

IMF Working Paper

Financial Sector Evolution in the Central European Economies: Challenges in Supporting Macroeconomic Stability and Sustainable Growth

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European I Department

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Abstract

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This paper takes stock of the current state of development of the financial systems in five Central European transition economies (the Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia) that are also leading EU accession candidates. It presents both a progress report and an assessment of remaining challenges, with a focus on the role of the financial sector in supporting macroeconomic stability and sustainable growth.

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I. INTRODUCTION

1. In the run-up to EU accession—a setting of real convergence and sizable, possibly volatile, capital inflows—the role of the financial sector in supporting broadly-based and stable growth will move to center stage. First, successful reform of the banking sector is a necessary condition for fiscal and monetary stabilization. Second, a well functioning financial sector helps enforce corporate control, contains potential quasi-fiscal losses in the enterprise sector, and is, therefore, key in fostering sound enterprise development. Third, financial sector resilience is crucial for a flexible interest rate policy and a predictable and effective monetary transmission. Fourth, effective supervision, regulation, and risk management can help mitigate vulnerabilities associated with capital flows. More broadly, empirical evidence has shown convincingly that countries with better developed financial systems enjoy substantially faster and stable long-run growth through channeling savings into productive investments.

2. Many challenges facing the Central European Countries (CEC5)² in the financial sector are similar to those in existing EU members—but there is a particular need for institutional deepening and, to varying degrees, addressing residual legacies of the past. Slovakia and, to a lesser extent, the Czech Republic continue to suffer from weak banking sectors and are now engaged in major efforts to ensure a healthy financial structure. They have recently privatized the remaining state-owned banks—and made explicit quasi-fiscal costs, but completing the bad debt workout still lies ahead. Slovenia still needs to privatize its largest state-owned banks and move away from an oligopolistic banking structure. Hungary and Poland have the most advanced financial systems, but face increasing competition—which will narrow margins, impact profitability, and spur consolidation. These pressures are becoming increasingly evident across the region, and will intensify as all five countries enter a common market for financial services. Adequate regulation and supervision will be essential to avoid excessive risk-taking, particularly in the presence of heavy capital inflows. In all five countries, the legal system and judiciary need to be strengthened in areas such as collateral enforcement, which provide key underpinnings to financial sector activity. Improving corporate governance, in both the financial and enterprise sectors, will also be core to ensuring financial sector soundness.

3. To shed light on financial sector challenges in the accession period, including inter-linkages with the macroeconomic framework, this paper explores three main issues. What are the key priorities in this sector to support broadly-based growth and help avoid macroeconomic disruptions? How can its structure best support fiscal and monetary policies? What changes are needed if it is to cope effectively with large scale capital flows? Success in these areas is interrelated, and will reflect progress in restructuring, deepening of market and institutional structures, and effective regulation and supervision—including an appropriate incentive structure to contain moral hazard. While this paper focuses on the role of sound

² The Czech Republic, Hungary, Poland, Slovakia, and Slovenia.

financial systems in supporting macroeconomic policy, linkages go both ways: a setting of sound macroeconomic policy is crucial for supporting financial sector development.

4. The paper is organized as follows. The next section provides an overview of financial development in the CEC5 and explores ways in which the financial sector can help foster sustainable growth. The third section discusses reform priorities, drawing lessons from these countries' diverse experiences with privatization and examining fiscal implications of bank restructuring and rehabilitation. This section also reviews interactions with monetary policy, with a particular emphasis on how the structure and health of the banks affect monetary transmission. The fourth section examines issues related to financial stability, including the institutional and supervisory framework and the financial sector's role in intermediating capital flows. The final section contains concluding remarks.

II. FINANCIAL SECTOR DEVELOPMENT AND ITS IMPORTANCE FOR GROWTH

5. As the CEC5 approach EU membership and ultimately the adoption of the euro, the litmus test for financial sector performance will be its success in supporting sustainable economic growth. This involves harnessing the diverse roles of the sector in mobilizing and reallocating savings; facilitating the hedging, diversifying, pooling and trading of risk; and, through the operation of both banks and capital markets, strengthening corporate governance in the enterprise sector. Through these activities, well-developed banking systems and financial markets have a significant positive impact on total factor productivity, which translates into higher long-run growth.³ The empirical literature also shows that initial levels of financial development are good predictors of subsequent growth, capital accumulation, and efficiency improvement in the real economy—even after controlling for income, education, political stability, and measures of monetary, trade, and fiscal policy.⁴ There are broad positive feedback effects between financial and economic development.

A. Bank-based or Market-based Financial System?

6. The financial systems in the CEC5 have developed more in the direction of “bank-based” systems—as in Germany or Austria—than toward the “market-based” systems of the United States and the United Kingdom. Banking sector assets in the CEC5 account for about

³ See Levine (1997) for a literature review on the impact of financial systems on growth. For cross-country evidence, see Levine and Zervos (1998); Beck, Levine, and Loayza (2000a).

⁴ After controlling for simultaneity bias and for other determinants of growth, Beck, Levine, and Loyasa (2000b) find that measures of the initial level of financial depth and stock market liquidity (but not the size of the stock market) have independent causal effects on the subsequent rates of GDP growth and economic efficiency improvements. Rajan and Zingales (1996) find that, for a large sample of countries, industries relying heavily on external funding grow faster in countries with well-developed financial intermediaries.

85 to 95 percent of overall financial assets, compared to a little over 50 percent in the United Kingdom, which is more typically regarded as heavily securities- or market-based. In the CEC5, bank monitoring plays a more important role in corporate governance as opposed to the threat of hostile takeovers, which may characterize more market-based systems. Claims on banks are more important in household portfolios than securities. Thus, banks dominate the provision of financial services.⁵

7. Analysis of market-based versus bank-based financial systems, however, has found no conclusive evidence that the type of system matters for growth performance. Countries at the same stage of economic development and with similar rates of long-run growth have a different mix of financial institutions (Levine (2000)). Banks and capital markets provide different services in response to different market imperfections. The presence of both types of financing can also allow for better diversification and risk sharing. More important than the debate on bank- versus market-based systems is the recognition that effective and well-supervised financial structures are key in achieving rapid and sustainable growth.

8. Though dominant within the financial sectors, banks in most of the CEC5 are still small relative to the level of economic activity, and the banking systems, to differing degrees, share characteristics such as high concentration and increasing competition. Several commonly used indicators of financial system activity and performance are presented in Tables 1 and 2 and discussed in Annex 1. The main findings are as follows:

- Credit to the private sector as a share of bank assets, at 40 to 50 percent, is lower than the typical 60 percent for the advanced economies. This also reflects, to some degree, the large share of direct external financing enjoyed by corporates in several of the countries. Nevertheless, private sector credit growth has been on the uptrend in Hungary, Poland, and Slovenia in recent years.
- Concentration in the banking sector is high. There is particularly strong concentration of deposits, while the credit market is somewhat more fragmented.
- The efficiency of financial intermediation has room for further improvement. Net interest margins are higher than the EU average. In some of the CEC5, state enterprises still enjoy financing at more favorable terms due to implicit or explicit government guarantees.
- Competition, however, has strengthened as evidenced by declining intermediation spreads, a shift in bank portfolios from government securities to private sector

⁵ The structure of taxation can significantly influence the development of the financial system in the direction of bank-based or market-based. For example, the introduction of a capital gains tax in Hungary at the beginning of 2001 further depressed interest in the local stock exchange, which was already struggling with a drop in liquidity.

Table 1. Banking Sector Statistics

	Czech Republic			Poland			Slovakia			Slovenia			Hungary		
	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
Number of licenced (commercial) banks	45	42	42	83	77	75	25	23	21	24	25	25	37	36	33
<i>of which</i>															
Majority state owned (number)	5	4	4	13	7	7	5	5	4	2	2	2	2	2	...
As % of total assets	23.2	23.2	...	48.0	23.9	23.4	50.0	47.1	...	39.7	40.0	40.3	11.8	...	...
Majority foreign owned (number)	13	14	18	31	39	48	11	10	10	3	5	5	27	...	...
As % of total assets	15.5	26.8	...	16.6	47.2	69.5	28.9	30.2	...	4.9	4.8	15.6	61.4	65.4	66.7
Number of banks accounting for:															
25% of total assets	2	2	...	2	2	2	2	2	2	1	1	1	2	2	...
Asset share of the 3 largest banks	...	...	...	...	...	...	45.6	45.8	...	52	52	50	40	38.5	...
Asset share of the 5 largest banks	66.2	63.2	59.1	42.9	47.7	46.7	...	...	...	64	64	62.5	50.8	50.8	...
Total bank assets as % of GDP (excl. Central Bank)	174.0	181.3	...	58.0	59.5	65.2	111	100.4	95.5	72.2	78.7	79.1	68.6	67.8	65.2
FX denominated assets (as % of total)	19.9	21.5	...	...	...	...	...	16.0	18.3	29.7	30.2	32.8	36.1	37.0	36.4
FX denominated liabilities (as % of total)	18.2	18.3	...	15.2	17.5	...	16.2	16.2	17.4	30.6	31.2	34.1	36.9	36.1	36.5
Contingent and off-balance sheet accounts (as % of total)	78.2	81.0	...	52.6	74.5	129.6	...	...	...	32.3	35.1	37.3	44.1	38.8	40.8
Average lending spread (lending - deposit rate)	4.7	4.2	...	6.3	5.8		6.5	5.1	4.4	6.2	6.3	6.4	3.1	3.1	3.0
Non-performing loans (as % of total loans) (overdue 30 or more days)	26.4	32.1	29.5	10.9	13.7	13.2	31.7	23.7	15.2	10.4	11.5	12.6	10.4	8.8	7.9
Risk-weighted capital/asset ratio (in percent)	12.1	13.7	14.9	11.7	13.1	12.4	6.7	12.6	12.5	16.0	14.0	13.5	16.5	14.9	13.5

Sources: Data provided by desks; EBRD Transition Report; NBP, "Summary Evaluation of the Financial Situation of Polish Banks, first half 2000"; NBH, "The Hungarian Banking Sector, 2000"; Bank of Slovenia

Table 2. Profitability and Efficiency Measures, 1995–2000

	1995	1996	1997	1998	1999	2000
<u>Czech Republic</u>						
Net Interest Margin	3.21	2.60	2.62	3.12	1.97	...
Return on Average Assets (ROAA)	0.67	-0.51	-0.58	-2.77	-0.52	...
Return on Average Equity (ROAE)	9.55	-7.64	-9.31	-50.81	-8.55	...
Cost to Income Ratio	50.75	64.66	44.46	95.12	32.20	...
<u>Hungary</u>						
Net Interest Margin	5.22	3.76	3.14	3.19	2.45	...
Return on Average Assets (ROAA)	0.78	0.82	0.73	-0.21	0.55	...
Return on Average Equity (ROAE)	19.03	18.49	14.74	-4.01	10.95	...
Cost to Income Ratio	70.60	70.95	74.61	88.21	85.34	...
<u>Poland</u>						
Net Interest Margin	5.16	5.47	4.71	4.50	4.05	...
Return on Average Assets (ROAA)	3.09	2.00	1.64	0.79	1.15	...
Return on Average Equity (ROAE)	59.21	23.84	15.11	7.04	9.48	...
Cost to Income Ratio	40.50	52.25	54.46	62.28	60.36	...
<u>Slovakia</u>						
Net Interest Margin	4.45	3.12	2.87	2.66	2.11	...
Return on Average Assets (ROAA)	0.96	0.60	-0.42	-1.11	4.20	...
Return on Average Equity (ROAE)	16.02	11.18	-8.56	-24.01	94.53	...
Cost to Income Ratio	45.07	53.31	61.25	51.04	66.92	...
<u>Slovenia</u>						
Net Interest Margin	4.43	5.04	4.50	4.13	3.73	4.17
Return on Average Assets (ROAA)	1.04	1.12	1.12	1.19	0.79	1.10
Return on Average Equity (ROAE)	9.16	10.26	10.33	11.29	7.76	11.33
Cost to Income Ratio	63.78	53.79	52.93	62.33	56.71	...
<u>EU</u>						
Net Interest Margin	2.00	1.80	1.60	1.52	...	...
Return on Average Assets (ROAA)	0.44	0.47	0.49	0.56	...	...
Return on Average Equity (ROAE)	8.96	9.54	10.01	11.31	...	...
Cost to Income Ratio	66.81	66.17	65.21	65.84	...	...

Sources: Bankscope; Bank of Slovenia.

lending, and declining bank profitability. Moreover, with the blue chip market saturated in some of the CEC5, lending to small- and medium-size businesses is on the rise.

- In each of the CEC5, with the exception of Slovenia, foreign strategic investors control the majority of banking sector assets.
- In the Czech Republic and Slovakia, the large share of non-performing loans and persistent negative average returns—at least until recently—pointed to a need for significant restructuring, which is now well underway. Most of the non-performing assets have been transferred to consolidation banks, and the remaining issue is how to dispose of those assets given the weaknesses of insolvency regimes.

B. The Evolving Role of Banks and Securities Markets

9. The inroads of new information technology, competition from capital markets, and EU integration should make the banking sectors of the CEC5 increasingly competitive. There is already a fledgling on-line banking sector in the CEC5, which calls into question whether banks should be emphasizing a bricks-and-mortar or an Internet-oriented development strategy. Indeed, distribution channels such as the Internet or telephone banking will allow customers to change banks easily, boosting competition and further depressing interest margins. Moreover, the growth of non-bank financial intermediaries will present a challenge for banks with respect to retail deposits as a cheap source of funding. Against this background of falling margins and needed heavy investment in information technology, banks in the CEC5 will struggle to maintain profits. These competitive pressures could lower the franchise values of some of the largest domestic banks and accelerate the process of bank consolidation across Central and Eastern Europe.

10. In this competitive setting, and likely some initial overinvestment in traditional banking by foreign and domestic parties, pressures on profitability will spur consolidation across the sector. As one of the financially most advanced accession countries, Hungary already provides a case study of these pressures. Households are allocating an increasing portion of their portfolio to securities as opposed to traditional bank accounts, and banking sector assets have failed to keep pace with GDP growth. There is a strong sentiment among bankers and analysts in Hungary that the number of banks in Hungary will decline significantly over the course of the decade.⁶ The significant disparity in returns for individual

⁶ In 2000, ING Bank withdrew from retail banking and sold its branches to Citibank. In 2001, K & H Bank and ABN Amro, the third and fifth largest banks, respectively, in Hungary, merged to form the second largest bank in Hungary. Moreover, in 2001, Hungary's OTP decided on a cross-border purchase of Slovakia's IRB, a stepping stone to regional expansion and into less competitive markets. Consolidation is also picking up pace in Poland, with the merger of WBK and Bank Zachodni in 2000, and the planned merger of BPH and PBK, creating Poland's third-largest bank, in 2001.

banks may also encourage an acceleration of consolidation. Mergers among parents of foreign banks will also be a driving factor behind consolidation in the CEC5. Indeed, the merger between Bank Austria Creditanstalt and Germany's Hypovereinsbank, both of which already have an important presence in the CEC5, was a first step in this direction.

11. While growing, bond markets in the CEC5 currently remain underdeveloped. Bond market capitalization is currently about 30 percent of GDP on average in the CEC5, compared to about 110 percent of GDP in Western Europe. The vast majority of bonds in the CEC5 are government issues, as the corporate bond market is almost negligible in the five countries. At the moment, bank loans are seen as a lower cost and less demanding approach to raising money, with the additional advantage that banks often provide a revolving credit line. A handful of the largest corporations have issued Eurobonds, but, even for these, the share of bond financing is lower than that of retained earnings and bank loans. There are a number of reasons for the current underdevelopment of private local bond markets. Blue-chip companies obtain bank financing at low interest rate margins, and those which are foreign-owned receive financing from parent companies at even lower rates. The majority of the remaining companies are small and cannot issue debt in large liquid denominations.⁷ Moreover, the need to comply with international accounting standards could make bond issuance too costly. Thus, only the largest enterprises, often with explicit or implicit state guarantees on their debt, find issuing bonds to be a cost-effective alternative to other sources of finance.

12. Equity markets are still rarely used as a source of finance. Market capitalization and turnover are the two most frequently used measures for assessing the liquidity of equity markets and the capacity of such markets to provide finance. Market capitalization remains low in the CEC5 relative to comparable market economies (Table 3), and typically only a few large companies are actively traded, reflecting in part the short time span for their existence, inadequacies in the legal and regulatory framework (e.g., insufficient shareholder protection), and still low levels of public confidence. Growth in market capitalization has been due mainly to privatization and price changes rather than to new share issues.

13. Nevertheless, there are several reasons why funding through domestic securities markets is likely to increase. Pension reform and rapid growth in the insurance market would, if done successfully, support the development of domestic institutional investors (and long-term finance) in the coming years, which should feed through into greater liquidity and turnover on the stock exchanges (Table 4). Pension reform would also spur local demand for domestic paper. Raising money locally could become increasingly attractive against a background of falling inflation, lower interest rates, and improved legislation. Moreover, the ongoing revolution in communications and information technology may shift the balance of advantages toward market-based finance as opposed to bank-based finance. The Internet, for example, may assist market participants in overcoming information barriers which impede

⁷ In fact, in Hungary, there are legal limits on the amount that a company can publicly issue.

Table 3. Equity Market Indicators

	1994	1995	1996	1997	1998	1999	2000 2/
Market Turnover	(In percent of market capitalization, mid-period)						
Czech Republic	26	33	50	47	37	61	81
Hungary	22	17	42	76	112	103	93
Poland	177	72	85	78	54	62	69
Slovakia	96	69	134	109	74	48	25
Slovenia	68	71	82	31	35	28	22
Germany	98	109	123	137	145	152	167
Portugal	36	48	59	67	96	114	127
United States	70	85	92	104	106	117	141
Market Capitalization	(In percent of GDP, mid-period)						
Czech Republic	14	30	31	24	21	19	25
Hungary	3	5	12	33	29	31	34
Poland	3	4	6	8	13	18	21
Slovakia	8	7	12	9	5	4	3
Slovenia	4	2	4	9	13	11	12
Germany	23	22	27	36	45	51	
Portugal	15	17	24	34	57	59	
United States	74	82	101	122	151	163	
Number of listed companies							
Czech Republic	1024	1635	1588	276	261	164	154
Hungary	40	42	45	49	52	66	65
Poland	44	65	83	143	198	221	221
Slovakia	18	18	816	872	837	845	843
Slovenia	25	17	21	26	28	28	34
Germany							851
Portugal							125
United States 1/							3025

Source: Claessens, Djankov, and Klingebiel (2000).

1/ NYSE only.

2/ As of March 2000.

Table 4. Assets Held by Institutional Investors in Transition Economies
(In percent of GDP; June 2000 or most recent information)

Country	Investment and Mutual Funds	Pension Funds	Insurance	Total
Czech Republic	8	2	9	19
Hungary	12	4	3	19
Poland	8	2	5	15
Slovakia	6	0	4	9
Slovenia	5	0	4	9
Germany	28	13	32	73
Portugal	21	11	10	42
United States	129	90	43	262

Source: Claessens, Djankov, and Klingebiel (2000).

financial development. Thus, the CEC5 could well see a growing role for securities markets in financial resource allocation.

