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### Working Paper Banking in transition countries

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John Bonin, Iftekhar Hasan and Paul Wachtel

Banking in transition countries



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## Banking in transition countries

## Abstract

Modern banking institutions were virtually non-existent in the planned economies of central Europe and the former Soviet Union. In the early transition period, banking sectors began to develop during several years of macroeconomic decline and turbulence accompanied by repeated bank crises. However, governments in many transition countries learned from these tumultuous experiences and eventually dealt successfully with the accumulated bad loans and lack of strong bank regulation. In addition, rapid progress in bank privatization and consolidation took place in the late 1990s and early 2000s, usually with the participation of foreign banks. By 2005, the banking sectors in many transition countries had developed sufficiently to provide a wide range of services with solid bank performance. Recently, banks have switched their focus from lending to enterprises in a somewhat underdeveloped institutional environment to new collateralized lending to households, which accounts for much of the recent growth of credit in many transition countries.

Keywords: transition banking, bank privatization, foreign banks, bank regulation, credit growth.

JEL codes: G21, P30, P34, P52

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## Banking in Transition Countries

## Tiivistelmä

Keski-Euroopan ja entisen Neuvostoliiton suunnitelmatalouksissa ei ollut nykyaikaisia pankkeja. Järjestelmämuutoksen alettua pankkijärjestelmät alkoivat kehittyä, mutta kehitystä häiritsivät bruttokansantuotteen romahdus ja useat pankkikriisit. Useimmat siirtymätalousmaiden hallitukset kuitenkin ottivat oppia näistä kokemuksista, mikä auttoi ratkaisemaan suuriin luottotappioihin liittyvät ongelmat. Lisäksi pankkijärjestelmän valvontaa pystyttiin vahvistamaan. Pankkien yksityistäminen ja pankkisektorin konsolidaatio etenivät nopeasti 1990-luvun lopulla ja 2000-luvun alussa. Tässä yhteydessä monet ulkomaiset pankit saivat myös jalansijaa siirtymätalouksien pankkimarkkinoilla. Vuoteen 2005 mennessä useimpien siirtymätalouksien pankkijärjestelmät olivat jo tarpeeksi kehittyneitä tarjotakseen laajan valikoiman pankkipalveluita asiakkailleen. Viime vuosina pankit ovat siirtyneet yritysrahoituksesta enemmän kotitalouksille myönnettäviin vakuudellisiin lainoihin, mikä selittää suuren osan nopeasta luotonannon kasvusta.

Asiasanat: Pankkitoiminta siirtymätalouksissa, pankkien yksityistäminen, ulkomaiset pankit, pankkivalvonta, luotonannon kasvu.

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## 1 Introduction: the distinctive character of banking in transition countries

Banking in the transition countries is particularly interesting because banks played no economic role in planned Soviet-style economies while financial sectors in most transition countries are now dominated by banks rather than equity markets. Hence, our first topic in this overview is the emergence of banking sectors from the planned economies. The birthing process was hardly smooth; it took place amidst massive macroeconomic collapse and considerable economic uncertainty. Not surprisingly, these nascent banking sectors experienced crises ranging from serious bad loan problems to total collapse. The next section deals with the responses to the bad loan problem, the process of bank privatization, and the development of the necessary regulatory framework. The following section characterizes the structure of the more mature banking sectors in the leading transition countries, with particular attention paid to the dominant role of foreign banks. Banking sectors in many transition economies have developed remarkably quickly and now look little different from their counterparts in other emerging market economies except for the distinctive high percentage of foreign ownership. Nevertheless, these banking sectors are not immune to problems and do not always provide sufficient impetus for economic development, which is problematic because of the bank-dominated financial sectors of most transition economies. Our last section considers the problems of, and prospects, for banks fulfilling this role in the European transition countries. To illustrate the commonalities and differences in the transition experience, we have selected ten representative countries from three regions Central Eastern Europe (CEE), South Eastern Europe (SEE), and the former Soviet Union. We divide the countries into two groups. The Czech Republic, Hungary, Poland and Slovakia (CEE) along with Russia, as the largest and most important of the former Soviet republics, make up the first group; Bulgaria, Croatia, Romania, Serbia, and Slovenia (SEE) constitute the second group.

