td>
<td>48,1%</td>
<td>8,5%</td>
<td>8,0%</td>
<td>8,0%</td>
<td>11,7%</td>
<td></td>
</tr>
<tr>
<td>Industry share in GDP</td>
<td>40,2%</td>
<td>34,0%</td>
<td>32,9%</td>
<td>32,2%</td>
<td>29,2%</td>
<td>27,1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market exchange rate (Zloty per USD; eop)</td>
<td>0,95</td>
<td>1,10</td>
<td>1,58</td>
<td>2,13</td>
<td>2,44</td>
<td>2,47</td>
<td>2,88</td>
<td>3,52</td>
<td>3,50</td>
</tr>
<tr>
<td>Market exchange rate (Zloty per USD; avg)</td>
<td>0,95</td>
<td>1,06</td>
<td>1,36</td>
<td>1,81</td>
<td>2,27</td>
<td>2,43</td>
<td>2,70</td>
<td>3,28</td>
<td></td>
</tr>
</tbody>
</table>
### Table 10.

**Romania - Main Economic Indicators**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (bln USD)</td>
<td>38,2</td>
<td>28,9</td>
<td>19,6</td>
<td>26,4</td>
<td>30,1</td>
<td>35,7</td>
<td>35,5</td>
<td>34,8</td>
<td>41,7</td>
</tr>
<tr>
<td>GDP real growth</td>
<td>-5,6%</td>
<td>-12,9%</td>
<td>-8,8%</td>
<td>1,5%</td>
<td>3,9%</td>
<td>7,0%</td>
<td>4,1%</td>
<td>-6,6%</td>
<td>-7,3%</td>
</tr>
<tr>
<td>Inflation - CPI (eop)</td>
<td>37,7%</td>
<td>222,8%</td>
<td>199,2%</td>
<td>295,5%</td>
<td>61,7%</td>
<td>27,8%</td>
<td>56,9%</td>
<td>151,4%</td>
<td>40,1%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0,5%</td>
<td>3,0%</td>
<td>8,2%</td>
<td>10,4%</td>
<td>10,9%</td>
<td>9,5%</td>
<td>6,3%</td>
<td>8,9%</td>
<td>10,3%</td>
</tr>
<tr>
<td>General government balance/GDP</td>
<td>1,00%</td>
<td>3,3%</td>
<td>-4,6%</td>
<td>-0,4%</td>
<td>-1,9%</td>
<td>-2,6%</td>
<td>-4,0%</td>
<td>-3,6%</td>
<td>-5,5%</td>
</tr>
<tr>
<td>Current Account/GDP</td>
<td>-8,5%</td>
<td>-3,5%</td>
<td>-7,7%</td>
<td>-4,7%</td>
<td>-1,5%</td>
<td>-5,0%</td>
<td>-7,3%</td>
<td>-6,2%</td>
<td>-7,9%</td>
</tr>
<tr>
<td>FDI net/GDP</td>
<td>0,0%</td>
<td>0,1%</td>
<td>0,4%</td>
<td>0,3%</td>
<td>1,1%</td>
<td>1,2%</td>
<td>0,7%</td>
<td>3,5%</td>
<td>2,8%</td>
</tr>
<tr>
<td>CA, net of FDI/GDP</td>
<td>-8,6%</td>
<td>-3,4%</td>
<td>-7,3%</td>
<td>-4,3%</td>
<td>-0,4%</td>
<td>-3,8%</td>
<td>-6,5%</td>
<td>-3,6%</td>
<td>-4,4%</td>
</tr>
<tr>
<td>Credit real growth</td>
<td>-43,8%</td>
<td>-34,2%</td>
<td>-8,7%</td>
<td>32,0%</td>
<td>12,8%</td>
<td>-33,4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit/GDP</td>
<td>39,7%</td>
<td>24,5%</td>
<td>15,8%</td>
<td>13,9%</td>
<td>17,2%</td>
<td>18,6%</td>
<td>13,3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits/GDP</td>
<td>26,4%</td>
<td>18,5%</td>
<td>12,0%</td>
<td>11,3%</td>
<td>15,2%</td>
<td>17,5%</td>
<td>15,6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency outside banks/GDP</td>
<td>6,6%</td>
<td>5,4%</td>
<td>3,8%</td>
<td>3,3%</td>
<td>4,1%</td>
<td>4,2%</td>
<td>2,9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2/GDP</td>
<td>33,7%</td>
<td>23,0%</td>
<td>15,3%</td>
<td>14,3%</td>
<td>19,0%</td>
<td>21,3%</td>
<td>18,3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local currency share in M2</td>
<td>96,1%</td>
<td>82,1%</td>
<td>71,0%</td>
<td>77,9%</td>
<td>78,3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross general government debt/GDP</td>
<td>1,0%</td>
<td>9,0%</td>
<td>19,0%</td>
<td>17,0%</td>
<td>14,0%</td>
<td>16,0%</td>
<td>22,0%</td>
<td>25,4%</td>
<td>33,0%</td>
</tr>
<tr>
<td>Gross external debt/GDP</td>
<td>3,0%</td>
<td>5,7%</td>
<td>13,7%</td>
<td>14,2%</td>
<td>16,2%</td>
<td>17,1%</td>
<td>21,1%</td>
<td>25,2%</td>
<td>22,6%</td>
</tr>
<tr>
<td>Debt service/Exports</td>
<td>0,0%</td>
<td>2,0%</td>
<td>9,0%</td>
<td>6,0%</td>
<td>8,0%</td>
<td>10,0%</td>
<td>11,0%</td>
<td>17,0%</td>
<td>16,0%</td>
</tr>
<tr>
<td>Short term external debt/GDP</td>
<td>3,3%</td>
<td>4,5%</td>
<td>3,1%</td>
<td>3,1%</td>
<td>3,2%</td>
<td>3,0%</td>
<td>2,9%</td>
<td>3,0%</td>
<td></td>
</tr>
<tr>
<td>Foreign reserves (minus gold)</td>
<td>155,7%</td>
<td>115,0%</td>
<td>90,8%</td>
<td>60,3%</td>
<td>61,9%</td>
<td>57,5%</td>
<td>34,1%</td>
<td>34,7%</td>
<td></td>
</tr>
<tr>
<td>Industry share in GDP</td>
<td>37,9%</td>
<td>38,3%</td>
<td>33,8%</td>
<td>35,6%</td>
<td>34,6%</td>
<td>36,0%</td>
<td>35,6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market exchange rate (Lei per USD; eop)</td>
<td>34,71</td>
<td>189,00</td>
<td>460,00</td>
<td>1276,00</td>
<td>1767,00</td>
<td>2578,00</td>
<td>4035,00</td>
<td>8023,00</td>
<td>10950,00</td>
</tr>
<tr>
<td>Market exchange rate (Lei per USD; avg)</td>
<td>22,43</td>
<td>76,39</td>
<td>307,95</td>
<td>760,051655,092033,283084,227167,94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 11.