14. While empirical studies suggest that the initial level of stock and bond market liquidity affects subsequent growth positively,⁸ the physical location of the intermediary does not necessarily matter and could well be in another country. An illustration of this is the growing access to capital market financing via global or American Depository Receipts. Domestic stock exchanges may prove to not be a cost-effective means of raising capital owing to the lack of economies of scale. There is thus likely to be a consolidation of stock exchanges, either on a regional basis or by merging with larger European exchanges.⁹ But as with many of the financial market developments in the coming years, this is not so much an outgrowth of the transition process as it is a feature of increasing global integration.

15. These developments, in sum, point to systems that could be increasingly diversified in structure and ownership—key strengths in a world of potentially volatile capital flows and a domestic setting of rapid structural change. The “existence of multiple avenues of financial intermediation” can be important in preventing financial crises from causing sustained

⁸ Liquidity is inversely related to price, as more liquid stock exchanges provide cheaper financing.

⁹ Even some much larger and more mature exchanges in Europe and the United States have been attempting to capture a larger slice of global liquidity through mergers.

knock-on effects on the real economy.¹⁰ If a crisis strikes the banking system, for example, and a credit crunch occurs, well-developed capital markets can help to fill the ensuing funding gap. Thus, for the CEC5, ensuring financial stability is closely related to financial market deepening and maturing, and to cite the same source, creating “flexible institutions that can adapt to the unforeseeable needs of the next crisis.”

C. Improving Access to Finance for Underserved Sectors

16. Improving access to financing for small and medium enterprises will support growth by fostering entrepreneurship and innovation. When the financial sector is underdeveloped, it is primarily the private sector which suffers from inadequate financing. In the CEC5, the more risky market segments—small and medium-size enterprises (SMEs) and households—still have only limited access to financial markets. With SMEs frequently the engine of economic growth in many countries, developing financing mechanisms for these markets should be a key policy priority. These markets have already started to expand as banks—facing increasing competition for blue chip corporate loans—seek to expand their client base in the underserved markets for mortgage lending, household loans, and SME financing. As this occurs, investment in housing and in fixed assets of firms should increase, while households’ savings may tend to level off or decline as they become increasingly leveraged.

17. These market segments are, however, particularly prone to problems of asymmetric information—making risk assessment difficult for intermediaries. Asymmetric information can lead to adverse selection, moral hazard, principal-agent problems, and financial contagion, all of which can undermine efficiency and result in financial vulnerability. Banks are likely to remain of paramount importance for these smaller borrowers, since banks have a comparative advantage in screening projects and monitoring clients, mitigating problems of asymmetric information. Thus, one way to support development in these markets is to improve (and, in many cases, create) interbank information systems which can provide reliable and timely data on consumer and commercial credit information, including loans outstanding, collateral registers, past debt defaults, etc. These markets can also be supported by strengthening the legal framework, especially as regards creditor rights, bankruptcy laws, and recovery of collateral. Some of these countries, however, are resorting to government intervention—providing public guarantees for SME loans or subsidizing mortgage lending. Such approaches can ultimately put pressure on the fiscal accounts and impede the healthy development of a fully market-based financial system.

18. Venture capital has only recently been viewed as a potential financing source in the CEC5. Bank lending is often seen as the lowest cost (and perhaps only) financing source for

¹⁰ U.S. Federal Reserve Chairman Alan Greenspan, in a speech given at the Financial Crisis Conference, Council on Foreign Relations, New York, July 12, 2000. Davis (2001) finds empirical evidence that the existence of active securities markets alongside banks is beneficial to the stability of corporate financing.

SMEs with limited track records, while securities markets are sometimes viewed as the more cost-effective source for large, well-established firms. However, venture capital firms, which are more closely associated with securities-based finance, could find a firmer foothold in these economies through providing finance for new enterprises undertaking high risk, high return projects. This is due to the risk-sharing features of venture capital firms as opposed to bank creditors. Banks typically charge a pre-determined rate of interest and do not benefit from excess returns to successful high-risk projects. On the other hand, venture capital firms, as part equity holders, do share the benefits of the upside returns, and their losses are limited to their stake in the new enterprise.

19. The success of venture capital firms in Hungary suggests that, given a stable macroeconomic environment and strong legal system, venture capital may provide a viable source of funds for small entrepreneurs. Venture capital firms have been active in the country for almost a decade, and there has been a national association with 14 members since 1992. The number of projects undertaken has so far been relatively small, but there is increasing interest from both local and international funds. In 1998, the government passed a law aimed at encouraging venture capital investment. Nevertheless, the success of the government in providing macroeconomic stability—and a favorable business environment conducive to growth—has no doubt been the key attraction for investors.

III. INTERLINKAGES TO MACRO-POLICY

20. A weak financial sector can heavily constrain the flexibility and effectiveness of fiscal and monetary policy, and shift the policy emphasis away from long-run growth. Significant contingent liabilities prevent credible fiscal planning, divert resources from productive investments, and may lead to debt sustainability issues. Monetary authorities may be unwilling to tighten policy if that would threaten the health of financial intermediaries. Thus, completing the remaining reforms in the financial sector should facilitate the tasks of macroeconomic policy—removing constraints on interest rate movements, enhancing the effectiveness and predictability of the transmission mechanism, and recognizing and/or reducing quasi-fiscal losses—which can serve to add to fiscal transparency. Of course, linkages work in both directions, as financial sector soundness not only affects the macroeconomic policy environment, but is also affected by the macroeconomic environment (Box 1). However, the focus of this paper is primarily the linkage from the financial sector to the conduct of macroeconomic policy.

A. The Remaining Privatization Agenda

21. Bank restructuring and privatization remain, to some degree, to be completed in most of the CEC5, and the experience of the past decade points to useful lessons for the future. In particular, the experiences of the forerunners—Hungary and Poland—can provide lessons not only for the Czech and Slovak Republics and Slovenia, but for most of the other transition countries, in which much remains to be done in their financial sectors. Completing privatization is one of the main priorities in the financial sector. Privatization is usually a necessary component of a successful bank restructuring program: it diminishes the scope for

Box 1. The Macroeconomic Environment and Financial Sector Stability

The **macroeconomic environment** clearly has an impact on financial sector developments. Indeed, the soundness of the financial sector is, to a large degree, a reflection of the economy's health. Business cycles affect the financial sector through a number of channels, including: shifts in risks associated with asset prices, credit quality, interest rates, and liquidity; balance sheets, through changes in the amount and composition of indebtedness; and, ultimately, perhaps a boom-bust cycle precipitated by the bursting of an asset price bubble. Structural changes, particularly as embodied in financial liberalization (whether domestic or external), can have a significant impact on financial vulnerability. Closely related, and often structural in nature (particularly for the CEC5 in the early years of transition), are shocks, including the disappearance of markets (e.g., the collapse of CMEA trade) or substantial relative price changes (such as domestic price liberalization or terms of trade shocks). Open economies, such as the CEC5, are even more exposed to external shocks, underscoring the importance of adequate risk management capacity in the financial sector.

The **choice of macroeconomic policy instruments** has important implications for financial sector soundness. On the fiscal side, tax policy—such as non-deductible loan-loss provisions, bank specific taxes, or heavy capital gains taxes—can undermine financial sector development. On the monetary side, unremunerated reserve requirements, sharp and frequent changes in reserve requirements, direct monetary instruments (e.g., interest rate ceilings), or the absence of a properly functioning lender-of-last resort mechanism could adversely affect banking sector soundness. Even the transition from direct to indirect instruments entails a period of increased risks. The choice of exchange regime can also undermine financial sector stability, if, for example, it leads to a prolonged period of over- or under-valuation of the exchange rate or is subject to substantial volatility, particularly in the absence of sufficiently developed markets for hedging risks.

An excessively expansionary or restrictive **macroeconomic policy stance** can exacerbate financial sector vulnerability. A loose policy mix, underpinning inflationary pressures, reduces the information provided by prices and interest rates, can lead to an overly rapid expansion of domestic credit (increasingly allocated to riskier market segments), and can distort asset prices or even create an asset price bubble. Eventual stabilization or, similarly, a restrictive policy mix—particularly one heavily reliant on monetary restraint—can place strains on the banking system—including through balance sheet effects (depending on the degree of adjustment attained through the interest rate and exchange rate channels) and rising credit risks—and could even induce a liquidity crisis in the banking sector. Large structural fiscal imbalances can severely complicate the achievement of macroeconomic stabilization—placing the burden of adjustment on monetary policy and the banking sector, putting pressure on the exchange rate, increasing overall debt levels and associated vulnerability, crowding out credit to the private sector, and generally constraining the fiscal response to exogenous shocks. Moreover, an inappropriate policy mix can lead to a loss of foreign and domestic investor confidence, triggering sudden capital outflows or a significant deterioration in external financing conditions, either of which increases the vulnerability of the domestic financial sector.

distortions in the form of directed policy lending, or moral hazard in the form of reliance on future government support.¹¹ Restructuring cum privatization programs often present the government with a difficult task. Ideally, they should be designed in a way that minimizes the present value of fiscal costs. However, for whatever reasons, reforms have at times shifted the burden of adjustment to the future, potentially leading to much higher costs in present value terms (Box 2).

22. In recent years, state ownership of the banking sectors in the CEC5 has been declining rapidly (Table 1). In Hungary, privatization of the banking sector has been largely completed—the remaining share of state-owned banks is only about 12 percent of assets, most of which is concentrated in Postabank. In the other countries, several major state-controlled banks were privatized in the last three years, and most of the remaining large state banks are currently being prepared for sale. As described more fully in Annex 2, the CEC5 followed quite different approaches to privatization:

- **Hungary's** policy was to sell controlling shares in state-owned banks to strategic foreign investors as rapidly as possible. The foreign parents brought with them skills for credit evaluation, risk management, and more sophisticated financial instruments, which increased the knowledge capital and efficiency in the banking sector as a whole. Currently, Hungary has one of the most modern and advanced financial systems among the transition economies.
- In contrast, the voucher privatization in the **Czech and Slovak Republics** left controlling ownership of the largest banks with the state. Banks assumed ownership stakes in their voucher-privatized clients, which led to continued soft lending practices and repeated bailouts. This magnified problems with connected lending and non-performing loans, complicating efforts to find strategic foreign owners in the absence of cleanups or guarantees. Moreover, persistent political interference in the banking system depressed foreign investor interest. Recently, however, the environment has changed. The bad debts have now been recognized and have been—or are in the process of being—transferred to consolidation banks in their respective countries, and privatization has been largely completed, with foreign shares in excess of 80 percent, the highest in the CEC5.
- **Poland's** approach to restructuring resulted in the lowest overall fiscal cost among the CEC5. In the early 1990s, a bank-led enterprise restructuring program was implemented using a variety of instruments, including debt-equity swaps through which banks acquired ownership stakes in their financially weak clients. The

¹¹ Barth, Caprio, and Levine (2000) find that the greater the share of bank assets controlled by the state, the lower is the depth of financial development, and the lower the development of non-bank financial intermediaries and the stock market.

Box 2. Troubles with IPB

Investicni a Postovni Banka (IPB) was the first of the four large state banks in the Czech Republic to be privatized by selling the state's 46.6 percent share to Nomura Europe in 1998. The government did not carve out non-performing loans prior to the sale, nor did it provide any guarantees extending after the sale, so it seemed that the sale involved minimum fiscal outlays. Nomura apparently did not view the acquisition as that of a strategic investor, but rather as a portfolio investor and, therefore, did little restructuring of the bank. During the recession of 1998 and 1999, the asset quality of IPB deteriorated even further. The information provided by the bank to Czech National Bank (CNB) supervisors was intransparent and misleading and, therefore, did not reflect accurately IPB's financial situation.¹ Inadequacy of provisioning was concealed by the bank through selling non-performing assets to related entities, recording assets at overstated values, and misclassifying receivables. Independent outside auditors also failed to give a timely notice to banking supervision of the true financial state of IPB. Even after the extent of the problem became apparent to banking supervision during audits in 1999, action was delayed due to the time required to finalize the documents from the audit. IPB attempted to delay the process further through legal actions. The excessively slow court process also prevented a rapid response by banking supervision.

In mid-June 2000, there was a major run on the bank,² and it was taken under forced administration by the CNB. Nomura, meanwhile, had sold some of IPB's stronger industrial assets and, according to some estimates, realized as much as \$300 million profit. Faced with the alternative of closing the bank, the administration quickly sold IPB to a strategic investor— ČSOB (Ceskoslovenska Obchodni Banka, with Belgian KBC Bank the largest shareholder). At the time of sale, the government agreed to a framework for cleaning the balance sheet of the bank. This entailed bad loan carve-outs as well as guarantees on deposits and on the quality of assets for a certain period after the sale. While the full cost of IPB losses is still unknown, initial costs alone may amount to as much as 5–10 percent of GDP.

The troubles with IPB demonstrate that foreign ownership by itself is not enough to bring stability, that the right incentive structure needs to be in place to attract strategic investors and encourage them to increase the bank's value, that accounting standards and their enforcement need to be strengthened, and that delayed reaction to problems may magnify fiscal costs considerably.

¹ For the most recent statement from the CNB on the IPB case, see "Statement of the Czech National Bank on the 'Concluding Report of the Chamber of Deputies Fact-finding Commission for Clarification of Decision-Making by the State in IPB from the Time of its Founding until the Imposing of Receivership and its Sale to ČSOB, for the Purposes of Deliberation by the CD PCR'," at <http://www.cnb.cz/en/index.html>.

² Just prior to the run, IPB accounted for 22 percent of all household deposits.

government attempted to minimize explicit guarantees and create incentives for market-based work-outs, which took place in the mid-1990s. In the last few years, Poland has attracted significant strategic foreign investment, and given the high proportion of foreign ownership of the share capital of banks with dispersed ownership, banks controlled by foreign capital effectively had a market share of about 70 percent by 2000.

- Meanwhile, **Slovenia** has maintained a high share of state ownership in the banking sector, resulting in an oligopolistic banking structure with limited competitive pressures. Foreign ownership is limited to less than 20 percent of all assets. However, in the process of legislation alignment with the EU, competition has strengthened.¹²

23. Allowing reputable foreign banks to enter the domestic market has proved to encourage innovation and competition, while underpinning institutional soundness. As suggested by the growth literature, foreign capital stimulates the development of local markets, including through market liquidity.¹³ Foreign banks often bring stronger corporate governance to the market, as well as more sophisticated risk management systems. While there are cases of longer-established foreign banks taking a passive approach and benefiting from high local margins, more typically they spur competition and render the sector more efficient—introducing new skills, products and technology. More intense competition leads to lower profits, and puts pressure on all banks to reduce costs. This prepares domestic banks to cope with competition in the single market after accession. The presence of reputable foreign banks may also reduce the risks of capital flight or widespread depositor runs, as they may be seen as more immune from a crisis in the domestic banking system. Hungary has had the most liberal policy toward foreign bank entry of any of the CEC5. In both Hungary and Poland, more than 60 percent of the banking sectors' capital is held by foreign investors. The Czech and Slovak Republics have, over the past year, followed this path towards greater strategic foreign ownership, and foreign ownership in the Czech and Slovak Republics now exceeds 80 percent. But, as exemplified by the experience with IPB in the Czech Republic, privatization to foreign investors is not a panacea: appropriate incentive and supervisory structures need to be in place to ensure soundness.

¹² Slovenia passed a new banking law in 1999. Foreign banks may now open up branches, and foreign investors may purchase stakes in Slovene banks. However, acquisitions of a share of voting rights or holdings in a bank's capital exceeding 10 percent, 20 percent, 33 percent, 50 percent, or providing control over the bank are subject to Bank of Slovenia authorization. This requirement applies equally to both residents and non-residents.

¹³ Levine (1999) finds that capital control liberalization leads to higher market liquidity, with a positive impact on long-run growth.

B. Minimizing Fiscal Costs and Stabilizing the Macroeconomy: Lessons for the Future

24. In view of the large share of insolvent banks at the start of transition, government intervention was unavoidable to provide a clean start for financial institutions and to remove incentives for risky behavior. The state-owned banks in the CEC5 faced large volumes of nonperforming loans—often the legacy of central planning and directed lending—as they began the transition process. In each of the countries, bank recapitalization required substantial fiscal resources in the early 1990s, and, in the case of the Czech and Slovak Republic, continues to have significant fiscal implications. But simply intervening via recapitalization was not enough. The success of such interventions was determined largely by the degree to which bank restructuring and privatization programs were designed to impose hard budget constraints on both enterprises and financial intermediaries.

25. With government involvement in bank recapitalization and restructuring often reflecting substantial fiscal or quasi-fiscal transfers to banks, it is imperative to put in place an incentive structure that minimizes the need for future intervention—to avoid increasing the future tax burden and impairing the stabilizing and growth-enhancing role of fiscal policy. These fiscal infusions added to the public debt and, through higher interest payments, restricted the flexibility of fiscal policy.¹⁴ Cumulative transfers to banks in the last decade were by far the largest in the Czech Republic, and current quasi-fiscal liabilities are highest in the Czech Republic and Slovakia (Annex II). Although highly uncertain, the costs for the current restructuring in the Czech Republic, for example, are estimated to be on the order of 15 percent of GDP or more (see Annex II).¹⁵ The sustainability of public debt is currently not a dominant issue for those countries.

26. A decisive and comprehensive response—combined with successful enterprise restructuring and the imposition of hard budget constraints—is key to dealing with problem banks. Approaches achieving “too little, too late” allowed problems to reach systemic proportions, as authorities tried to minimize costs through incomplete recapitalization, avoiding market-based work-outs, preserving insolvent institutions of non-systemic importance, and postponing major changes in the legal and institutional framework. In the most successful cases, weak institutions were closed or privatized quickly—avoiding a mounting quasi-fiscal cost. The managements of deeply insolvent banks do not have the proper incentives to improve the performance of the portfolio, and, indeed, sometimes engage in risky “gambling for redemption,” which can lead to a further deterioration in asset

¹⁴ Enoch, Garcia, and Sundararajan (1999) provide a comprehensive discussion on operational and technical issues of the use of public funds in helping to recapitalize banks and restructure assets.

¹⁵ The Fund recently estimated the cost of cleanup in the Czech Republic at 15 percent of GDP over the 2001–2004 period. The estimate for the restructuring in the Slovak Republic, which took place in 2000, is about 12 percent of 2000 GDP.

quality. Improving bank performance is difficult without privatization and imposition of hard budget constraints on enterprises as well. Severing the links between banks and their weak clients or putting in place the proper legal and incentive structure for bank-centered loan workouts are necessary conditions for successful restructuring.