## 2 The emergence of banking institutions in the early stages of transition

Banking sectors in the European transition economies were relatively underdeveloped compared with the real economies in these countries due mainly to the legacies of the pretransition centrally planned economy. As examples of real sector development, Czechoslovakia had a relatively modern automobile industry, Hungary produced buses, and Bulgaria made computers and software for use within the Soviet bloc. However, in the planning framework, financial intermediation between savers and borrowers was internalized wholly within the state banking apparatus. Capital was allocated through a system of directed credits to state-owned enterprises (SOEs) for both investment needs and budget allocations for the working capital necessary to meet the output plan. Credit evaluation and risk management played no role in lending decisions. The national monobank served only as an accounting clearing house for inter-enterprise transactions. Cash issuances by enterprises were based on planned wage bills that were calibrated to the expected aggregate value of consumer goods sold to households at administered prices. Money was entirely passive in that it was used solely as a unit of account in enterprise transactions and as a medium of exchange between households and the state distribution sector. Household savings, oftentimes the result of forced accumulation of monetary balances due to the unavailability of desirable consumer goods to purchase, were collected by a state savings bank that operated an extensive branch network throughout the country.

Pre-transition banking sectors typically included a foreign trade bank that handled all foreign currency transactions to isolate these from the domestic financial system and often contained separate specialty banks to oversee the financing of the agricultural and construction sectors. In this environment, banking was segmented along functional lines and credit allocation was entirely subservient to the plan. Hence, structural segmentation, state control of banking activities, and high concentration ratios are the major legacies inherited from the planning period by the banking sectors in the European transition economies. Despite these commonalities, important differences among the experiences of countries both prior to and during the transition period yield unique characteristics. As an example, we begin with a brief discussion of banking in the SEE transition countries that were former republics of Yugoslavia because their sectors inherited somewhat special legacies. We continue with a consideration of the initial developments in banking during the first half decade of the transition followed by a more detailed look at several European transition countries. This section concludes with a discussion of foreign bank participation in the early transition years.

In the 1950s, Yugoslavia established a two-tier banking system with a traditional central bank located in Belgrade, the National Bank of Yugoslavia (NBY), and republiclevel commercial banks. Banks were owned collectively, as were all enterprises under the Yugoslavian system of self-management. Because Yugoslavia was a small, open economy, commercial banks made a significant number of loans denominated in foreign currency throughout the 1980s. However, these republic-level banks were required to remit most of their foreign exchange deposits to the NBY in exchange for credits in dinars. Hence, the balance sheets of republic-level banks exhibited a serious currency mismatch between assets and liabilities by the late 1980s. Upon the secession of Croatia and Slovenia in 1991, the NBY froze the forex deposits of the republic banks in these two countries creating large holes in their balance sheets. Although the legacies of segmentation and stateownership found in the banking sectors of CEE transition economies were not initially present in Croatia and Slovenia, high concentration ratios and a substantial accumulation of problem loans are important legacies from the Yugoslavian past. Government rehabilitation policies that were designed to deal with bank insolvency led to the nationalization of most banks; hence, state-owned banks were created at the beginning of the transition in Slovenia and Croatia.

The first step in banking sector reform for most transition economies involved the creation of a two-tier system with commercial activities carved out of the portfolio of the national monobank. The top tier consists of a traditional central bank that is charged with pursuing monetary policy, including exchange rate policy, and is given responsibility for supervising and monitoring the nascent banking sector. The second tier consists of the newly created state-owned commercial banks (SOCBs), the state-owned specialty banks, which themselves morphed into SOCBs, any operating foreign and joint-venture banks, and all private domestic banks, including those that entered after the political change. As a rule, lax entry requirements led to the creation of many new private banks, some of which were of dubious quality, or even fraudulent, and virtually all of which were severely undercapitalized. In the former republics of Yugoslavia, this entry occurred well prior to

transition, in the late 1970s, when the establishment of many internal company banks led to excessive numbers of small unhealthy and undercapitalized banks. Hence, the seeds for a banking crisis were planted at the beginning of the transition, or even before, in virtually all transition countries due partly to the adoption of lax entry requirements with the intent of fostering competition for state-owned banks in highly segmented banking sectors. Moreover, the nascent regulatory systems were overwhelmed by the mismatch between their capabilities, which were severely restricted by a lack of human capital, and their mandates provided by quickly adopted standard financial rules and regulations, especially given the inherited loan portfolios of the SOCBs.