Slovak Republic - Main Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (bln USD)</td>
<td>11.8</td>
<td>12.0</td>
<td>13.9</td>
<td>17.3</td>
<td>19.0</td>
<td>19.6</td>
<td>19.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP real growth</td>
<td>-2.5%</td>
<td>-14.6%</td>
<td>-6.5%</td>
<td>-3.7%</td>
<td>4.9%</td>
<td>6.9%</td>
<td>6.6%</td>
<td>6.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Inflation - CPI (eop)</td>
<td>18.4%</td>
<td>58.3%</td>
<td>9.1%</td>
<td>25.1%</td>
<td>11.7%</td>
<td>7.2%</td>
<td>5.4%</td>
<td>6.4%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.8%</td>
<td>4.1%</td>
<td>11.6%</td>
<td>12.2%</td>
<td>13.7%</td>
<td>13.1%</td>
<td>11.1%</td>
<td>11.6%</td>
<td>12.0%</td>
</tr>
<tr>
<td>General government balance/GDP</td>
<td>-11.9%</td>
<td>-7.0%</td>
<td>-1.3%</td>
<td>0.2%</td>
<td>-1.9%</td>
<td>-3.8%</td>
<td>-4.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Account/GDP</td>
<td>1.6%</td>
<td>-4.8%</td>
<td>5.2%</td>
<td>2.3%</td>
<td>-11.0%</td>
<td>-6.9%</td>
<td>-10.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI net/GDP</td>
<td>0.6%</td>
<td>1.2%</td>
<td>1.4%</td>
<td>1.0%</td>
<td>1.2%</td>
<td>0.3%</td>
<td>1.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA, net of FDI/GDP</td>
<td>2.2%</td>
<td>-3.7%</td>
<td>6.5%</td>
<td>3.3%</td>
<td>-9.8%</td>
<td>-6.7%</td>
<td>-9.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit real growth</td>
<td></td>
<td></td>
<td>-19.0%</td>
<td>-15.4%</td>
<td>21.5%</td>
<td>37.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit/GDP</td>
<td>62.6%</td>
<td>48.4%</td>
<td>38.3%</td>
<td>43.6%</td>
<td>56.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits/GDP</td>
<td>54.9%</td>
<td>53.0%</td>
<td>54.0%</td>
<td>57.3%</td>
<td>55.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currency outside banks/GDP</td>
<td>6.0%</td>
<td>6.1%</td>
<td>6.8%</td>
<td>6.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2/GDP</td>
<td>61.6%</td>
<td>59.7%</td>
<td>60.1%</td>
<td>64.4%</td>
<td>62.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local currency share in M2</td>
<td>88.5%</td>
<td>87.0%</td>
<td>88.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross general government debt/GDP</td>
<td>25.0%</td>
<td>24.1%</td>
<td>29.0%</td>
<td>28.6%</td>
<td>25.0%</td>
<td>25.3%</td>
<td>26.7%</td>
<td>28.0%</td>
<td></td>
</tr>
<tr>
<td>Gross external debt/GDP</td>
<td>22.9%</td>
<td>25.4%</td>
<td>28.7%</td>
<td>29.8%</td>
<td>35.2%</td>
<td>45.3%</td>
<td>55.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt service/Exports</td>
<td>6.0%</td>
<td>8.0%</td>
<td>9.0%</td>
<td>11.0%</td>
<td>12.0%</td>
<td>18.0%</td>
<td>20.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short term external debt/GDP</td>
<td>4.5%</td>
<td>5.3%</td>
<td>7.0%</td>
<td>8.5%</td>
<td>12.3%</td>
<td>19.0%</td>
<td>23.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short term external debt /Foreign reserves (minus gold)</td>
<td>92.6%</td>
<td>58.4%</td>
<td>68.7%</td>
<td>112.0%</td>
<td>135.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry share in GDP</td>
<td>37.9%</td>
<td>35.4%</td>
<td>30.6%</td>
<td>32.2%</td>
<td>30.0%</td>
<td>28.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official exchange rate (Koruny per USD; eop)</td>
<td>33.20</td>
<td>31.28</td>
<td>29.57</td>
<td>31.90</td>
<td>34.78</td>
<td>37.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official exchange rate (Koruny per USD; avg)</td>
<td>30.77</td>
<td>32.05</td>
<td>29.71</td>
<td>30.65</td>
<td>33.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>