27. The choice of approach to asset recovery—particularly as regards the incentive structure—can significantly influence the outcome. While the CEC5 differed in their approaches to resolving non-performing loans, asset recovery, following bank restructuring, has, for the most part, been poor to date in the CEC5. Most of the countries set up a government-owned centralized asset management agency (AMC) which assumed responsibility for the collection of bad assets. These agencies have not been very successful in the recovery of assets due to a number of reasons: lack of clear mandate, lack of legal powers to dispose of assets or to force restructuring, and no specific timeframe for winding down operations, which may have increased moral hazard. In the Czech Republic, for example, the AMC initially functioned as a bank and was subject to all prudential regulations for banks, including capital adequacy requirements. It also was used for government-directed lending, and for many years was simply a passive collection agency instead of an active manager of its asset portfolio.¹⁶ AMCs often had an explicit or implicit mandate to prolong the existence of enterprises. Poland, on the other hand, resorted to a decentralized approach in the mid 1990s; after banks were recapitalized with government bonds, as part of the package, they were expected to work with some of the delinquent enterprises and could keep any recovered non-performing assets. At the same time, the government made clear that it would not be involved in further recapitalization efforts, and hard budget constraints were imposed on the enterprises. This led to the highest recovery rates among the CEC5 on classified loans (Tang, Zoli, and Klutchkova (2000)). While this was a highly successful approach, it has not been replicated elsewhere.

28. In general, a multi-track approach to asset resolution provides the greatest likelihood of success. This might involve banks working out the better quality bad loans (substandard and doubtful categories, for example), bundled sets of loans sold at auction or open tender, and an AMC to work out more complex loans. Such an approach better distributes the burden of debt workout across a broader range of participants. Indeed, in the mid-1990s, Hungary employed a combination of workout methods, including asset sales, transfers of some loans to an AMC, etc., which succeeded in setting the banks on a strong footing and created incentives for more prudent behavior in the future. More recently, both the Czech and Slovak Republics are also using a multi-faceted approach to their bad debt problems.

29. A combination of market-based approaches to asset resolution as well as private sector expertise, enhanced legal powers, and minimum political intervention have been

¹⁶ This has changed over the past two years—KoB, the Czech AMC, has auctioned some of its assets in 1999–2001, and its banking license was revoked in 2001, thereby allowing it to concentrate on the debt workout function.

important ingredients of successful AMC. Again, the design of the incentive structure is of paramount importance. The AMCs put in place after the crisis in Korea and Malaysia followed best practices learned from Sweden, the U.S., and other successful cases.¹⁷ These experiences suggest that AMCs can be effectively used if they have clearly defined non-conflicting statutory objectives and political interference is minimized (for example, by limiting management discretion, enhancing accountability, and imposing high disclosure standards). Making full use of private sector expertise—and employing a variety of methods for the management of distressed loans—has led to higher recovery rates. If bankruptcy laws are deficient or poorly implemented, it is important to provide the AMCs with special legal powers to speed up the process of loan resolution, since slow resolution often leads to asset stripping and rapid decline in collateral values. Unless an explicit time limit for asset recovery or disposal is determined at the outset, AMCs may have an incentive to prolong the process to remain in existence.¹⁸ Since centralized AMCs typically have full government guarantees, they may not use the most efficient methods for disposing of non-performing assets.¹⁹ Application of commercial criteria and the principle of value maximization is crucial for the choice of methods of restructuring and asset disposal.

30. While support for weak banks may at times prevent major macroeconomic disruption, assistance needs to be designed to avoid a recurrence of problems—notably by reducing incentives for moral hazard behavior. When banks cannot simply be closed, due to their systemic role, sufficient recapitalization, combined with measures to address sources of weakness, is needed to provide a sound basis for future operations. Hungary's experience in the early 1990s was a good example of this—several rounds of incomplete recapitalization in consecutive years created incentives for commercial banks to engage in rent-seeking and trying to maximize future assistance. In 1995, in a major overhaul of the macroeconomy (including the real, fiscal and monetary sectors), the authorities decided to combine bank support with privatization and the imposition of hard budget constraints, which led to a much stronger and more competitive banking sector and minimal subsequent fiscal transfers. As described in Box 2 above, the experience of IPB in the Czech Republic showed that privatization in the absence of an appropriate incentive structure may create a recurring problem and increase the present value of government obligations. Privatization of banks with significant non-performing loans may attract portfolio investors in search of quick

¹⁷ See Klingebiel (2000) for cross-country experiences in the use of AMCs in the resolution of banking crisis. Giorgianni (2001) has an overview of the Asian experience to date.

¹⁸ Bolivia allowed private asset management agencies to keep a portion of recovered assets, with the portion retained an increasing function of the speed of recovery.

¹⁹ James (1991), in a study of bank failures in the US, finds that the rate of recovery of defaulted assets for banks taken over by the FDIC is significantly lower than the rate of recovery for banks taken over by private banks. This could, however, also reflect selection bias to some degree.

profits instead of prudent strategic owners, leading to further destabilization of the system. The IPB case also demonstrates the need for particularly vigilant supervision of weak large banks, on top of regular audits from independent auditing firms.

31. If there is a single pointer for future success, it is to design assistance in ways that provide incentives to improve banks' operations.²⁰ A crucial supporting element is improvement in the overall macroeconomic environment and a simultaneous restructuring of the real sector. The recapitalizations in the early 1990s often did not significantly change the behavior of the financial intermediaries. In the Czech Republic and Slovakia, repeated government interventions created a perception of soft budget constraints and led to moral hazard behavior. Reforms in the economy were delayed, since enterprises which had relatively easy access to finance, independent of their creditworthiness, had little incentive to restructure. This lack of progress in enterprise restructuring, in turn, created a feedback effect leading to further deterioration of bank balance sheets.

32. In a macroeconomic context, concern about the fiscal impact of recapitalization is often misplaced. Recapitalization may significantly increase the headline deficit, raise concerns about undesirable aggregate demand effects, and/or about sustainability of the debt path. Lane (1996) argues, however, that the first-round fiscal effects of a bank recapitalization (resulting from the direct fiscal transfer), under certain conditions, are economically irrelevant.²¹ If bank deposits carry an implicit or explicit guarantee, and it is common knowledge that an insolvent bank will have to be recapitalized at some point by the government, then the nonperforming loans are effectively already a claim on the government. He recognizes, however, that there are second round effects which violate the irrelevance argument through the incentives that bank recapitalization can create for future bank lending behavior. Whether these effects are expansionary or contractionary depends on the extent to which the moral hazard problem is addressed.²² Debt sustainability does not appear to be an

²⁰ Nevertheless, some banks perceived as "too big to fail" may not respond sufficiently even to a well-designed incentive structure.

²¹ Even in the absence of Ricardian equivalence, the aggregate demand impact of fiscal recapitalization can be difficult to ascertain, as it depends on the counterfactual. Thus, for example, if the alternative to recapitalization is wiping out deposits, then the demand impact of recapitalization is likely to be positive. On the other hand, if the alternative is to allow banks to continue to function and to delay recapitalization, then the demand impact could even be negative if, in the absence of recapitalization, the insolvent banks would "gamble for redemption" and lend more freely now, anticipating an even larger recapitalization if things went wrong.

²² Daniel (1997) discusses in more detail the aggregate demand impact of bank recapitalization due to changes in interest rate spreads, wealth effects, and recurrent recapitalization.

issue for any of the CEC5 under present estimates of implicit government liabilities—and, in any case, making quasi-fiscal liabilities explicit in a timely manner may actually speed up the fiscal adjustment necessary to address potential debt sustainability problems.

33. The full fiscal implications of government assistance should be transparently recorded in the budget to promote fiscal discipline and accountability, and to allow for the creation of credible forward-looking medium-term fiscal frameworks. Interventions, in the past, were sometimes conducted in a non-transparent manner, through the central bank or quasi-government management agencies. A (still) commonly used tool of intervention in all five countries has been a selective reduction or waiver of reserve requirements, and selective tax reductions for some banks. More often than not, the government assumption of bad debt has been in a quasi-fiscal form—liabilities have not been explicitly recognized on the budget at the time they were incurred. This has led to the accumulation of “hidden” debt in some countries. Two recent sales of large banks in the Czech Republic involved “ring-fencing,” or government guarantees on the quality of the portfolio extending after the sale. While this speeded the sales and minimized the immediate need for recapitalization, it ran the risk of creating incentives for both the borrowers and the new owners that would result in an unpredictable stream of claims for the government.

34. In summary, the impact of recapitalization and privatization programs on incentives is key. Reform of the financial sector in transition economies is likely to be successful only if accompanied by reforms in the real sector and the imposition of hard budget constraints. There is no valid economic reason for delaying bank restructuring—the demand impact of recapitalization is usually fairly small, and delays or incomplete restructuring have proven to magnify the problem, ultimately leading to a higher present discounted value of government liabilities.

C. Monetary Policy and the Financial Sector

35. Underdevelopment of financial markets and vulnerabilities in the financial sector can complicate the conduct of monetary policy and may seriously limit the policy choices both in day-to-day operations and in response to external shocks. A banking sector crisis can directly affect monetary stability through the need to inject liquidity into banks. The monetary authorities could fear allowing the exchange rate to depreciate if there has been heavy unhedged foreign borrowing, or could avoid raising interest rates if banks are in poor financial condition. Raising interest rates to defend the currency can weaken the repayment capacity of banks’ clients and lead to banking sector problems with liquidity and solvency. That is, the authorities can be caught straddling two horses—trying to maintain monetary stability but at a cost of financial stability or vice-versa.

36. The trade-off between monetary and financial stability is likely to be harsher in countries with less mature financial markets, such as in the CEC5, than in more advanced economies. In the face of a financial sector crisis, there may be a switch into foreign assets from domestic assets, bond markets become more illiquid, and a liquidity injection to the

banking system may cause a sharp depreciation in the exchange rate, further exacerbating the crisis through solvency problems related to open foreign currency positions.

37. Developing a systemic liquidity policy is one approach to dealing with this trade-off. An important objective of a systemic liquidity policy is to enhance confidence in the banking system. A good liquidity framework encompasses a broad range of supporting elements, including: a safety net (lender-of-last-resort facility, credible deposit insurance) and day-to-day liquidity management infrastructure (prudential liquidity rules, creditor rights, reliable payments system, information disclosure, etc.)²³ As discussed by Powell (2000), such a liquidity policy could also require that the country have sufficient reserves to cover all internal and external public sector debt coming due within the year, with internal debt included since problems in domestic capital markets can quickly turn into external problems.²⁴ At a minimum, there should also be some regular monitoring of the unhedged liabilities of the non-financial private sector. As shown in Figure 1, Poland and Slovenia are particularly well-positioned with respect to one measure of external liquidity, and the Czech Republic and Hungary also fare quite well, particularly when compared with other middle income countries which have faced outflow pressures in the recent past.²⁵

38. Weaknesses in the financial sector may also lead to a highly unpredictable monetary transmission mechanism—and understanding the transmission mechanism is especially critical now for the CEC5, with most of the countries having recently moved to an inflation targeting framework for monetary policy. A stimulative monetary policy could be expected to be rather ineffective if the banking system is burdened by non-performing loans.²⁶ As examples, declines in the policy rates in Slovakia and the Czech Republic in 1998–2000 did not translate into credit growth. As banks struggled to meet the stricter provisioning requirements, credit to the private sector continued to decline (Figure 2). A restrictive

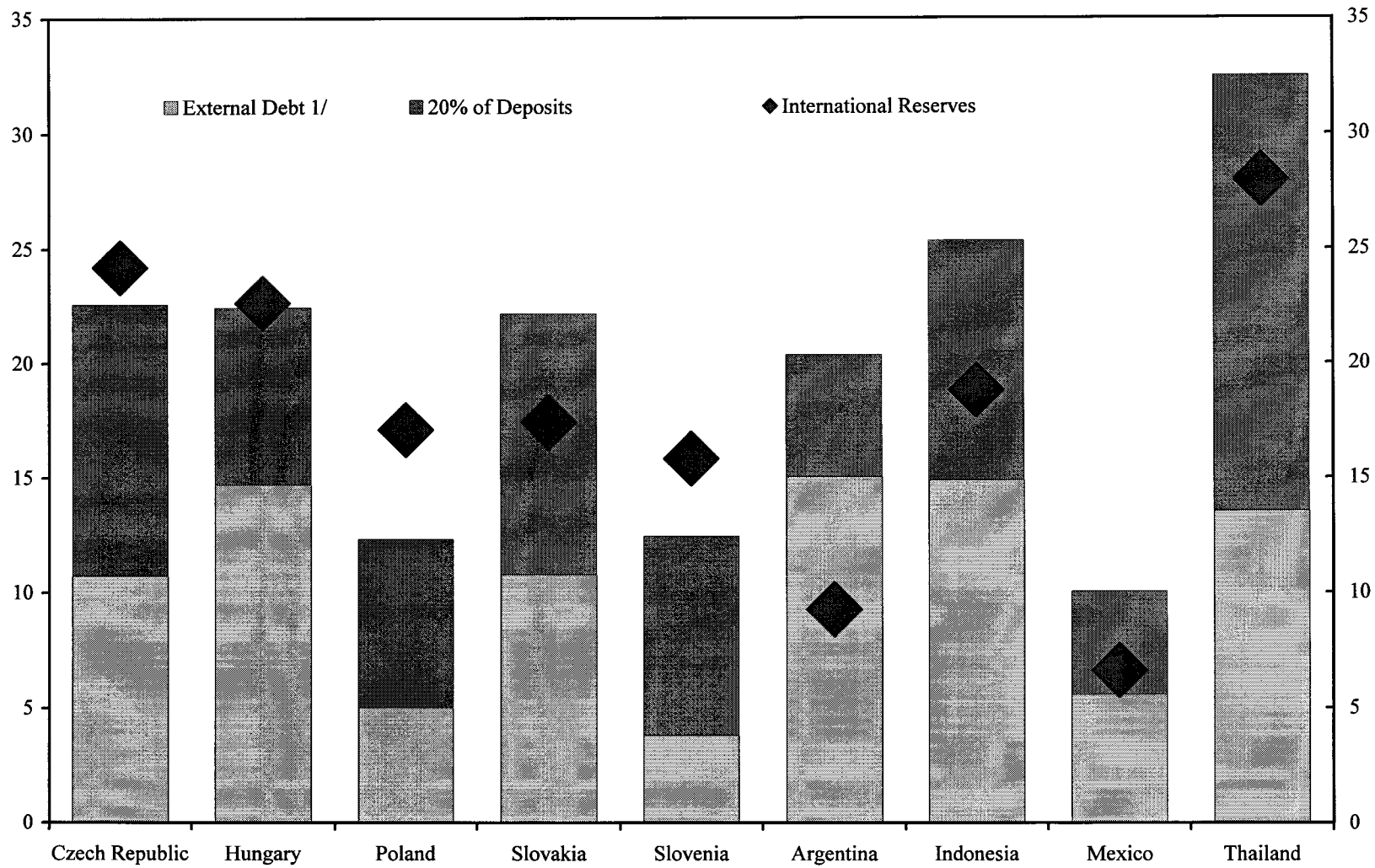
²³ Dziobek, Hobbs, and Marston (2000) provide a comprehensive discussion on systemic liquidity policy frameworks.

²⁴ Powell (2000) notes that a possible modification for countries with floating exchange rates and inflation targets (as in the CEC5) would be to maintain reserve cover for total public debt coming due, conditioned on the maximum depreciation consistent with the inflation target.

²⁵ See also Powell (2000). The choice of 20 percent of deposits is arbitrary (and indeed was chosen by Powell “in sympathy with the ratio for Argentine liquidity requirements”), but is an attempt to capture the amount that might flee the country in the event of loss of depositor confidence.

²⁶ Calvo and Kumar (1994) note that, seemingly perversely, injecting central bank liquidity could prove counterproductive and actually exaggerate a credit crunch, with higher inflation reducing the demand for money and the stock of real bank credit.

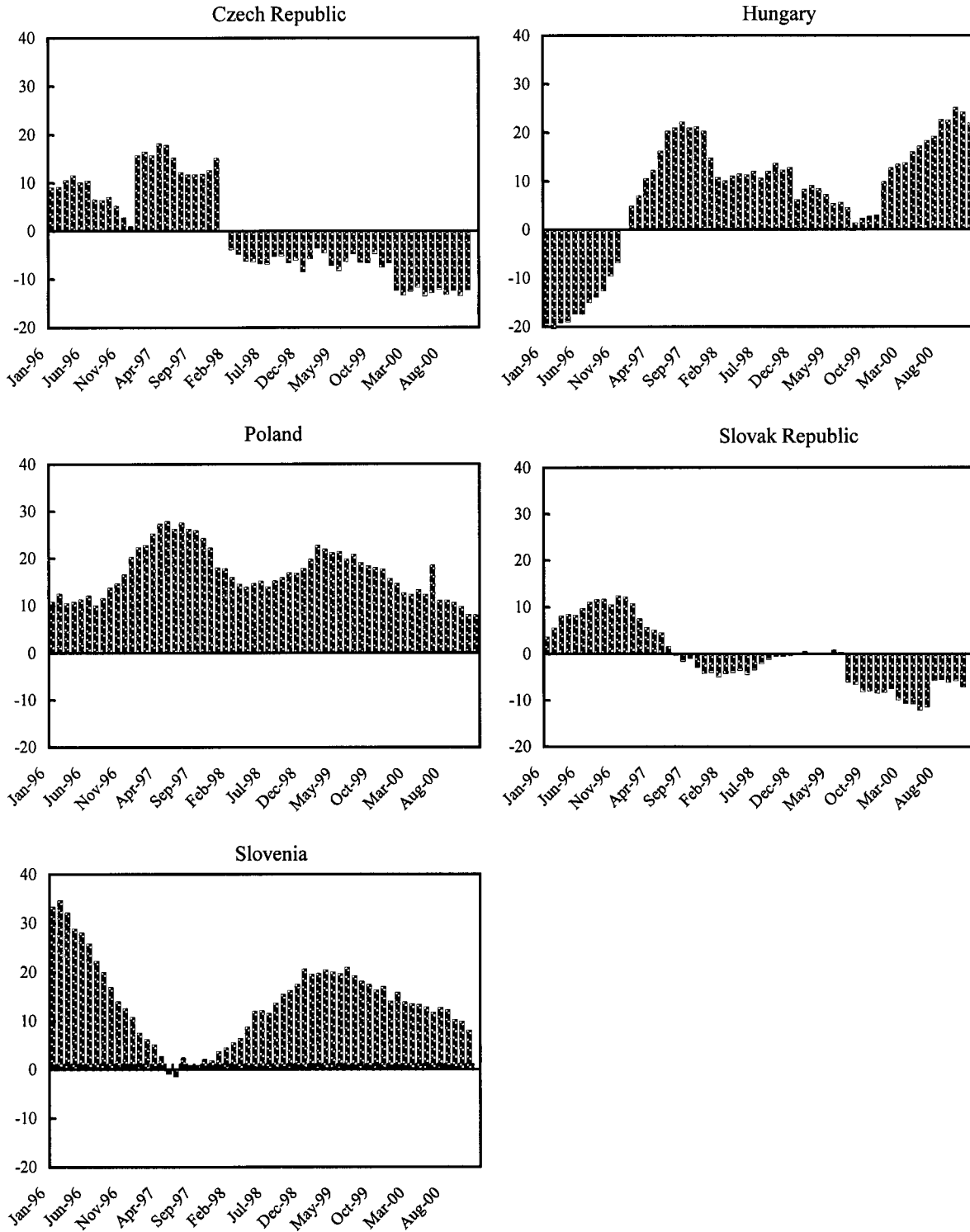
Figure 1. External Liquidity Position: Selected Countries, 1999
(In percent of GDP)



Source: OECD\IMF\WB\BIS Joint Database, IFS.