Although each country's financial restructuring program involved hiving off the commercial bank portfolio of the national bank to establish the two-tier system, different approaches were taken toward the creation of SOCBs, all of which were established initially as wholly state-owned joint-stock entities. In Hungary, the commercial portfolio was divided along sectoral lines, e.g., industry, agriculture, and infrastructure plus the nascent small business sector, to create three SOCBs. In Poland, the commercial portfolio was divided along regional lines to create nine SOCBs from regional offices of the national monobank. The commercial portfolio of the Czechoslovak national monobank was separated into two parts regionally to create two SOCBs, a Czech and a Slovak one. After the Velvet Divorce, each new country had a single large SOCB. Similarly, in Romania, only one SOCB was created from the entire commercial portfolio of the national monobank. All CEE countries and Russia had specialty banks that obtained universal banking licenses and, thus, became SOCBs after the transition.

At the opposite extreme, full separation of all commercial activities from the Bulgarian national bank's balance sheet occurred in 1990 when each of its 145 branch offices was granted a universal banking license that allowed it to pursue commercial business either as an individual entity or in combination with other branches. Again, the intent of this policy was to foster competition. As a result, 59 SOCBs were formed and, in 1992, the Bank Consolidation Company was established to oversee and orchestrate the eventual consolidation of the Bulgarian banking sector by the government. By 1995, 41 banks were operating in Bulgaria and the two largest SOCBs were the former state foreign trade bank and the former state savings bank. In Russia, then the Soviet Union, the two-tier banking system was established in 1987 with the separation of all commercial bank functions from the national monobank and the creation of sectoral banks by enterprises or former branch ministries. As in Bulgaria, branches of the national bank became independent entities and then regrouped into larger banks. In addition, new entry into Russian banking was dramatic. By 1995, about 2,300 banks were licensed and operating in Russia. Most of the newly created banks were small and poorly capitalized. Some of them were merely internal or house banks owned by industrial enterprises. However, by 1996, six of the *de novo* domestic private banks had grown sufficiently to be among the ten largest banks in Russia, a group that included the former state foreign trade bank and the former state savings bank as the two largest SOCBs (Abarbanell and Meyendorff, 1997).

Policies toward foreign bank participation, both in establishing subsidiaries and in purchasing equity stakes in SOCBs, differed considerably across the transition countries. In some countries, policies that invited entry, e.g., providing tax holidays, encouraged Greenfield foreign operations. In others, licensing was restrictive and foreign banks were limited to taking minority stakes in SOCBs or to participating in the resuscitation of ailing smaller domestic banks. Foreign participation in the banking sector was viewed initially by most governments as a vehicle for importing banking expertise and training to augment the scarce domestic human capital in the sector. Even before the political change, the Hungarian government pursued a liberal licensing policy toward foreign financial institutions. The Central-European International Bank Ltd. was founded as an off-shore joint-venture bank by six foreign banks and the Hungarian National Bank in 1979; in 1986, Citibank Budapest Ltd. began operations as a foreign-majority-owned, joint-venture bank. By 1995, foreign financial institutions held almost 42% of banking assets in Hungary due in large part to the privatization of two SOCBS to foreign owners. The next highest percentage of foreign ownership by the middle of the first decade of transition is found in Slovakia, a country that opened up to foreign bank penetration rapidly after the Velvet Divorce. In contrast, the Czech Republic and Poland restricted new licenses for foreign Greenfield operations and invited foreign owners to take only minority equity positions in existing Czech and Polish banks. These governments followed a more protectionist strategy, taking an infant industry approach according to which domestic banks are nurtured to become strong enough to fend off foreign competition when it arrives. By 1995, only about 16%

and 4% of the banking assets in the Czech Republic and Poland, respectively, were owned by foreign financial institutions. As Table 1 indicates, no other major transition country had more than 4% of its banking assets held by foreign institutions by the end of 1995.

See <u>Table1</u> below

For the most part, governments in transition countries succeeded in establishing the foundations for building commercial banking sectors early in the transition period. However, developing efficient banking sectors required the completion of three interrelated tasks namely, the resolution of non-performing loans, the privatization of the SOCBs, and the establishment of effective regulatory institutions. We discuss the progress made on these fronts during the first decade of transition in the next section.