1/ Debt falling due within one year.

Figure 2: Real Growth of Private Credit, 1996–2000 1/
(12-month growth)



Source: Desks; IFS.

1/ Deflated using current CPI.

monetary policy, on the other hand, could *ex post* have a much stronger effect than desired.²⁷ In the aftermath of the 1997 currency crisis in the Czech Republic, the central bank tightened monetary policy to prevent the exchange rate from further depreciation, and also strengthened bank supervision.²⁸ These moves, together with higher provisioning requirements and the imposition of hard budget constraints on enterprises, induced credit contraction, which contributed, along with a tight fiscal policy, to a rapid fall in inflation (from 8 percent per annum to a brief period of deflation) and a prolonged recession.

39. The most obvious channel for the transmission of monetary policy is the direct interest rate effect. The responsiveness of lending and deposit interest rates to changes in policy rates depends on several factors, including the degree of competition in the banking sector, the depth of financial markets, and alternative sources of financing. Thus, for example, the banking sectors in Hungary and Poland are highly competitive with respect to the corporate lending market, so that policy rate changes should feed through quickly to loan interest rates. On the other hand, Slovenia's banking sector is oligopolistic in nature, so that the responsiveness of interest rates may be more sluggish.²⁹ Furthermore, in Slovenia, and until recently in the Czech Republic and Slovakia, the banking sectors have been dominated by large state-owned banks, which could diminish the sensitivity of lending and deposit rates (Figure 3).

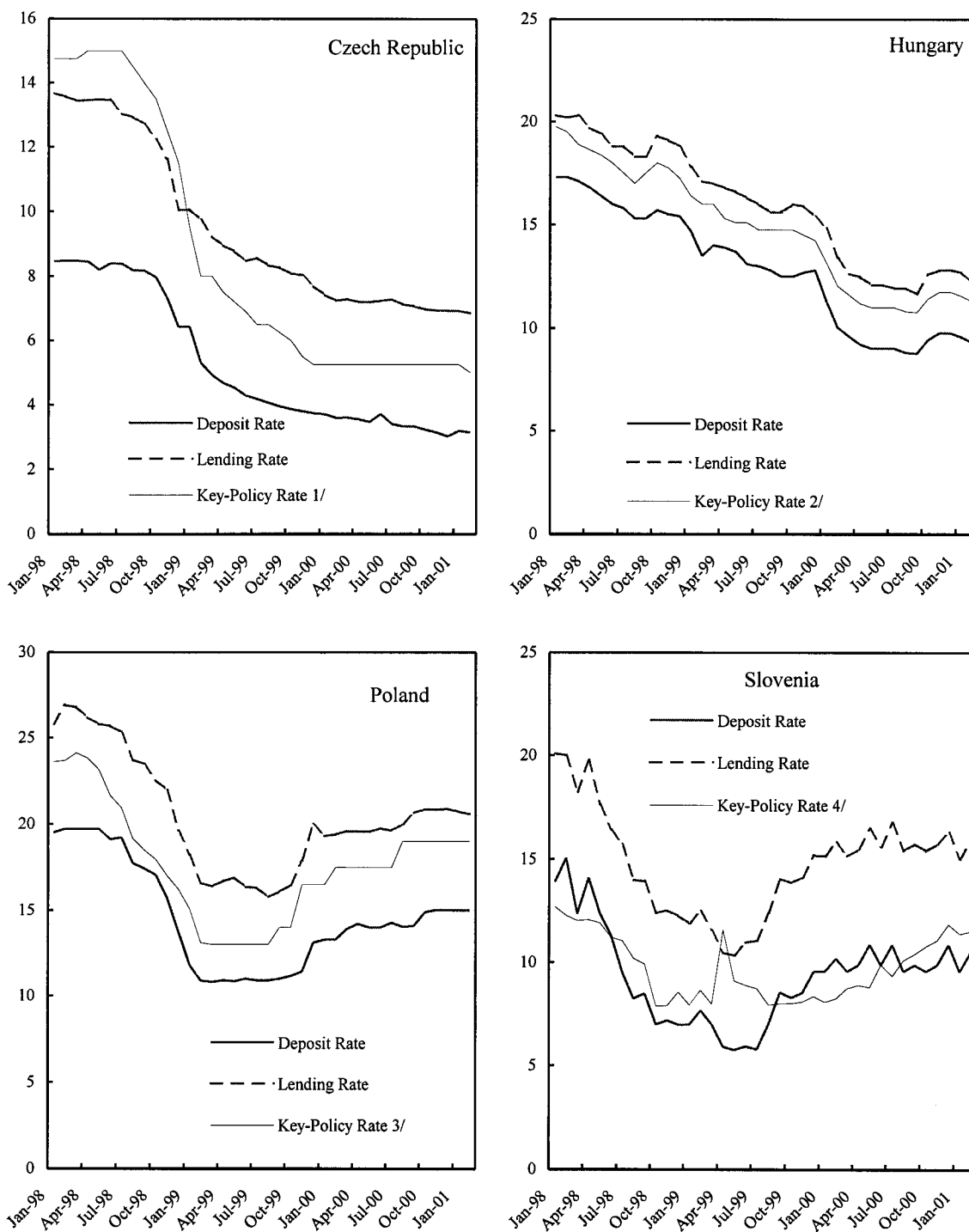
40. However, the pattern of household consumption and the approach to corporate finance in the CEC5 reduces the effectiveness of monetary policy—through the interest rate channel—to influence economic activity and domestic demand. With respect to household behavior, much of consumption is financed through personal savings, and short-term consumption credits are only now growing at a rapid pace—but seemingly regardless of the level of interest rates—as a result of the catch-up effect after years of depressed consumption. In the corporate sector, much of investment is financed either through retained earnings, cross-border borrowing, or foreign direct investment (FDI) inflows. In Hungary and Poland, for example, foreign bank loans to the non-bank commercial sector account for 50 percent or more of all foreign loans directed toward those countries. With transition very

²⁷ Calvo (1992) discusses how high interest rates can actually jeopardize the success of an inflation stabilization program, a situation exacerbated by the segmented and incomplete credit markets which characterized the CEC5, particularly in the early years of transition.

²⁸ In July 1998, the Czech National Bank issued a regulation requiring commercial banks to fully provision against loss loans (overdue over one year) collateralized by real estate. The requirement was phased in over three years.

²⁹ The legacy of hyperinflation at the end of the 1980s (with inflation reaching 13,000 percent per year in 1989) led to a practice of widespread indexation for most financial contracts. Indeed, interest rates for households and corporates are still quoted in real terms, and a revaluation clause is added as compensation for past inflation.

Figure 3. Deposit, Lending and Key-Policy Rates, 1998-2001
(In percent)



Source: IFS, country authorities

1/ Two-week Repo rate

2/ Reverse Repo 1 month (2-week since March 1st 1999)

3/ NBP Intervention rate

4/ Repo rate

advanced, foreign banks are often willing to bypass the local banking system and provide finance directly to the private sector. The Hungarian economy, in particular, with its heavy presence of multinationals, is characterized by a corporate sector with extensive access to offshore financing (Figure 4), which greatly reduces such firms' exposure to domestic monetary policy conditions. And, particularly in the Czech Republic, Hungary, and Poland, FDI inflows have accounted for a significant portion of corporate investment. Leasing has also grown substantially in some of the CEC5; for example, in the Czech Republic, leasing now exceeds 10 percent of lending to enterprises and households. Banks are, therefore, constrained in their ability to raise interest rates in the face of a policy tightening, since many of the blue chips will shift to foreign or other sources of financing.

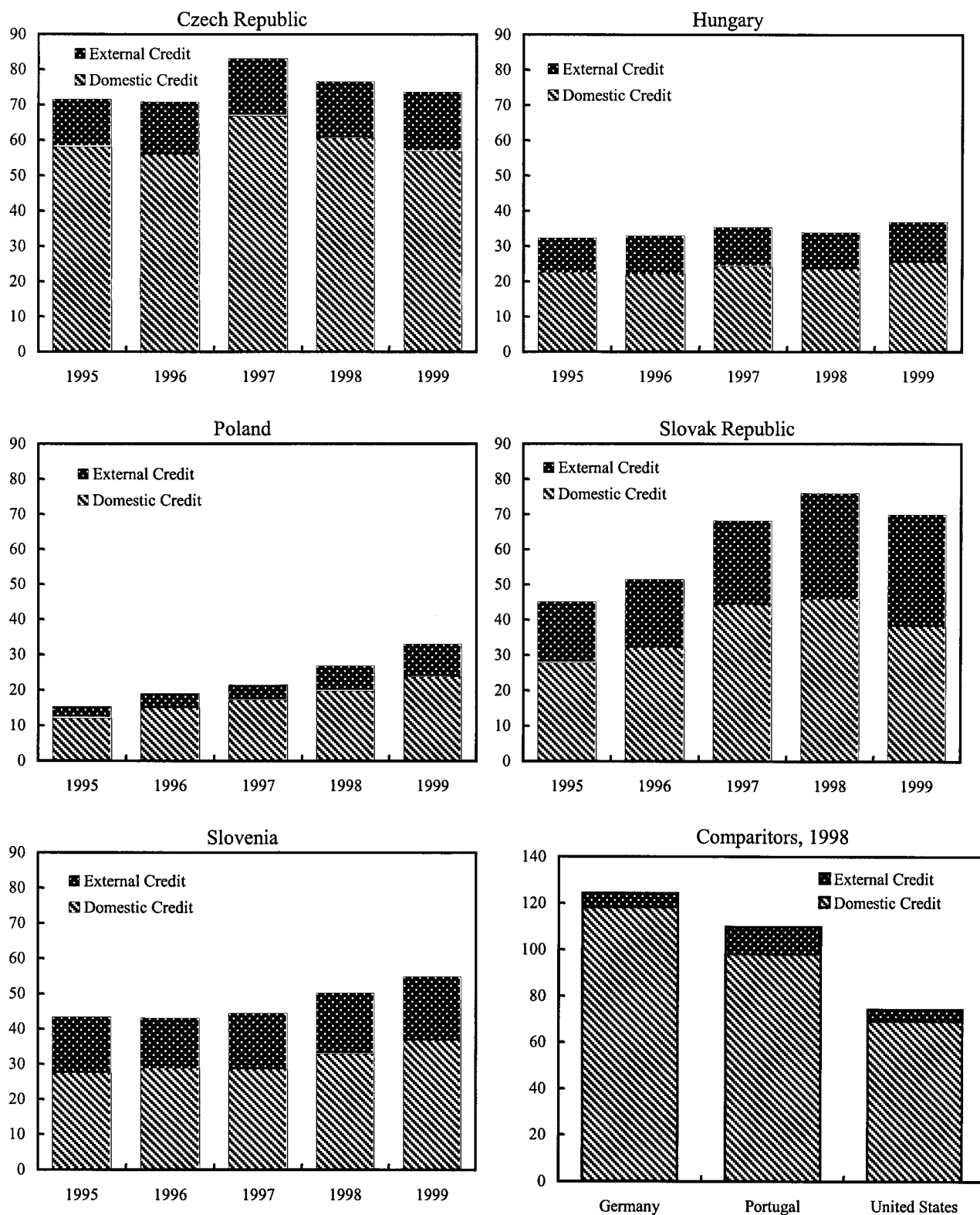
41. In view of the relatively low interest-rate sensitivity of consumption and investment, the credit availability channel is likely to be a more important one for the CEC5. When monetary policy is tightened, banks are likely to not only raise lending rates but to also increase the standards for creditworthiness, since relying exclusively on the rationing effect of higher interest rates can result in an adverse selection problem of attracting the most risky borrowers. This channel is particularly important with respect to credit availability to SMEs, for which there are much higher costs for acquiring information. Similarly, a contractionary monetary policy is mostly likely to affect the household sector through a restriction in the supply of credit. Thus, a tightening in monetary policy in the CEC5 is likely to disproportionately affect the SME and household sectors, which usually do not have alternative sources of financing.

42. For the CEC5, the exchange rate may be the most important asset price affected by monetary policy, in view of the less developed markets for real estate, equities, and bonds. Indeed, the low responsiveness of domestic demand to changes in interest rates or monetary aggregates is a reason consistent with most of the CEC5 countries' initial choice of exchange rate targeting as the primary monetary framework.³⁰ In addition to the relative price effect (which affects the demand for domestic goods relative to foreign goods as well as aggregate supply through changes in import costs), changes in the exchange rate will also exert an impact on the balance sheets of households and corporates which hold foreign currency assets and liabilities, much of which is intermediated through the domestic banking system. Unless foreign currency liabilities are fully offset with foreign currency assets, changes in the exchange rate may have a significant impact on net worth, triggering adjustments in borrowing and spending behavior.

43. The effectiveness of monetary policy is likely to improve naturally as the financial markets mature and once a stable legal environment has been established. Part of the maturation process would be a catching-up effect in the aftermath of repressed domestic

³⁰ The Bank of Slovenia, however, did not choose an initial exchange rate targeting framework, but instead relied on regulating the quantity of money in circulation, with a managed float for the exchange rate regime.

Figure 4. Credit to Private Sector, 1995–99 1/
(In percent of GDP)



Source: International Financial Statistics, World Economic Outlook and Staff estimates.

1/ The 1999 data for Poland and Slovak Republic are based on staff estimates.

Note: The panel for the comparator countries is on a different scale.

demand. To this effect, the volume of outstanding credit to the private sector is likely to expand substantially over the medium term, especially credit to households and small businesses. Empirical research on advanced economies indicates that the most sensitive sectors to interest rate changes are residential investment and consumer durables purchases. As the share of consumer credit and mortgage loans increases in bank lending, this development should enhance the impact of monetary policy. In addition, as fiscal adjustment (and financial liberalization) in the CEC5 has increasingly released financial resources for the private sector, this should underpin the responsiveness of aggregate demand to monetary policy over time.

44. The completion of legal and institutional reforms and the process of privatization in the financial sector should increase market efficiency and strengthen the balance sheet of banks, both of which should lead to a more predictable transmission mechanism. Indeed, the firm establishment of market discipline on financial intermediaries through limiting government intervention to its role as a regulator and supervisor, requiring better and more timely financial information disclosure, and improving the rights of creditors and stockholders, are among the most effective ways to improve market liquidity and strengthen the resilience of financial institutions to monetary and other shocks.

IV. A FRAMEWORK FOR FINANCIAL STABILITY

45. Enhancing financial stability and reducing the vulnerability of financial systems—with particular emphasis on the banking sector—are key aims in each of the CEC5. In addition to the reform priorities discussed above, they face additional challenges in securing the path to financial stability: successfully coping with potentially strong capital flows, building up risk management capacity, ensuring the provision of adequate financial safety nets without encouraging moral hazard behavior, and striving to meet international financial market standards. An overarching priority in this regard is to put in place an effective legal and institutional framework, with a focus on the supervisory role in preventing a build-up of risks. The Fund has also been actively developing a broader framework for assessing financial vulnerability to assist its member countries in identifying areas for improvement to enhance stability.

A. The Legal, Institutional, and Supervisory Framework

46. The EU accession process has been beneficial in accelerating the needed legal reforms in the financial sector and in providing clear guidance on the direction for such reforms. The EU regulations for financial markets are based on the premise of an open EU-wide market and universal banking, and provide minimum standards governing the operations of banks, securities markets, and institutional investors (Box 3 provides a summary of the major EU banking legislation). All of the CEC5 have either updated or developed banking and securities laws to achieve consistency with the various EU directives, and the flow of capital and financial services has been significantly liberalized (Box 4 reviews the European Commission's assessment of progress in the area of financial services, as described in the 2000 Regular Reports).

Box 3. EU Legislation Governing the Banking Sector

Legislation governing the financial sector in the EU establishes the legal foundations for a fully integrated market in financial services. Every bank, insurance, or securities company will be able to provide financial services in other EU countries without restrictions. Firms can place securities on any stock exchange in the union, and every individual will have the right to acquire those securities. To achieve these goals, there must be full harmonization of standards for establishment and operation of financial entities, for prudential supervision, and for the protection of investors, depositors, and consumers. It is also necessary to have a uniform level of competence of the supervisory bodies, and a uniform level of enforcement of the rule of law.

The two key directives supporting the single market in banking are the *Capital Liberalization Directive* and the *Second Banking Directive*. The first one calls for removing all controls on capital flows within the EU, and for the most part, on capital flows between EU members and any third country. In the past, temporary exemptions to this rule were granted to Spain, Ireland, Portugal, and Greece, but exemptions are less likely to be granted to the current applicants. The *Second Banking Directive* establishes minimum capital requirements for new banks (ECU 5 million), and the principles of a single banking license and home country control. Any credit institution authorized in one member country can establish branches and provide services anywhere in the EU without requiring authorization from the host country. The home country has the responsibility for the consolidated supervision of the bank, while the host country supervises the liquidity of branches on its territory. Complementary legislation establishing common standards of prudential operation is summarized below:

- The *First Banking Directive* determines common rules for granting banking licenses and introduces the basic principle of cooperation between supervisory authorities of member states. The *Bank Account Directive* harmonizes the format and content of the annual accounts of all financial institutions within the union.
- The *Consolidation Supervision Directive* requires credit institutions to be supervised on a consolidated basis.
- The *Own Funds Directive* defines the concept of own funds, and sets up minimum criteria for determining their composition. According to the *Solvency Ratio Directive*, credit institutions are required to maintain a minimum risk-adjusted ratio of own funds to total assets of 8 percent. The *Capital Adequacy Directive* extends the solvency ratio directive by enabling supervisors to set minimum capital requirements for non-bank investment firms and for universal banks.
- The *Directive on Large Exposures* establishes a limit of 25 percent of own capital on lending to a group of related clients, and a limit of 800 percent of own funds on the total value of large exposures. Large exposure is defined as exposure to a single client exceeding 10 percent of the lending institution's own funds.
- *Deposit Protection*—all EU credit institutions are legally required to provide deposit insurance up to ECU 20,000 for each individual depositor. This directive explicitly states that the level and scope of coverage of deposit insurance should not become an instrument for competition.

Box 4. European Commission's Assessment of Progress Toward Accession in the Area of Financial Services (Continued)

In the 2000 Regular Reports, the European Commission (EC) evaluated the progress made by candidate countries toward meeting the economic criteria for accession, and outlined priorities for future reform. In the area of financial systems approximation, all countries have made significant progress toward legislative alignment. However, the institutional capacity for application and execution needs to be further developed. Another shortcoming has been the deficiency in the formulation or implementation of bankruptcy laws, and the slow and inefficient enforcement through the judicial system. A common conclusion has been that, despite increasing efficiency of intermediation, access to financing for small and medium enterprises has remained restricted. The major findings of the EC in the area of financial services are summarized below:

Czech Republic

The Czech Republic has adopted much of the *acquis* related to the financial sector or has set out a clear timetable for harmonization. Privatization of banks has accelerated over the last two years, with only one bank remaining with majority state ownership. The banking sector, however, continues to be overburdened by non-performing loans, and it is important to ensure strengthened monitoring by the supervisory authorities. The lack of efficient bankruptcy procedures has seriously hampered adjustment in the enterprise sector. While a new amendment to the Bankruptcy Act was introduced in May 2000, the procedures for seizing collateral remain complex. Moreover, only new loans are subject to foreclosure, implying that the heavy burden of bad loans from the past is unresolved. And the effective implementation of the Act depends heavily on improving the court system. The supply of credit to the private sector has declined, owing to increasingly cautious behavior on the part of banks. The operations of the Securities Commission, established in April 1998, have substantially improved supervision, but capital markets still suffer from lack of transparency and price manipulation. The new Insurance Act of April 2000 has also strengthened the supervisory capacity of the Ministry of Finance.

Hungary

Hungary has achieved a substantial degree of alignment in the area of financial services, and the new Insurance Law adopted in June 2000 provided significant further harmonization. The financial sector is strong and well-regulated, and the significant presence of strategic foreign investors in the banking sector has brought considerable experience with financial management. Banking sector profitability has declined in recent years, owing in part to greater competition among banks. While the financial sector has continued to develop, there is room for improvement in the level of intermediation. Lending activity is growing, and access to credit for SMEs and households is improving, albeit from a low base. With the merging of the three supervisory authorities in April 2000—to provide more effective consolidated supervision and to deal with new types of risks—Hungary appears to have the necessary supervisory institutions in place. The major remaining challenges are strengthening implementation of consolidated supervision and enhancing the supervisory agency's discretionary powers and financial independence.

Box. 4. European Commission's Assessment of Progress Toward Accession in the Area of Financial Services (Concluded)

Poland

Poland has already achieved a high degree of alignment with respect to financial services. In 2000, there was an acceleration of the ongoing bank privatization and further progress with respect to supervision of financial markets. The advanced stage of bank privatization is one of the banking sector's major strengths. The financial sector is developing fast from a low base, in particular through the increased presence of foreign strategic investors. While the banking sector has been fundamentally sound since the mid-1990s, bad loans in banks' portfolios have increased since the Russian crisis, owing to corporate failures. The rise in non-performing loans reflects both poor credit risk assessments in the past and methodological changes in reporting. Pension reform has boosted both the insurance and capital markets sectors. Some legal obstacles continue to hinder effective supervision, particularly with respect to consolidated supervision.

Slovak Republic

Important legislative work remains to be completed, and institutional capacity—notably with respect to supervision—needs to be reinforced. Banking rules on capital adequacy, consolidated supervision, and accounting are not in line with EC requirements. However, the new Banking Act of October 1999 strengthens the supervisory role of the Slovak National Bank. A new bankruptcy framework has been approved, but courts need to be strengthened. State-owned banks have been heavily burdened by non-performing loans, attributable largely to their involvement in financing of the big state-owned enterprises. But Slovakia has made considerable progress over the past year in restructuring and recapitalizing the state-owned banks. These steps should improve the prospects for privatizing these banks, and the government intends to sell all its remaining shares. Capital markets remain illiquid and fragmented and progress is still needed in their regulation.

Slovenia

Substantial progress has been made in aligning financial services legislation with the acquis. Most of the banking legislation is in place, including the freedom to establish foreign banks. A new law requiring consolidated supervision of banks has been adopted. The focus should now largely shift toward effective implementation and supervision of the new legislation, as well as on increased cooperation with other European supervisory authorities. There has been little progress with privatization in the financial sector, and restructuring of the banking sector has been slow. There remain concerns about the financial sector's preparedness to face increased competition in view of the oligopolistic structure, with an ownership structure which has evolved only to a limited extent. Reform of the financial sector should be reinvigorated and competition needs to be encouraged, with the lack of competition even impairing the efficiency of monetary policy instruments. The number of bankruptcies has been low, reflecting in part the need to upgrade the administrative capacity of the court system to allow for more efficient bankruptcy proceedings. The supervisory capacity for the insurance markets should be enhanced. Pension reform has started with a new law which came into force at the beginning of 2000.

47. While the CEC5 have already largely adopted internationally-compatible laws on banking and securities markets, the enforcement of the legal framework could still be significantly improved. According to an EBRD assessment, the effectiveness of financial system regulations in the CEC5 typically lags their extensiveness (Table 5), where extensiveness refers to adequacy of adopted regulations, and effectiveness refers to the adequacy of their implementation and enforcement. Typical problems include slow and inefficient bankruptcy procedures, low collateral recovery, legal restrictions on disposal of assets backed by real estate, tax laws discouraging write-off of bad loans, low levels of minority shareholders protection, and leniency towards off-market equity trading. Difficulties faced by the CEC5 in raising the standards of enforcement include an overburdened judicial process, lack of trained regulatory personnel, and lack of sufficient authority and independence of the supervisory body.³¹ The delayed reaction to the problems of IPB in the Czech Republic well illustrated the constraints that supervisors faced in dealing with problem banks owing to inefficient legal procedures and a slow judicial process.

Table 5. Extensiveness and Effectiveness of Financial System Regulations

	Banking		Securities	
	Extensiveness	Laws Effectiveness	Extensiveness	Laws Effectiveness
Czech Republic	3	3-	4-	3
Hungary	4	4	4	4
Poland	4	3	4	4
Slovak Republic	3	2	3	2
Slovenia	4	3	3+	2+

EBRD Transition Report 1998. The scale ranges from 1 to 4+, the highest possible score.

48. In the new environment of openness to capital flows and financial services, strengthening financial sector supervision should top the agenda—with particular emphasis on consolidated supervision and increased autonomy for the supervisory authorities. The largest banks in the CEC5 function as universal banks—they are often involved in a wide range of operations, including ownership of brokerage houses, investment funds, insurance and pension funds, and in some cases, corporations. However, in the CEC5, formal reporting on a consolidated basis is either not required or has only recently been adopted (and thus, there is as yet little experience in doing so). Historically, a lack of consolidated supervision has proved problematic. Banks' holdings of investment funds in the Czech Republic led to banks implicitly owning their clients with the resulting perverse incentives. In Hungary, some banks have engaged in the practice of covering on-balance sheet exposures by taking offsetting positions with their own subsidiaries. As part of recent legal reforms, progress is

³¹ The Reports on Observance of Standards and Codes (ROSCs) for the financial sectors (published on the IMF's public website for the Czech Republic, Hungary, and Poland), while recognizing the great strides made by each of the countries in assimilating international standards and best practices, also highlight the need to enhance enforcement of the regulatory and supervisory frameworks for banking and securities markets.

being made with regard to consolidated supervision. In Hungary, for example, three supervision agencies—for banking and capital markets, the pension funds, and the insurance funds—were merged in a formal move toward fully consolidated supervision in 2000, and Hungary adopted a regulation requiring consolidated reporting in early 2001. In Slovenia, the highly-interconnected financial system poses additional challenges for supervision, requiring additional emphasis on related party lending, especially to shareholders, and strengthening cross-sectoral supervision. Enhancing the independence of the supervisory authorities—giving them the power and authority to respond quickly to any nascent financial market risks—is also a crucial issue for most of the CEC5.

49. Free entrance of foreign banks, as required by the EU, creates additional challenges for bank supervision. At the same time, it could be argued that heavy foreign ownership simplifies the task of supervision, to the extent that CEC5 supervisors can rely on effective home supervision and on parental support of local banks. Nevertheless, with foreign bank entry, supervisors must have the ability to (1) assess the health of the entering bank, (2) evaluate the systemic risk of newly introduced financial instruments and, (3) work with other national supervisory authorities to ensure proper consolidated supervision (but may not have all the requisite skills to do so). In addition, the CEC5 would be more exposed to developments in the banks' home markets, an asymmetric information complication for local supervisors. Thus, some of the CEC5 have postponed allowing the establishment of foreign bank branches (which are not subject to the host country supervision). Hungary, for example, has been a leader in encouraging foreign investment in its banking system, but still does not permit the establishment of foreign bank branches. This may be prudent to the extent that the cost of failure of such entities may have to be born by the host authorities, despite having little regulatory and supervision power over them. However, upon EU accession, this restriction will have to be abolished.

50. Adequate protection of the rights of creditors and shareholders should also be a reform priority if the financial sector is to play an increasing role in the efficient allocation of resources and support growth. Measures of the effectiveness of shareholders' protection, for example, confirm that legal enforcement needs improvement in the CEC5 countries (Table 6). Hungary and Poland scored the highest and, not surprisingly, also enjoyed the most liquid stock markets in the late 1990s.³² A remaining weakness identified in all five countries, although to differing degrees, is the poor enforcement of creditor rights. The most serious problems in this area for the CEC5 are the slow and inefficient bankruptcy procedures. Bankruptcy courts take several years to complete a bankruptcy action and often provide very low recovery of collateral, even in countries with relatively good,

³² Notably, however, stock market liquidity in both Hungary and Poland has dropped sharply over the past year.

internationally-comparable bankruptcy laws.³³ Compounding the problem, a common complaint among creditors in most of the CEC5 is creditors' inability to choose or participate in the choice of the liquidator, and this has raised the specter for corrupt practices within the judicial system. These difficulties have affected the portfolio decisions of financial institutions—banks in the CEC5 invested a disproportionately large share of their portfolio in government securities in the past, although this trend has started to reverse in recent years.³⁴ While there are many reasons for the low level of credit to households and small and medium enterprises (SMEs)—including the usual ones of lack of collateral and prior credit history—the major legal impediment is the costly and slow bankruptcy procedure.

Table 6. Effectiveness of Shareholder Protection

	Shareholder Protection Laws, 1998	Effectiveness of Shareholder Protection, 1998
US	5	100
Czech Republic	3	51.4
Hungary	3	71.0
Poland	3	68.6
Slovak Republic	2	56.5
Slovenia	3	39.8

Source: Claessens, Djankov, and Klingebiel (2000). In column 1, the scale ranges from a low of 1 to a high of 5. In column 2, the United States equals 100.

B. Intermediating Capital Flows

51. In the run-up to EU accession and the adoption of the single currency, as the CEC5 complete the restructuring of their economies, capital inflows are likely to increase further and potentially become more volatile. A well-educated labor force, proximity to EU markets, and increased confidence in the countries' stability have made and will continue to make the CEC5 attractive for foreign investors, as evidenced by the explosive growth of capital inflows over the past decade. In recent years, the improving economic prospects and speculation on interest rate convergence have also led to a steady increase in those capital inflows—such as short-term debt and portfolio investment—which are most easily

³³ Interestingly, there is no specific EU directive regarding bankruptcy or collateral legislation, so that the EU accession process has provided minimal guidance in this regard. The World Bank is currently trying to create benchmarks.

³⁴ For example, problems with repossession of (even highly liquid) collateral have impeded the development of an interbank repo market in Hungary. However, Hungary is currently in the process of amending its legal framework for financial institutions, and this issue is being addressed.

reversible.³⁵ A sound financial system can provide a needed buffer against major market disturbances affecting the direction and magnitude of capital flows.

52. Capital controls have been progressively eased in the CEC5 in recent years, in part owing to OECD membership requirements for some of the countries and also as a result of EU accession commitments. While the Czech Republic, Hungary, and Slovakia have largely liberalized their capital accounts, Poland and Slovenia continue to maintain some short-term capital controls mostly aimed at encouraging non-debt financing and lengthening the maturity structure of external financing. Upon accession, at the latest, remaining controls will have to be removed—in the absence of derogations—potentially stimulating further capital inflows.

53. Inflows are likely to be very sensitive to the perceived sustainability of policies in the run-up to accession. Contagion effects through trade and financial channels are also likely to intensify as the CEC5 increasingly compete in their main export markets and complete the liberalization of their capital accounts. Temporary surges in inflows during periods when interest rates are bid down toward euro zone levels can be quickly reversed once arbitrage opportunities disappear. A heavier reliance on the securities markets, in itself, may increase the vulnerability of capital flows to shifts in expectations and asset price volatility.

54. While the benefits of capital flows are many, large capital inflows—if these flows are greater than the recipient economy's ability to absorb them—can have a potentially negative impact on the financial sector and, ultimately, the real economy. Large capital inflows have been associated with rapid credit expansion and riskier lending practices in emerging markets. Short-term inflows are often driven by speculative considerations—exploiting an interest rate differential and/or expectations on the direction of exchange rate movements—and can be easily reversed if expectations change. Moral hazard distortions—such as an implicit exchange rate guarantee or expectations that the government would bail out the banking system—also underpin short-term flows. Such flows have been responsible for many of the boom-bust cycles in emerging markets in the 1990s, as they are also the first to head for the exits at any signs of economic or financial distress (Box 5). Heavy inflows can also lead to excessive real exchange rate appreciation, potentially eroding competitiveness and resulting in a deterioration in performance of some of the banks' clients, with possible negative repercussions on debt repayments.

55. Particularly in the case of a relatively fixed exchange regime, heavy inflows can result in currency (and maturity) mismatches for the financial sector's assets and liabilities. If the fixed exchange rate regime is credible, there can be a shift toward foreign borrowing at lower interest rates, leading to large open foreign exchange positions for banks (Box 6). This

³⁵ Even FDI, which is typically viewed as the most stable form of capital inflow, could be increasingly vulnerable to reversals, since a growing proportion of FDI is coming in the form of intercompany loans and retained earnings.

Box 5. Impact of the Russian Crisis

Cross-border capital flows can serve as a major channel for contagion. In this respect, the Russian crisis in August 1998 was a test for the financial markets and exchange regimes of the CEC5. In Hungary, Poland, and the Czech Republic, stock markets fell sharply,¹ but the impact was much less in Slovakia and Slovenia, where the stock exchanges are much less fully integrated with global markets. In fact, Slovenia, with a much more sheltered economy, was practically unaffected by the crisis, and, its stock market even reached record highs by end-1998.

Profitability of banks in the CEC5 was negatively affected by a deterioration in portfolios, but the crisis served to foster the strengthening of risk management systems, especially for monitoring country risk and reducing country-specific exposures. The Czech Republic was already in a recession at the time of the crisis, while Slovakia was forced to abandon its fixed exchange rate in the aftermath. Hungary and Poland, on the other hand, weathered the crisis well after suffering temporary capital outflows and pressures on their exchange rates. The crisis contributed to a slowdown in GDP in Hungary and Poland in the first half of 1999, but growth has since accelerated and, after a temporary cutback, capital inflows largely resumed on the scale seen before the crisis struck.

Thus, while the immediate market reaction was large, international capital markets quickly differentiated among the transition economies, according to their fundamental strengths and weaknesses. In particular, the capital outflows were associated with both direct and indirect contagion effects, with the direct effect coming from the need for international investors to liquidate some of their portfolios to meet liquidity requirements elsewhere, and the indirect effect arising from a “flight to quality” sell-off of assets in emerging markets. Countries like Hungary and Poland suffered disproportionately from the direct liquidity effect, in part, due to more liquid asset markets, but recovered quickly from the indirect “flight to quality” impact.

¹ The stock market decline was greatest in Hungary, with its narrow exchange rate band at the time, in part because the other CEC5 countries could absorb some of the shock through sharp changes in exchange rates.

directly links the health of the banking system to the survival of the fixed exchange rate regime and increases the probability of speculative attacks. However, a robust financial system should reduce the likelihood of speculative attacks, since a strong system is known to be able to withstand an aggressive policy response.

56. Flexible exchange regimes allow more transparently for two-way risk, which can limit excessive foreign currency exposures and liquidity mismatches. Exchange rate volatility

will change the incentives regarding hedging, naturally spurring the development of markets for hedging instruments.³⁶ Nevertheless, a floating exchange rate regime does not prevent speculative inflows—there can still be excessive borrowing abroad if, for example, there are strong expectations of appreciation that are not fully reflected in the interest rate differential. Sufficient fiscal consolidation can relieve monetary policy of the burden of attempting to curb inflationary pressures with excessively high interest rates, which ultimately may attract capital inflows and create an unsustainable current account deficit. A premature opening of the capital account—against a background of immature financial markets and incomplete structural reforms—may magnify any underlying macroeconomic and structural weaknesses and heighten the risk of bank failures.

Box 6. Capital Inflows into Hungary in Early 2000

In early 2000, short-term capital inflows flooded into Hungary (the only one among the CEC5 which had a relatively fixed exchange regime at that time), with banks borrowing abroad to take advantage of the high interest rate differential on the central bank's passive sterilization instrument, the 2-week deposit facility. This forced the central bank to aggressively cut interest rates to stem the inflows, as well as adopt other measures (including moral suasion and threats of more stringent reserve requirements). Commercial banks in Hungary must observe a limit on open foreign exchange exposures of 30 percent of capital, but some commercial banks were able to maintain higher open on-balance sheet positions by using their own brokerages to cover them partially with off-balance sheet transactions. In response, in mid-2000, Hungary imposed a "tax" via reduced reserves remuneration if a bank's on-balance sheet open position exceeded 30 percent of capital (this "tax" was subsequently abolished after the introduction of the wide exchange rate band in May 2001). So far, the fiscal costs of sterilizing such inflows have been manageable, but Hungary has not been immune to the tensions between internal and external objectives of monetary policy.

57. Effective regulation and supervision can provide the best insurance against capital inflows being intermediated through banks that are poorly equipped to deal with them. Strengthened supervision and regulation, as discussed above, will be key as capital account liberalization continues in a setting of high (and variable) capital inflows. In addition, financial market imperfections associated with asymmetric information (e.g., moral hazard, adverse selection, and herding behavior)—which can be magnified by an open capital account—can be limited by putting in place a bankruptcy framework that ensures budget constraints on enterprises, minimizing explicit and implicit government guarantees, and

³⁶ Nevertheless, there is some evidence to date that derivatives markets may remain underdeveloped in the CEC5 to the extent that the costs of domestic currency debt issuance makes hedging too costly.

improving the integrity and availability of financial information as well as the corporate governance structure of financial institutions.