## 3 The development of modern banking sectors during the first decade of transition

As described in the previous section, the typical banking sector in a transition economy consisted initially of state-owned banks that were carved out of the planned economy structure along with newly established small private domestic banks. Some countries began to privatize the large SOCBs quickly and also opened up to foreign bank entry early in the transition. However, the creation of market-based legislation and institutions did not lead automatically to good banking practices. To the contrary, the SOCBs and the newly created banks often did not behave like proper commercial banks due to distorted incentives.

First, the SOCBs continued to maintain banking relationships with their large clients, i.e., state owned enterprises (SOEs). Such lending was either politically mandated or simply the result of long-standing relationships between clients having little experience in choosing viable projects and banks unable to evaluate the risk of loans. Second, in many countries, *de novo* banks were created without adequate regulatory oversight. As a result, some *de novo* banks were used to channel loans improperly to their owners, many of which were enterprises so that these banks acted as pocket banks for their owners. Entry requirements for *de novo* domestic banks were initially very lenient because policy was based on the mistaken notion that competition would be enhanced by easy entry. The proli-

feration of new, often undercapitalized, banks placed an added burden on an underdeveloped regulatory structure. Although most countries adopted modern banking and regulatory legislation immediately, effective supervision did not follow automatically due partially to the scarcity of human capital.

Not surprisingly, bad loans were a serious problem for all transition economies due partly to the inherited legacies but also to continuing lending practices. The ratio of nonperforming loans to total loans in 1995 averaged 25.9% in the four CEE countries (Poland, Hungary, Czech Republic and Slovenia, see Table 1). For the four major SEE countries (Slovenia, Croatia, Romania and Bulgaria) the average in 1995 was 18.8% of the total loans on the books. However, information about the performance of borrowers in a rapidly changing environment is revealed only slowly under the best of circumstances so that these measures are only illustrative of the serious overall problem of bad loans. Most governments responded to failing banks with efforts to save them from closure by recapitalization and the removal of bad loans from their balance sheets. For small insolvent banks, mergers with state-owned banks were used commonly. Repeated problems were inevitable because recapitalizations addressed only the stock of existing bad loans.

In the absence of independent market-oriented banking institutions, the flow of new bad loans continued to accumulate. Regulators did not have proper incentives, the requisite expertise, or sufficient independence to cope with this problem. To some extent the bad loan problem was unavoidable because transition recessions and the dissolution of trading relationships within the Soviet bloc generated severe real sector shocks that were mirrored on the balance sheets of the banks. Nonetheless, even though the roots of this problem were difficult to resolve, the average ratios of non-performing loans to total loans had fallen to 6.4% for the four CEE countries and 5.9% for the four major SEE countries by 2005. To examine the resolution of the bad loans problem in more detail, we consider several country experiences.

The Hungarian government began to clean up the portfolios of its banks in the early 1990s when it enacted strong bankruptcy laws, new accounting regulations, and a new banking law. At the time, the Hungarian government provided guarantees to cover a portion of the debts of SOEs. However, firms continued to accumulate debts in arrears so that a second policy to address bad loans was introduced in 1992. The government replaced non-performing loans on bank balance sheets with government securities and transferred

these assets to a government collection agency. Further recapitalizations introduced an element of moral hazard into the banking relationship. The situation changed when the authorities began to pursue an aggressive strategy of selling controlling stakes of the large SOCBs to foreign investors, signaling a credible commitment to no further bailouts. However, such a privatization strategy was not without difficulties as exemplified by an early transaction. The sale of a controlling stake in Budapest Bank, the third largest SOCB in Hungary, to GE Capital in 1995 was controversial because the buyer was given the right to off load bad loans that were uncovered after the sale. Nonetheless, the banking expertise and discipline imposed by foreign owners of the three major SOCBs in Hungary led to rapid improvements in the banking environment. By the end of the 1990s, the Hungarian banking sector was well capitalized, loan quality had improved, claims on the state were a declining share of bank assets, bank staffing declined, bank margins narrowed and, incidentally, bank regulation improved markedly (OECD, 1999; Hasan and Marton, 2003).