C. Risk Management

58. Improving risk management practices—both within banks and by supervisory agencies—is particularly important for the survival of financial institutions in an environment of free capital flows and international trade of financial services. Risk management requires, first and foremost, having sufficient capital to absorb expected losses from market, credit, liquidity, and operational risks. For the most part, however, in the CEC5, only the largest domestic banks have developed risk management models adequately addressing credit risk, liquidity risk, and market risk. Corporate governance, as exercised by banks' boards and management, also plays an important role in risk management, and, in this regard, foreign-owned banks often have an inherent edge, with strong governance from the parents.³⁷ To instill better corporate governance practices in the CEC5, the roles and responsibilities of management, owners, and boards could be more clearly defined in financial sector legislation. In addition, management, owners, and boards should be held explicitly responsible for imprudent or fraudulent activity, with appropriate remedial or penal actions (such as removal from position) spelled out.

59. In the CEC5, the mismatch between risk management capacity and the opportunities for risk-taking underscores the need for enforcing discipline through monitoring both by the market and by the official supervisory authorities. Thus, for example, the rapid expansion of the CEC5 banks into new business areas, such as retail lending to SMEs and derivatives markets, creates greater opportunities for taking on risk, without risk management capacity keeping pace. As the financial markets mature in the CEC5, good corporate governance could increasingly be enforced through steadily rising activism among shareholders and deposit-holders, facilitated by greater transparency and the flow of information via the Internet, but the supervisory role will remain most critical. However, the supervisory capacity for assessing risk can be improved in the CEC5, and weaknesses should be addressed in a timely manner. Importantly, this may entail delinking pay scales for supervisory personnel from those of the broader civil service, allowing salaries instead to approach those in the private financial sector.

60. The development of markets for hedging instruments could facilitate a more efficient allocation of risk. In the CEC5, however, derivatives markets are at a very early stage of

³⁷ The failure of Hungary's Postabank in 1997 was a clear case of weak corporate governance, including management misconduct, lack of strong control over management (owing in part to a highly dispersed private ownership structure), and low internal prudential standards (World Bank, 1999).

development.³⁸ This is due, in part, to a legacy of relatively fixed exchange regimes for all of the countries until recently,³⁹ which has discouraged market participants from hedging their foreign currency exposures. It also reflects the lack of skilled professionals in the trading and design of more complex financial instruments. With all of the CEC5 countries now having fairly flexible exchange regimes, and with experience being imported through foreign bank penetration, the markets for risk management should start to deepen in the coming years. At the same time, regulation is struggling to keep pace with the development of these markets, with the laws governing derivatives in some of the CEC5 rather vague. In this regard, it will be important for the countries to bring accounting standards in line with International Accounting Standards and to ensure consistent tax treatment of derivatives.

61. The supervisory agencies can mitigate the risk stemming from large capital inflows through applying and enforcing prudential regulations—on foreign currency open positions, bank loan exposures, collateral valuations, etc. Such regulations may reduce excessively risky bank lending that can fuel boom and bust cycles. Limits on sectoral credit concentrations (or limits on concentrations of credit to sectors with highly positively correlated returns) limit the risk that a negative impact on a particular industry or sector will feed through into bank failure. Credit risk is affected by the macroeconomic environment and the legal and regulatory environment (such as bankruptcy laws, collateral recovery, etc.), implying that a stable macroeconomy and a strong institutional environment can go a long way in reducing credit risk.

D. Financial Safety Nets

62. The expected increase in capital inflows and the larger role of foreign financial institutions in the accession countries may complicate the role of the central banks as lenders of last resort (LOLR). This problem could be magnified after accession. If the obligations of the bank are in foreign currency, it may be more difficult for the central bank to provide adequate liquidity support if the domestic and foreign currencies are not completely fungible. If the bank is of systemic importance, inadequate liquidity support could destabilize the whole system. There are no definite policies in the EU as to who would meet the social costs of bank failure for an internationally active bank. That makes it even more important to strengthen prudential regulations and oversight to limit the effect of individual failures on the

³⁸ Moreover, according to Business Central Europe (2001b), the inexperience with derivatives markets has led many company managers to use the nascent derivatives markets to play the market and attempt to hike profits, as opposed to containing risks.

³⁹ In May 2001, Hungary widened its $\pm 2\frac{1}{4}$ exchange rate band to ± 15 percent. Hungary fully liberalized its capital account in June 2001, in part to support the development of hedging markets needed for a more flexible exchange regime.

system as a whole. In any event, LOLR support should be largely limited to systemic purposes and, in this context, to addressing bank illiquidity, not bank insolvency.⁴⁰

63. EU accession requirements will necessitate a large increase in deposit insurance ceilings for a number of the CEC5. Deposit insurance can reduce the probability of a widespread run on deposits, but such insurance should be explicit and limited to the smaller depositors to allow for risk-sharing and enforce better corporate governance through the monitoring activities of larger depositors.⁴¹ In view of the much lower per capita incomes in the CEC5 compared to that in the EU, meeting the EU requirements raises the risk of inducing moral hazard behavior. In fact, Garcia (1999) finds that the optimal coverage ratio for deposit insurance to GDP per capita should range between 1 and 2, to ensure financial stability yet minimize moral hazard. However, moving to EU levels of deposit insurance would raise the coverage ratio to between 4 and 6 in the CEC5 (Table 7).

Table 7. Deposit Insurance Coverage

	Coverage (1998)	1998 Coverage Ratio ¹	Required EU Level (in euros)	Coverage Ratio under EU Requirements ¹
Czech Republic	Czk 400,000	2.09	20,000	3.9
Hungary	Ft 1 million	0.99	20,000	5.0
Poland	ECU 4,600	1.4	20,000	6.1

¹ As a ratio of 1998 GDP per capita.

64. The CEC5 regulations have established a minimum capital adequacy requirement of 8 percent of risk-adjusted assets. But in view of the more volatile economic environment in the transition economies, a higher benchmark ratio may be desirable. Archarya (2001) suggests that uniform capital requirements are only socially optimal if the rescue policies are also uniform across countries. If one country has a higher level of regulatory forbearance with respect to bank rescue policies, it is optimal to impose higher capital requirements on its banks to ameliorate moral hazard. Given the high concentration of the banking systems in the CEC5, lax rescue policies for the largest banks could be more probable, implying that capital ratios higher than 8 percent would be advisable to reduce moral hazard and the cost of bank failures. In fact, the banking systems in each of the CEC5 maintain aggregate risk-weighted capital asset ratios in the double digits, well in excess of the minimum 8 percent requirement.

⁴⁰ He (2000) examines in detail the appropriate circumstances and modalities of LOLR support.

⁴¹ Again, in some of the CEC5, it is not just a matter of having the appropriate legal framework in place as regards financial safety nets, but rather the practice. For example, in the Czech Republic, in seven out of ten cases, depositors were reimbursed for the full value of their deposits, exceeding the legal limit on deposit insurance coverage (by a factor of ten, in the most recent case).

However, accounting standards in the CEC5 may still not fully reflect international standards, suggesting that there could be some problems with accurate measurement of capital.

E. International Standards and Enhanced Fund Surveillance

65. The Czech Republic, Hungary, Poland, and Slovenia have already participated in the Financial Sector Assessment Program (FSAP),⁴² a joint Fund and World Bank initiative designed as a complement to the Fund's surveillance exercise. The FSAP (Box 7)—developed as part of the effort to strengthen the architecture of the international financial system—assists the country authorities in identifying areas to further strengthen their financial systems. In this connection, the FSAP assesses countries' progress in adopting and implementing international financial market standards. These include the *Core Principles for Effective Banking Supervision* of the Basle Committee on Banking Supervision, the *Objectives and Principles of Securities Regulation* of the International Organization of Securities Commissions (IOSCO), the IAIS *Insurance Supervisory Principles*, the *Core Principles for Systemically Important Payment Systems*, and the *Code of Good Practices on Transparency in Monetary and Financial Policies*. As confirmed by the outcomes of the FSAP exercises, each of the four participant countries in the CEC5 has made considerable progress with respect to these standards, but a few remaining weaknesses were also highlighted (some of which were discussed above). Importantly, the CEC5 participants have voluntarily chosen to publish the Financial System Stability Assessments (FSSA)⁴³ and Reports on the Observance of Standards and Codes (ROSCs) related to the financial sector. This transparency increases the accountability of policy makers and should improve the environment for market participants' investment decisions, ultimately leading to improved policy-making and economic performance.

66. In addition to assessing compliance with international standards, the FSAP takes a broad look at a wide range of factors which could affect financial stability and vulnerability, with a focus on the linkages between financial system developments and the macroeconomy. An FSAP, for example, typically includes a series of stress tests, conducted under a variety of macroeconomic scenarios and external shocks, in order to assess the banking system's vulnerability to market and credit risks. Indeed, the stress tests for the participating CEC5 countries indicated that their banking systems could likely weather most external or domestic shocks. Nevertheless, an FSAP—and stress tests in particular—can only examine vulnerability at a point in time and should, therefore, not be construed as a “bill of health.” For this reason, one of the most important aspects of an FSAP is to encourage the authorities to continue with such monitoring on its own. Indeed, the National Bank of Hungary (NBH)

⁴² Slovakia's FSAP is scheduled for the 2002 fiscal year.

⁴³ The exception was Hungary. As a pilot participant in the FSAP, it was unable to publish its FSSA.

Box 7. The Financial Sector Assessment Program (FSAP)¹

In May 1999, the IMF and the World Bank jointly launched the Financial Sector Assessment Program (FSAP). The main output on the Fund's side is the Financial System Stability Assessment (FSSA) that is discussed by the Fund's Executive Board in the context of a country's Article IV Consultation. This box describes the key elements of this program.

Objectives.

- With crisis prevention the key aim, the FSAP exercise focuses on the soundness and stability of the financial system as a whole. The FSAP offers an assessment of factors that could make the system vulnerable to instability and suggests measures to reduce such vulnerabilities, including developmental priorities.
- The FSAP is intended to highlight the linkages in both directions between financial system developments and macroeconomic outcomes.
- The FSAP involves an assessment of observance and implementation of relevant standards, codes and good practices applying to the financial sector.
- The FSAP serves as a basis for assisting the participating country in designing an operational sequencing of financial sector reforms.

Scope. The typical scope of an FSAP mission includes: the macroeconomic environment; financial institutions' structure; financial markets; risk management procedures; the legal and regulatory framework and the system of supervision, including observance of standards, core principles, and good practices; the institutional and legal arrangements for crisis management; and key reforms to minimize systemic risks and reduce vulnerabilities.

The FSAP undertakes an assessment of financial sector vulnerabilities. The building blocks of this include macroprudential analysis, stress tests of the banking system, and an assessment of countries' observance of the international standards relevant to the financial sector. These include standards in the areas of banking supervision, payments systems, insurance, securities, and monetary and financial policy transparency. Summaries of these assessments of adherence to international standards can also be published as various module(s) of Reports on the Observance of Standards and Codes (ROSCs). The ROSC reports have typically comprised two elements—a description of country practice and an independent commentary by Fund staff on the extent to which these practices are consistent with the relevant standard.

¹ Further details on the FSAP can be found on the IMF's website or in Hilbers (2001).

subsequently launched an excellent and comprehensive semi-annual *Report on Financial Stability*, and the second issue featured the NBH's own stress test, modeled after that performed during the FSAP (Box 8).

67. Macprudential analysis—monitoring financial vulnerabilities on the basis of objective measures of financial system soundness—has also been employed in the context of these FSAPs. Indicators for such analyses can include macroeconomic variables associated with financial system vulnerability (e.g., current account deficit, composition and maturity of capital flows, exchange rate volatility, foreign exchange reserve adequacy, etc.), aggregated microprudential indicators of the health of financial institutions (e.g., CAMELS),⁴⁴ and market-based indicators (e.g., credit ratings, sovereign yield spreads, etc.). Figure 5 illustrates, for the CEC5, some of the macroeconomic indicators used to assess financial and balance of payments vulnerability.

68. In addition to the FSAP exercise, the Fund's regular surveillance also attempts to carefully monitor financial sector vulnerabilities, with an increased emphasis in the aftermath of the emerging market crises of the 1990s. As the Fund builds up experience in the broader framework of vulnerability assessments (including macroprudential analysis, early warning systems, and analyses of reserve adequacy and debt sustainability), it has encouraged country authorities to assist in this effort by compiling and publicly disseminating macroprudential information. Indeed, the CEC5 have been among the early subscribers to the Fund's Special Data Dissemination Standards (although macroprudential indicators are not specifically part of the SDDS), including, notably, the detailed template on international reserves and foreign currency liquidity.

V. CONCLUDING REMARKS

69. The financial sector is at the crossroads of the macroeconomy—with immense potential to enhance and broaden growth or to impair economic stability. As evidenced by past experience in the CEC5, the more rapid is the pace of financial sector reforms, the less is the uncertainty about growth and stability—easing the path to develop and adhere to a realistic macro-framework. In a context of potentially heavy and volatile capital flows, moreover, the importance of sound banking and financial systems for stability cannot be overemphasized. While this paper has illustrated the role of sound financial systems in supporting macroeconomic policy, the relationship is, of course, a two-way street: a setting of sound macroeconomic policy is crucial for supporting financial sector development.

70. The last two years have been a period of stock-taking and important progress, with all countries undertaking initiatives to address remaining problems. The Czech and Slovak Republics have moved towards more transparency in acknowledging quasi-fiscal liabilities,

⁴⁴ The CAMELS framework encompasses information on Capital adequacy, Asset quality, Management soundness, Earning/profitability, Liquidity, and Sensitivity to market risk.

Box 8. Stress-Testing of the Hungarian Banking System

Hungary was one of 12 participants in the pilot project of the Financial Sector Assessment Program (FSAP). An integral aspect of this assessment was a quantitative analysis—stress tests under various scenarios—on commercial banks' balance sheets to determine the extent of possible systemic vulnerabilities. Since the FSAP, the National Bank of Hungary (NBH) has begun to conduct its own stress tests along the lines of those used in the FSAP. This box provides an overview of the stress tests described in the NBH's February 2001 issue of the *Report on Financial Stability*.

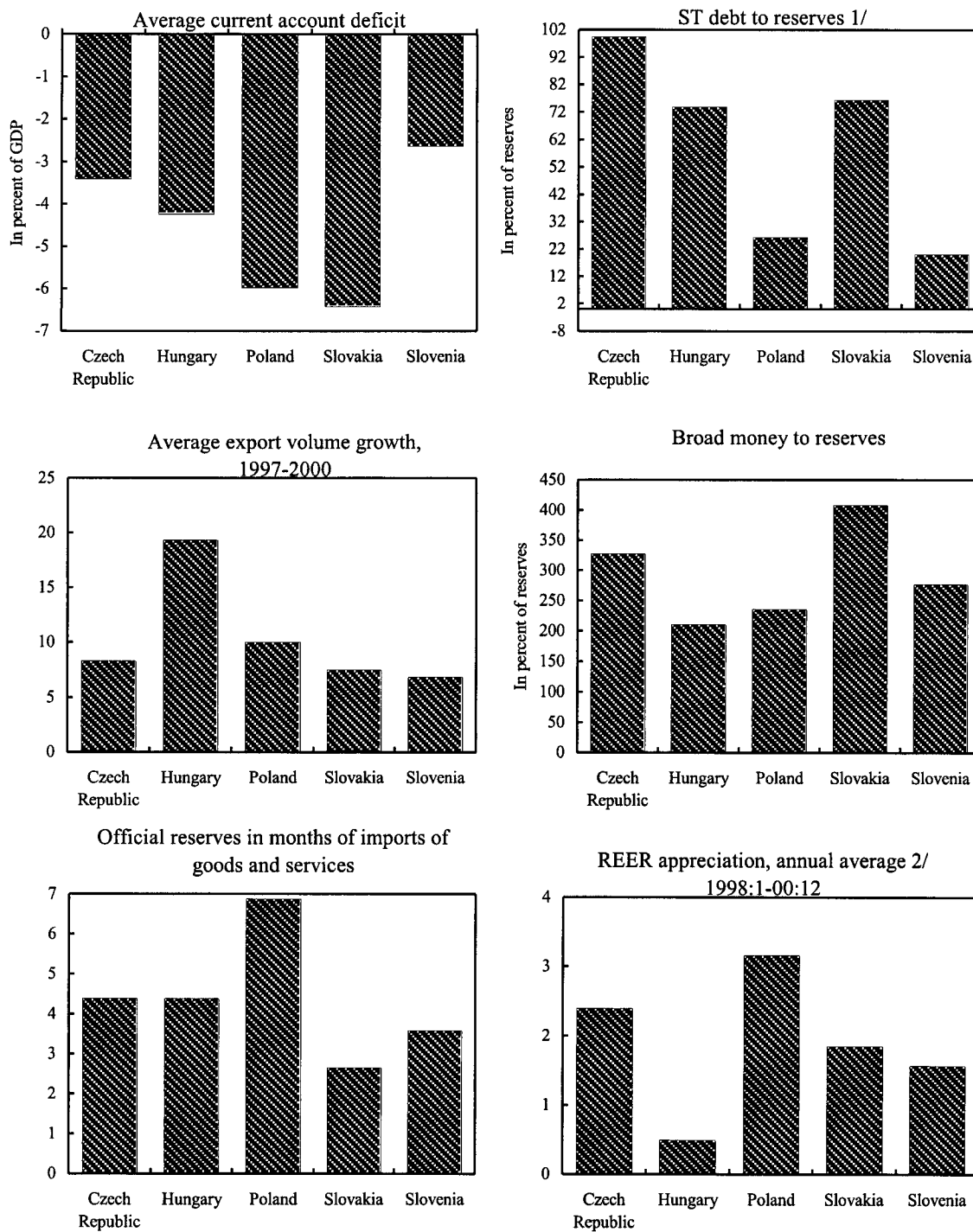
Monte Carlo techniques were used to examine the exposure of the Hungarian banking system to market risk (including domestic interest rate, foreign currency, and foreign interest rate risks) and credit risk. Examination of the balance sheets (with banks grouped into six categories by size and profitability) indicated that interest-bearing assets were concentrated at short maturities, and longer loan contracts were generally written with interest rates that adjusted frequently, thereby minimizing repricing risk. The portfolios also indicated a low level of exposure to foreign currency risk. As a result, stress testing scenarios (both uncorrelated and correlated), using interest rate and exchange rate shocks (based on the largest such changes over specified historic periods ranging from 5 to 10 years) indicated that the overall impact of market risk on the banking system overall was quite modest—with a combined impact in the worst case scenario equivalent to about 7½ percent of Tier 1 capital.

The impact of credit risk was much greater, where credit risk was examined under two scenarios: (1) a shift in the portfolio composition toward loans from government securities, and (2) a deterioration in the loan portfolio measured by a two-standard deviation increase in non-performing loans. The model relies exclusively on macroeconomic variables and handles both market and credit risks in an integrated framework. While the first scenario indicated an impact of about 5½ percent of Tier 1 capital, the second scenario suggested that, for the banking system as a whole, the additional provisioning requirement could be as great as 42 percent of Tier 1 capital. Although credit risk is therefore a significantly greater source of risk than market risk, the stress-testing results suggest that neither source of risk would likely compromise the capital soundness of the banking system.

sales to strategic investors, and market-based methods for disposition of non-performing assets. Slovakia has amended its tax laws to make it easier for banks to write off bad loans. Slovenia has new legislation allowing greater foreign penetration and competition in the banking sector. Poland liberalized its policies toward foreign investors in the financial sector. Hungary recently implemented supervision on a consolidated basis, and the other countries have adopted legislation requiring reporting on a consolidated basis.

71. The CEC5 have made remarkable progress in reshaping their financial sectors: the challenge now is to build on this by deepening the legal framework and institutions that underpin financial stability—transparent accounting and auditing, comprehensive

Figure 5. Comparisons of Financial and Balance of Payments Vulnerability Indicators, 1998–2000



Source: OECD/IMF/WB/BIS Joint Database; IFS and INS.

1/ Debt falling due within one year.

2/ CPI based REER.

supervision, effective bankruptcy mechanisms, and adequate collateral registration and recovery mechanisms. More specifically, in addition to completing restructuring and privatization, the remaining agenda includes:

- enhancing the legislative framework and working toward effective implementation, including, in particular, streamlining the procedures for collateral liquidation;
- strengthening the independence of supervisory authorities and their legal powers;
- implementing effective consolidated supervision, which should forestall any trend to spin off riskier activities to affiliated nonbanks subject to less regulation;
- developing supervisory skills relating to cross-border operations of banks—an especially important task in the integrated market;
- enhancing the laws and supervision abilities to meet the needs of a more sophisticated market place—including internet trading and derivatives;
- improving risk management practices, especially in the area of market risk management—but also with respect to credit, operational, and systemic risk;
- bringing accounting practices, such as asset valuation, in line with international practice: balance sheets should reflect market values as closely as possible;
- ensuring that a financial safety net (such as deposit insurance or lender-of-last resort facilities) is in place, but is limited so as not to engender moral hazard.

72. With restructuring and privatization virtually finished in some cases, and well underway in others, completing the remaining agenda for financial sector reform would help ensure that the CEC5 approach EU accession with financial systems able to withstand most shocks. Key elements in this progress have been the effort to harmonize legislation with that of the EU, advances in implementing international financial standards, and participation in recent Fund and World Bank initiatives, such as the FSAP and publication of the associated ROSCs. These efforts should lay the basis for more effective monetary transmission, help parry capital account hazards, and avoid future threats to fiscal sustainability. By ensuring a stable financial environment, they are a critical foundation to allow the CEC5 to close their economic gap with the economies of the European Union.

Size of the Financial Sector and Banking Sector Performance

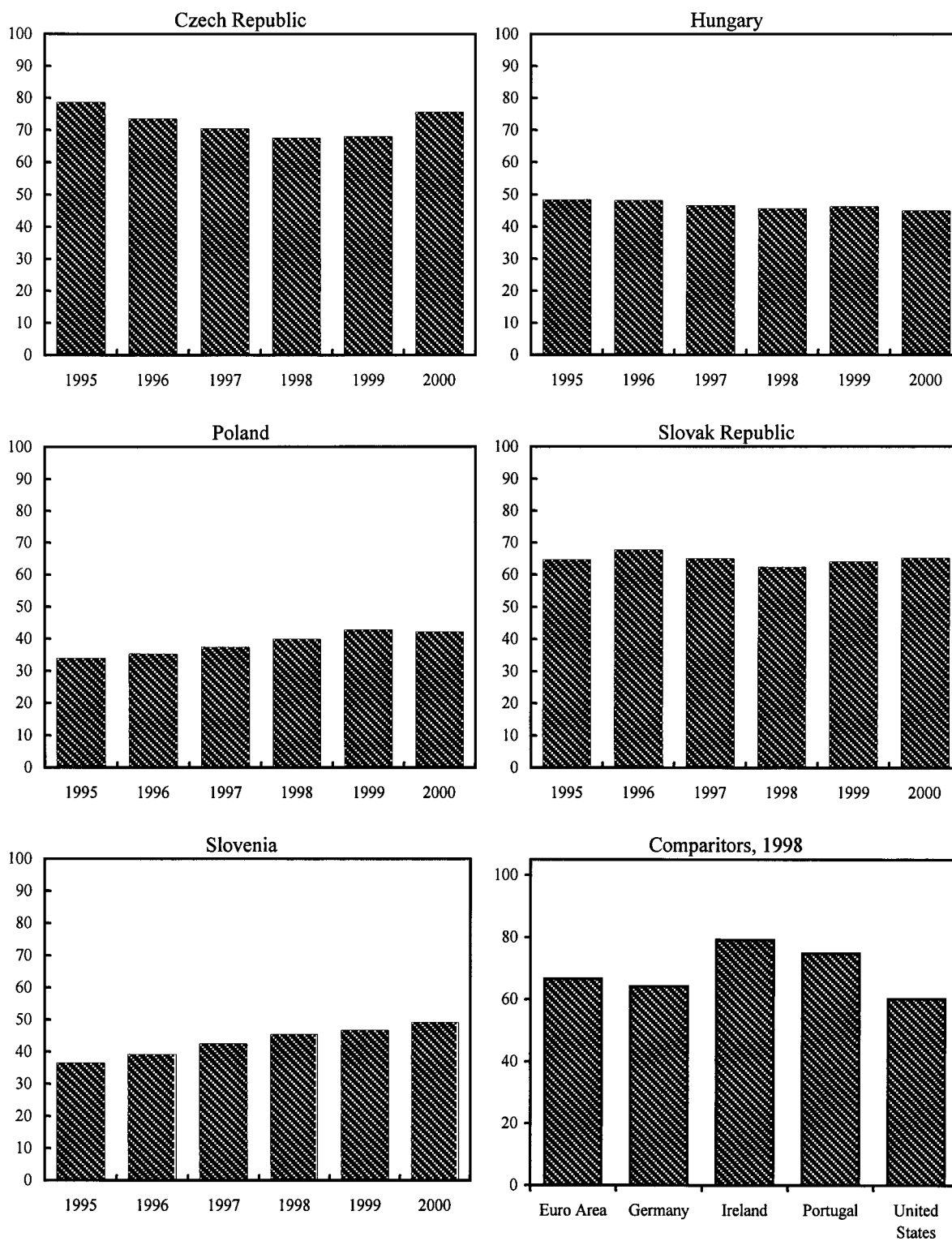
Financial sectors in most of the CEC5 are still small relative to economic activity. To assess their level of development, several frequently used measures for size and performance allow comparison with advanced economy benchmarks. In the euro area, bank assets exceed 210 percent of GDP, while in the CEC5 they are between 60 and 180 percent of GDP (Table 1). Only the Czech Republic and Slovakia have relatively high ratios—at 181 percent and 100 percent of GDP, respectively.⁴⁵ However, poor asset management and large shares of non-performing loans hinder efficient intermediation in those countries, and asset size may not be a good benchmark of financial sector effectiveness. Bond markets are also relatively small: issuance averages less than 30 percent of GDP, with the majority being government bonds.

Broad money (M2) to GDP is another common indicator of the depth of bank intermediation. This ratio has been steadily increasing in Hungary, Poland, and Slovenia, but is still under 50 percent, compared to almost 70 percent in the euro area (Figure 6). In Poland and Hungary, this reflects several factors, including: the relatively recent restructuring and consolidation of this sector; the large and growing share of multinational corporations in the domestic economies, with recourse to direct borrowing from abroad; the riskiness of lending to the consumer sector and to SMEs; the tendency of domestic firms to finance themselves from retained earnings; and the stabilization and restructuring required during transition, which temporarily depressed income and savings—followed more recently by a progressive catch-up in consumption. In addition, in Hungary, in 1999, about half of household savings were invested in securities and half in bank deposits, while the share of securities investment in household portfolios is much lower in the other countries. Slovenia went through a hyperinflationary period in the first years after independence that resulted in loss of wealth for depositors and demonetization. Only since 1995 has inflation stabilized and money returned to the banking system, but a cartel agreement has kept real deposit rates low, therefore discouraging savings. In contrast to the other CEC5, Czechoslovakia entered transition with very high ratios of money to GDP, and this is reflected even today in high ratios in the two successor countries. Inflation was relatively low and stable throughout the 1990s in those two countries. However, the higher ratio of broad money to GDP does not seem to correspond to higher quality financial intermediation or a healthier banking system.

The quality of intermediation can be assessed better by looking at private sector credit growth, concentration in the banking sector, interest rate spreads between loans and deposits, private sector loans as a share of banking assets, and measures of bank performance. Due to the poor conditions and the cleanup of the banking systems, credit to the private sector has been declining since 1997 and 1998 in the Czech and Slovak Republics, respectively, with virtually no new net credits being extended. In the other countries, private credit has grown rapidly in the last three years, albeit from a rather low base (Figure 2). Concentration in

⁴⁵ The high ratio in the Czech Republic reflects, in part, incomplete consolidation of the aggregate balance sheets, with double-counting of interbank credits.

Figure 6. Broad Money (M2)
(In percent of GDP)



Source: International Financial Statistics and World Economic Outlook

banking is high in all of the CEC5, with four or five banks accounting for more than half of all bank assets (Table 1). Since the countries are relatively small, high concentration is to be expected and may even be desirable given that upon EU accession, larger banks may be better placed to compete successfully. In most cases, the presence of a fairly large number of commercial banks, as well as significant foreign presence, attest to the already high degree of competition.

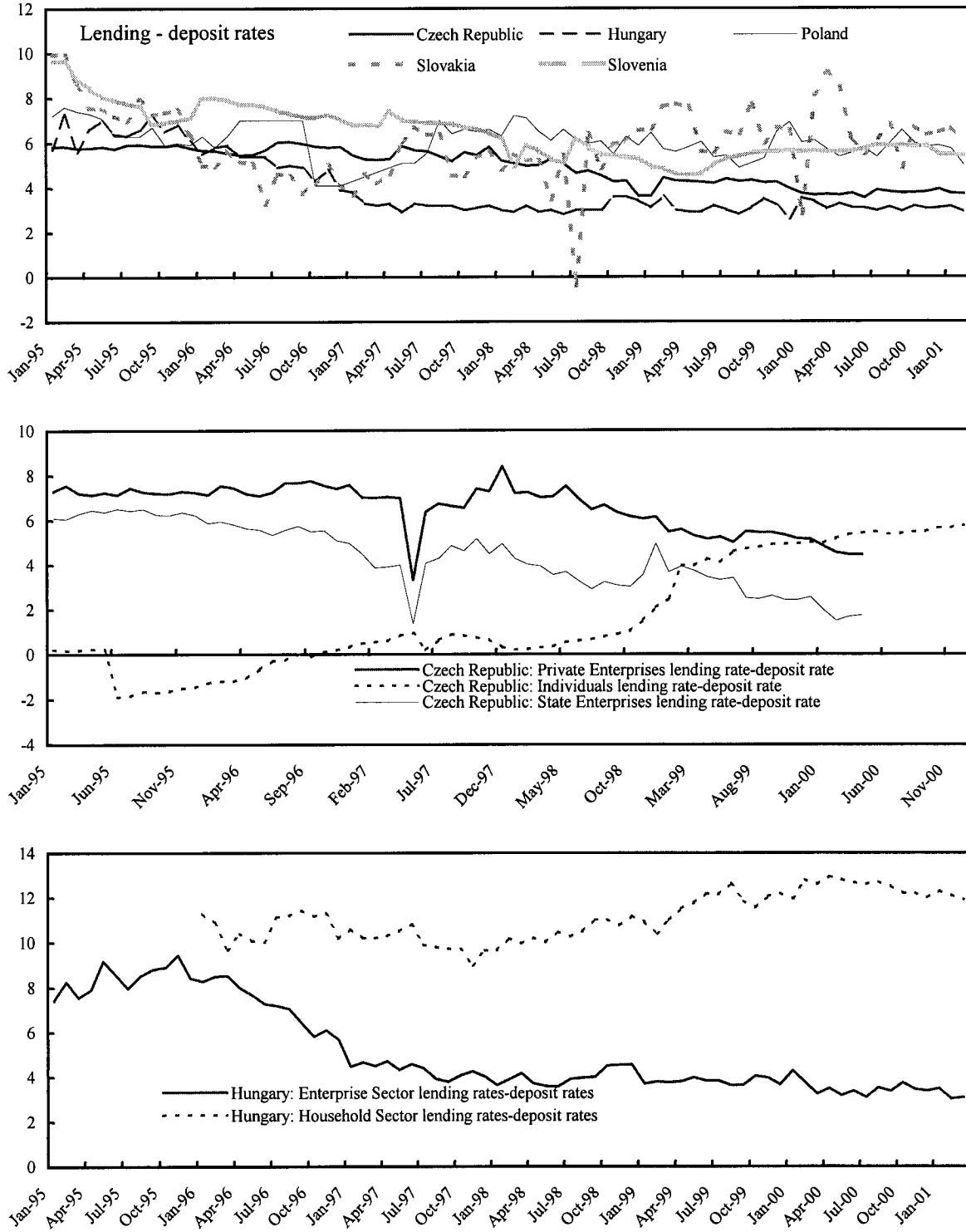
Figure 7 indicates that intermediation has been becoming more efficient, with a broad downward trend in interest rate spreads in most countries. It also illustrates an interesting divergence between corporate lending spreads and spreads on household lending in Hungary and the Czech Republic. While corporate margins have been steadily declining, those on household lending have increased substantially as this portfolio has grown. For the Czech Republic, corporate lending is disaggregated between state and private enterprises. The large state-owned firms, with an implicit or explicit government guarantee, enjoy much lower interest margins than private firms. These observations lend support to the hypothesis that there has been credit rationing for households and smaller firms. As competition has resulted in banks increasing the share of those sectors in their portfolio, lenders have required a higher return to compensate for the greater risk.

For some of the CEC5, the share of government securities in balance sheets has fallen, with a corresponding increase in loans to the private sector. There has also been a strong increase in consumer lending, with demand outstripping real income and a declining propensity to save. While these factors may increase risk, they also indicate that banks are increasingly playing their appropriate role of intermediation—and they should underpin growth in the private sector. Table 3 shows the share of claims on the private sector on a steady uptrend in Hungary, Poland, and Slovenia, although still substantially below that of Germany. In contrast, the share of private sector claims has declined markedly in the Czech Republic since 1997, reflecting in part the recession, but also the deteriorating state of the banking sector and the cleanup of loan portfolios. The ratio has begun to decline in the Slovak Republic, although it continued to rise through 1998, which may reflect the previous government's continued stress on directed lending to privatized enterprises whose owners were associated with the government.

In Table 2, some measures of profitability and efficiency are compared to those in the EU. Net interest margins are uniformly higher in the CEC5 banks, as spreads between deposit and lending rates are higher than in comparable market economies, suggesting inefficiencies and monopolistic or oligopolistic banking sectors in the CEC5. Another notable feature is the decline in bank profitability over the last years for all 5 countries. Competition has brought about increased efficiency of intermediation as evidenced by the generally downward trend in interest rate spreads (Figure 7), and has also lowered net interest margins.

The return on assets and equity differ significantly between domestic and foreign banks. In the period 1996–1998, foreign-controlled banks had significant positive profits, while domestic banks actually showed negative asset-weighted average returns (International Capital Markets Report (2000)). The results for domestic banks are biased by the inclusion of

Figure 7. Interest Rate Differential, 1995-2001
(In percent)



Source: IFS, country authorities.

one or two large state banks with significant losses that are being restructured, but for most countries it is indeed the case that domestic banks in general have lower profit margins. This is consistent with two hypotheses—one is that foreign banks are more efficient and bring better technology and human capital with them; the other is that they cherry pick the most creditworthy customers. A few exceptions are notable: some foreign banks in Hungary have suffered losses in an intensely competitive environment (see NBH, 1999), and the Czech IPB had to be taken over from Nomura after suffering a run (see Box 2 for details).

Positive real interest rates are necessary to ensure financial and macroeconomic stability. In the CEC5, from 1996, real lending rates remained positive, but there were several periods in which real deposit rates have fallen below zero (Figure 8). Depositors' financial assets were being eroded, resulting in transfers of real resources to banks. In some periods there were exceptionally large spreads between real lending and deposit rates, implying excessive transfers to banks. This may reflect inefficiencies in intermediation, low quality of portfolios, and/or differentials in consumer and producer price changes.

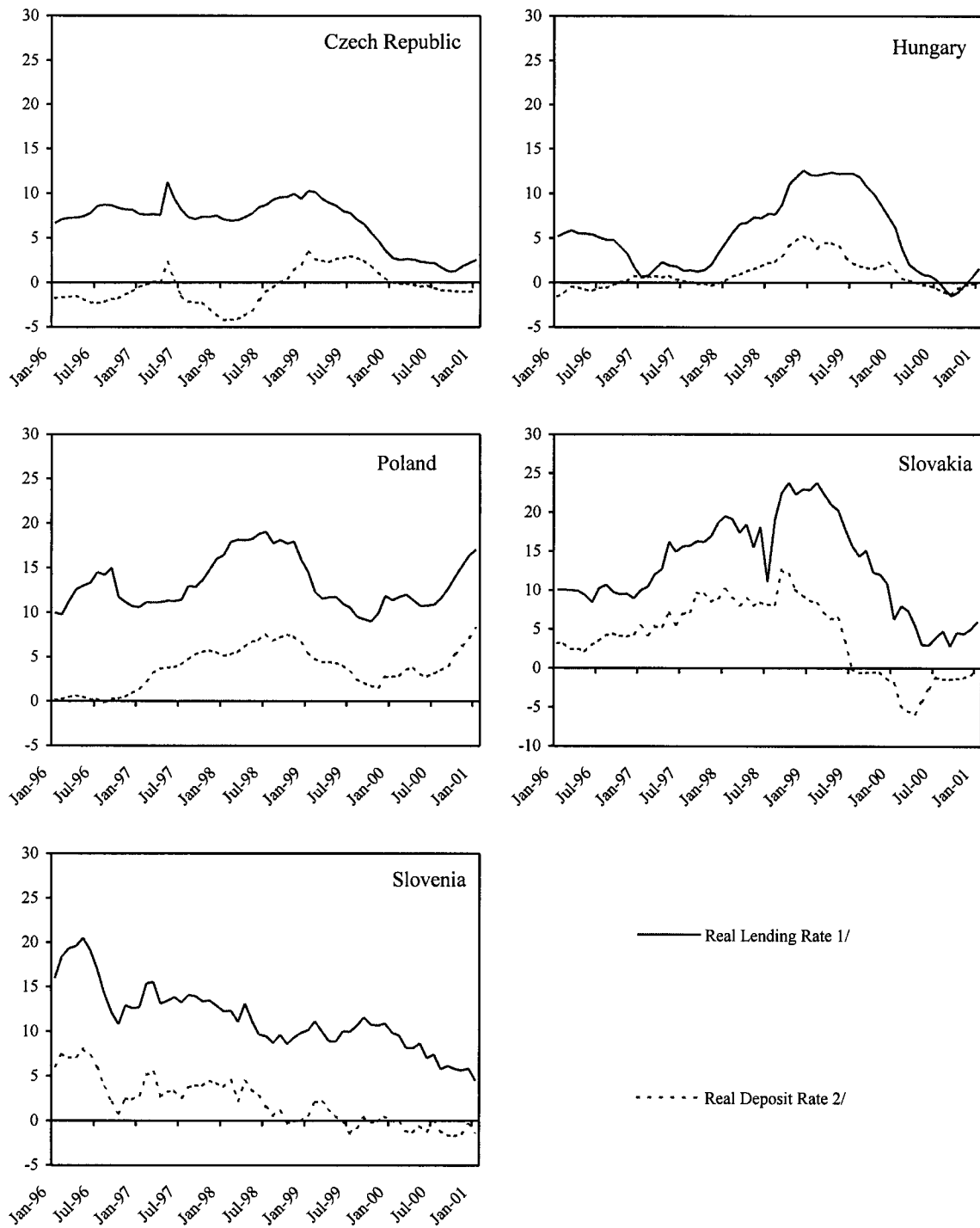
Most of the CEC5 have made considerable progress in improving the quality of banking portfolios (Table 8). In particular, both Hungary and Poland have seen sharp reductions in the share of classified loans, although Poland's share rose again in 2000. In contrast, the Czech and Slovak Republics, in the first ten years of transition, made little progress in addressing the issue of non-performing loans; a major effort is now underway to deal with these problems, with most of the non-performing loans having been transferred to consolidation banks, and the remaining issue being how to dispose of those assets given the weaknesses of insolvency regimes.

Table 8. Classified Loans/Assets as Share of Total Loans/Claims:

	1995	1996	1997	1998	1999	2000
Czech Republic	33	30	26.7	26.4	32.2	29.5
Hungary	20	12	8	10.3	8.9	8.0
Poland	21	14.1	10.5	10.8	13.1	14.6
Slovak Republic	40	30	31	36	30	22
Slovenia	5.9	6.3	5.5	5.4	5.2	5.2

Sources: National Banks, EBRD. The data are not comparable across countries due to definitional differences. For Poland, the ratio is given for the 15 largest banks, and for Slovenia, it is classified assets to total assets; using assets gives a downward bias relative to using loans. Data for 2000 is as of September for Hungary and June for Slovenia.

Figure 8. Real Deposit and Lending Rates, 1998-2001
(Annualized; In percent)



Source: IFS.

1/ Real Lending rates deflated by 3-month forward looking PPI.

2/ Real Deposit rates deflated by 3-month forward looking CPI.

Privatization Methods and Fiscal Costs of Bank Restructuring

Liberalization of the banking system in Eastern Europe at the beginning of the 1990s took place against the background of a contraction in real output, monetary instability, and attempts to put in place radically new institutional structures. The success of financial market reform was crucially dependent on progress in real sector adjustment, the establishment of market-based mechanisms of corporate control for both banks and enterprises, and the degree of disengagement of the government from the private sector. As a legacy of the period of directed lending, banks have inherited a large volume of non-performing loans, and their share increased in the first years of transition due to deterioration in the real sector and poor governance and supervision. All five countries went through a period of recapitalization of ailing banks in the first half of the 1990s. The incentive structures put in place explicitly or implicitly during this process to a large extent determined future developments in the sector and the magnitude of fiscal costs.

Czech Republic

The first round of government recapitalization of the Czech banks took place in 1991–1993, at which time the three big banks were partially privatized through participation in the voucher program. However, the government retained a controlling stake in most banks. Banks also participated on both sides of the voucher privatization since they managed the largest investment funds and therefore became indirect holders of their own shares and partial owners of many of their loss-making enterprise clients. As a result, soft lending continued and future rounds of recapitalization followed, as both banks and enterprises had little incentive to restructure and improve their operations.⁴⁶ The carved-out loans were managed by three centralized asset management agencies—Konsolidacni Banka (KoB), created in 1991, Ceska Inkasni, and Ceska Financni. The three state-owned agencies had some overlapping functions and, until recently, made little use of market mechanisms for asset recovery.⁴⁷ The history of repeated bail-outs and the very existence of the three agencies created a serious moral hazard problem. The resulting fiscal burden was higher than in any of the other Central European countries. Between 1991 and 1998, Tang et al (2000)

⁴⁶ It should be noted that bank ownership of the larger investment funds does not necessarily produce perverse incentives and is not unknown in other European countries (e.g., Germany). The problem in the Czech Republic was rather one of weak corporate governance, both of banks and the enterprise sector.

⁴⁷ See Tang, Zoli, and Klytchnikova (2000) for a discussion of some problems inherent in the use of centralized asset management agencies for bad assets work-outs. They estimate the recovery rate (loans recovered as a share of bad loans) to be between 3 and 5 percent in the Czech Republic. Part of the reason for the low recovery rate stems from the inadequate legal framework—for example, sale of real estate collateral is not allowed unless the debtor gives the creditor permission for the disposal.

estimated that the total cost of bank bail-outs exceeded 25 percent of 1998 GDP (Table 9), although the FSAP conducted in early 2001 indicated lower total costs (see below). Following the currency crisis in May 1997, the authorities introduced stricter loan classification and provisioning rules. Reported classified loans exceeded 30 percent of all loans in 1998 and 1999, with the large state-controlled banks having a disproportionately high share of non-performing loans. A more ambitious program of privatization of remaining state-owned banks was put in place. The government announced plans to sell controlling shares in the four largest banks—Komerční Banka, CSOB, Česká spořitelna, and IPB—to strategic investors. IPB, which was sold to Nomura Investments in 1998 without carving out the bad loans, continued to perform poorly and had to be returned to government control less than two years after privatization. The reprivatization of IPB was completed in mid-2000 with its sale to CSOP and involved both significant initial clean-up costs and future guarantees on its portfolio. Government guarantees, or ring-fencing arrangements were also part of the package for the recent sale of Česká spořitelna—the third of the four largest banks to be privatized. The privatization of CSOB, on the other hand, with its higher asset quality, went smoothly and was done without much state support. Komerční Banka, the largest bank, was still state-owned until June 2001, when the government agreed to sell its 60 percent stake to France's Societe Generale. Much of its loan portfolio was non-performing and significant further support (with 1½ percent of GDP in guarantees) could be required. As of December 2000, the quasi-fiscal debt on the books of KOB amounted to 9.6 percent of GDP. The projected exposure as of mid-2001, after the completion of the restructuring of all major banks, is equivalent to 21 percent of 2001 GDP. The actual fiscal cost may be lower or higher than that depending on the recovery rate and the uncertain costs of honoring the extended guarantees.

Most recently, the Czech Republic has chosen a multi-faceted approach to working out the bad debt problem. A revitalization agency was created to deal with the most sensitive and complex cases, primarily involving the debt of large industrial conglomerates. The government also decided to conduct a pilot sale of a pool of loans from KoB; the auction of about 10 percent of the portfolio in early 2001 yielded a recovery rate of 7 percent.

Foreign banks have been allowed to enter the country since 1992, but their share remained fairly small until recently. They have typically been profitable (with the notable exception of IPB), in part because they had no burden of old debts and were cherry-picking the most creditworthy customers. With the sale of the government's stake in Komerční Banka, the banking sector's privatisation has been completed; foreign strategic investors now control roughly 90 percent of assets of the banking sector.

Hungary

Negative shocks to the real sector and recognition of the inherited non-performing loans led to a significant deterioration in bank balance sheets in the first years of transition. The government intervened repeatedly through replacing bad loans with government bonds. However, interventions were not accompanied by efforts to reform the operations and management of the banks. In mid-1990, having learned the lessons from the ineffective

Table 9. Cost of Bank Restructuring for the Government and Central Bank, 1991–98
(Percent of GDP)

	1991	1992	1993	1994	1995	1996	1997	1998	Total Cost 1/
Czech Republic									
Government	14.9	1.8	3.6	1.0	0.3	0.1	0.7	1.0	20.6
Central Bank	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.9	4.8
Hungary									
Government	0.0	2.8	3.6	3.3	2.0	1.7	1.2	2.2	12.9
Central Bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland									
Government	7.4	0.4	1.8	1.5	0.6	0.4	0.3	0.2	8.2
Central Bank	NA	NA	NA	NA	NA	NA	NA	NA	0.5
Adjustment (-)	1.6	0.1	0.1	0.1	0.1	0.0	0.0	0.0	1.3
Government bonds placed in central bank	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Interest payments to central bank	0.1	0.1	0.1	0.1	0.1	0.04	0.03	0.02	

Source: Tang, Zoli, and Klytchnikova (2000)

1/ These total costs are the sum of the present value at end-1998 of annual costs during 1991–98, as a percentage of 1998 GDP. The estimates do not take into account cost recoveries.

interventions in the first years, the government started to impose much stricter conditions on bank bail-outs. Recapitalization followed by privatization (typically to strategic foreign investors) became the major form of bank resolution. The program was successful, and the newly privatized banks were, in almost all cases, well capitalized and well managed. However, some weaknesses of supervision were revealed in 1998 when two of the privatized banks—Postabank and Realbank—failed, although problems with their operations were known to supervisors well ahead of the failures.⁴⁸ The supervisors had restricted power to take actions in a timely manner, as intervention is authorized only on the basis of audited accounts, not on the basis of inspection only. Some of those weaknesses have been recognized, and efforts are being made to address them. The total fiscal cost of bank resolution amounted to about 13 percent of 1998 GDP (Table 9).

Presently Hungary has one of the most modern and competitive banking systems among the CEC5. The Russian crisis in 1998 provided a market test of the resilience of the system, and although certain vulnerabilities were revealed—with a few brokerage subsidiaries of foreign banks failing—the system withstood the shock well, and, in many cases, the foreign parents stepped in to provide additional capital where needed.

Poland

The high inflation in 1989-90 helped reduce the real value of the non-performing loans inherited from the socialist regime. A key turning point was the 1993 law on financial restructuring of banks and enterprises, which set the stage for improved financial results over the longer term. Between 1993 and 1996, the government recapitalized the ten larger state-owned banks by providing them with long-term treasury bonds. In exchange for the government support, banks had to get involved in enterprise restructuring—typically a debt for equity swap was implemented, with the result that banks became partial owners of companies. The central bank participated in the rehabilitation of a number of small private banks—some of them were restructured and then sold, others were taken over by other banks in exchange for long-term soft financing and/or a waiver of mandatory reserves. A third channel of support for ailing banks came from foreign banks applying for banking licenses in Poland between 1993 and 1997. In exchange for the license, they were required to spend certain amounts to support troubled banks (by either taking them over or providing financing at favorable terms). However, there was a commitment from the government that there will be no future rounds of recapitalization. The estimated fiscal cost of government intervention was the lowest among the five countries—about 8 percent of 1998 GDP (Table 9).

⁴⁸ After renationalizing Postabank in the wake of its collapse, the government had planned to reprivatize it after restructuring. In the event, the government granted exclusive negotiating rights to OTP, Hungary's largest domestically-owned bank. But OTP's offer for Postabank was deemed too low, so the government has now decided to keep it in state hands by selling it to the state-owned Hungarian Post.

Recovery on classified loans was also higher in Poland than in the other CEC5 since a decentralized approach was used in which banks kept ownership of the loans and any proceeds they could recover.⁴⁹ This way banks gained experience with the work-out of non-performing loans, and harder budget constraints were imposed on enterprises. Although soft lending to certain enterprises continued, some weak companies were liquidated, and the banks had incentives to adopt a more prudent portfolio strategy, investing heavily in government bonds and imposing more stringent credit rules for new clients. Vigorous economic growth, prudent leverage ratios, and government protection helped Polish banks to return to profitability. Emphasis on protecting domestic banks led to delays in lifting all legal and political restrictions to foreign participation until early 1998. In 1999, there was a sharp increase in foreign ownership—banks with majority foreign equity accounted for about 50 percent of assets, loans, and deposits at the end of 1999 compared to about 17 percent in 1998.⁵⁰ With competition increasing, banks have been subject to pressure to improve efficiency, increase the range of provided services, and expand availability of credit to the private sector.

Slovakia

The Czechoslovak government, in its first round of bank recapitalization in 1991–1992, spent over US\$1.2 billion (about 13 percent of 1992 GDP) on the three largest Slovak banks. Two of them participated in the coupon privatization program, and, just like their Czech counterparts, wound up with the government holding a controlling share. Proper restructuring of those three state-owned banks was not undertaken until 2000, and soft lending practices continued, resulting in non-performing loans exceeding half of total loans. When liquidity problems surfaced in 1997 with IRB, the third largest bank, the central bank provided a liquidity injection, and the large state insurance company had to acquire a controlling share and return the bank to solvency. Continued political interference in lending practices and ownership magnified the problem, creating large contingent liabilities for the government.

The same three state-owned banks—VUB, SLSP, and IRB—still held about half of all bank assets in 1999 and were dangerously undercapitalized, with two thirds of their loan portfolio in the classified categories. The seventeen smaller banks also had significant problems—four banks in this group failed in the ten months up to July 2000. Many banks did not meet the 8 percent minimum capital adequacy requirement (see Table 1 for average risk-weighted

⁴⁹ Poland's recovery scheme was also implemented early in the transition process before enterprises could potentially be stripped of their assets during privatization.

⁵⁰ The rapid rise in foreign ownership over the past few years triggered some backlash from the government, according to some observers. The government thwarted a hostile-takeover attempt by Deutsche Bank for Poland's Big Bank Gdanski, and an attempted merger of Bank Handlowy and BRE was derailed amid fears that Commerzbank, a 49 percent shareholder in BRE, was mounting a "Trojan horse attack" on the banking system.

capital/assets ratios). Risk management practices are very weak—for example, the three largest banks, and most smaller banks, do not comply with the single exposure limit to non-bank clients (25 percent of bank capital), and about half of the smaller banks do not comply with the credit exposure limit to a single bank customer (89 percent of bank capital).

In 1999, the government designed a comprehensive program for the restructuring of Slovakia's three largest state-owned banks, with the intention of bringing capital requirements to international standards, and then privatizing them.⁵¹ The restructuring involved both cash injections and a swap of part of the classified loans for claims on the consolidation agency, which were converted to government bonds in 2001. The first stage of the recapitalization involved a Sk18 billion direct equity infusion completed in December 1999. In the second stage, a Sk105 billion carve-out of bad loans was conducted in December 1999 and June 2000 (for a total cost of 12 percent of 2000 GDP). The classified loans were transferred to Konsolidacna Banka (KOB) and the newly established Slovak Consolidation Agency (SKA) and were replaced by state-guaranteed loans from the restructured banks to SKA and KOB. The privatization of the three state-owned banks to strategic foreign owners gained momentum in 2001. Erste Bank of Austria bought an 87 percent stake in SLSP in January. The second largest state bank, VUB, has been sold to Italy's IntesaBCI group, pending approval by the supervisory authorities. A 70 percent share in the third largest bank, IRB, was purchased in June by the largest Hungarian bank, OTP. At the same time, the Slovak government passed a package of laws aimed at improving banking supervision and bankruptcy procedures.

As in the Czech Republic, the Slovak government also conducted a pilot auction of a pool (about 10 percent) of the loan portfolio from KoB. In the first tranche early in 2001, the recovery rate was only 3.5 percent. The lower recovery rate than in the Czech Republic reflects, in part, a credit rating below investment grade and a lower quality package of loans, with many of the debtors already bankrupt (Business Central Europe, May 2001a). Plans currently call for a second tranche sale in December 2001, with additional auctions to take place in June and December 2002.

The share of foreign banks in 1999 was 30 percent of total assets. However, with the recent privatizations, the share of foreign ownership has increased to more than 80 percent.

Slovenia

At the time of independence from former Yugoslavia, the Slovene banking system lost some of its assets (foreign currency deposits placed at the former Yugoslav central bank were

⁵¹ The practice of collateral valuation at inflated book values—significantly exceeding the true market value—gave a distorted picture of the true size of recapitalization needed to reach the Basle capital requirements.

confiscated, and assets held in other federation republics' were frozen) and the sharp deterioration in economic conditions contributed to a plunge in the quality of banks' loan portfolios. As a result, non-performing loans reached 30 to 40 percent of all bank loans. The government nationalized three large banks that were close to bankruptcy and launched a rehabilitation plan. It was conducted by a centralized asset management agency, the Bank Rehabilitation Agency (BRA), and involved exchanging non-performing assets and contingent liabilities with bonds for an amount equivalent to 10 percent of Slovenia's 1993 GDP (DM 1.9 billion). The banks shared the cost of the bail-out by retaining about 15 percent of their bad loans. Between 1993 and 1996, the agency acquired additional classified assets for DM 1 billion, 32 percent of which were recovered. The success of the rehabilitation program, and the absence of major disruptions in the real sector helped the revival of banks—most of the banks registered positive profits within three years after recapitalization.

As a result of the renationalization, public sector ownership increased from about 12 percent to over 50 percent of banking assets. As of 2000, the first and second largest banks in the system remained government-owned. Although foreign banks are allowed to open subsidiaries in Slovenia, foreign presence has remained very low, perhaps due in part to the small size of the economy. Foreign banks were prohibited from establishing branches in Slovenia until recently, and since this restriction was relaxed in 1999 to meet EU requirements, very few banks have taken advantage of the opportunity due to the high cost of penetrating the concentrated retail market.

In April 1995, Slovenian banks entered into a binding arrangement according to which they all set deposit interest rates below an agreed maximum rate. The agreement had the blessing of the Bank of Slovenia, and resulted in limiting competition and reducing the cost of funds to the banks. The only way of increasing market share was through increases in equity, increases in international borrowing, or consolidation. As a result, the concentration in the banking system remained fairly high, with the largest bank accounting for a third of all assets (and further expanding), and the three largest banks for about half of all assets. Feyzioğlu (2000) confirms that the Slovenian banking sector has an oligopolistic structure and competition is limited.

Other consequences of the maximum deposit rates agreement were relatively low savings rates and high costs of capital for the enterprise sector. Slovenian banks have been consistently among the most profitable in the region since they maintained rather high interest rate margins (Figure 7). The interbank agreement formally expired in March 1999. Until the second half of 2000, the banks still followed the Bank Association recommendation for caps on deposit rates. Since then, however, banks' deposit rates have been differentiating.

The recent easing of capital controls, however, is likely to put pressure on the domestic banking sector, since large corporate customers can now borrow abroad, and conditions for the entry of foreign banks have been relaxed. With competition increasing, there are already pressures for consolidation. In the second half of 2001, three banks from the already existing Nova Ljubljanska Bnaka Group are expected to merge with the Nova Ljubljanska d.d.,

Ljubljana. Also, a consolidation of SKB Bank d.d. and Banque Societe Generale (already represented with 96 percent in the capital of SKB Bank d.d, Ljubljana) is underway. A new Banking Law intended to largely harmonize legislation with the EU requirements was approved by the Parliament in January 1999.

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