The government in the Czech Republic developed an explicit and detailed plan for privatization of most state-owned institutions, including SOCBs, using vouchers rather than direct sales. Initially in 1991, bad loans were removed from bank balance sheets and replaced with government bonds while the bad assets were taken over by a newly established hospital bank, Konsolidacni Bank. These resulting recapitalized large SOCBs were privatized by placing a minority stake of bank stock in the voucher program. However, non-state ownership of these partially privatized banks was dispersed with the largest stakes held by bank-related investment funds. Furthermore, the bank-related funds held ownership interests in their unrestructured industrial clients so that the large banks continued to lend to SOEs, which resulted in more bad loans. Hence, the key problems in the Czech Republic were interconnectedness between banks and their clients resulting from voucher privatization and the lack of independence of bank governance from a state holding controlling stakes in the banks. As a result, the resolution of bad loans required several rounds of recapitalization by the government, which increased the state's stake further and necessitated a second round of privatization. In this final round, foreign investors were allowed to take majority stakes in the large Czech banks and bank behavior changed accordingly. The continuing efforts to restructure the Czech banks over the first decade of transition were expensive with total costs amounting to more than 25% of 1998 GDP (Bonin and Wachtel, 2004).

In other countries, banking crises reached systemic proportions and severely impeded the overall transition to a market economy. In Bulgaria, weak bank governance and poor regulation of the many small SOCBs created from the commercial portfolio of the original mono bank resulted in considerable asset stripping and insider lending. In addition, the macroeconomic shock of transition in Bulgaria was severe; in 1996, real GDP declined by 10%. Repeated rounds of recapitalization of banks resulted in a total cost to the government at 42% of 1998 GDP, which made the Bulgarian banking crises one of the most costly of all transition countries. A currency board introduced in 1997 restored macroeconomic stability in Bulgaria and the banking system was rationalized quickly thereafter. In Romania, the dominant SOCBs accumulated large portfolios of bad loans and also required massive capital injections from the government. Non-performing loans peaked at 58% in 1998. In both of these SEE countries, severe macroeconomic shocks led to serious banking and sustainable economic growth resumed only after these crises were resolved.

After a decade and a half of transition, privatization of SOCBs is largely completed in CEE and SEE, although the situation is different in many countries emerging from the former Soviet Union. As the Czech and Hungarian experiences indicate, the privatization process differed considerably across the European transition countries. In Poland, the first bank privatizations utilized a combination of domestic initial public offerings (IPOs) and tenders to sell non-majority stakes to a strategic foreign investor. The Polish stock market was not very large; trading was not very extensive and bank stocks were the largest issues traded. Thus, bank IPOs were difficult to price and accusations of market manipulation lead to the political defeat of one of the early governments. The new government developed a bank consolidation program as an alternative approach to privatization and attempted to force mergers and acquisitions of banks but not without controversy. In one case, the attempt to include an already partially privatized bank (BPH) in the program caused a public uproar. Delays in privatization followed; almost a quarter of Polish bank assets remained in state hands as late as 2005. The two large banks that were still stateowned in that year, PKO (zloty savings bank) and BGZ (agricultural bank), had not participated in either consolidation or the privatization program.

Most of the later bank privatization programs in Romania, Bulgaria, Croatia, and the Czech Republic involved negotiated deals between the government and a single foreign bank, sometimes after a tender. In most transition countries, state ownership basically disappeared over a five-year period around the turn of the century. For the four CEE countries, average assets in state-owned banks were 27.1% of the total in 2000 and 5.9% five years later. For the four SEE countries, the average was 45.6% in 2000 and 8.0% in 2005. However, both the method, e.g., attracting a strategic foreign investor, and the timing of privatization matter to bank performance. Even after considering selection effects, Bonin, Hasan, and Wachtel (2005b) conclude that voucher-privatized and late-privatized banks lagged in performance and efficiency relative to non-voucher and early-privatized banks

The surprising aspect of banking in the transition countries is not the depth of the crises after the end of communism but the speed with which financial restructuring took place subsequently. The rapid changes in the last decade can be attributed to two related phenomenon. First, the desire of European transition countries to qualify for EU membership was a strong force for reform, not only in the eight original transition accession countries but also in the later joiners and in countries still hoping to join. Thus, improvements in bank regulation and investments in the banking sector took place rapidly. Second, the prospect of EU membership (and ultimately the adoption of the Euro) made these underserviced banking markets attractive to European banks once macroeconomic stability was attained and reasonable regulations were in place. However, the governments in many transition countries were reluctant to allow foreign ownership for all the common arguments that attempt to show that foreign direct investment (FDI) in banking, unlike all other FDI, is dangerous. The usual claims that foreign-owned banks would facilitate capital flight and fail to provide credit for local economic development were made. As noted earlier, Hungary was the exception in that foreign banks were allowed to operate even before the transition and SOCBs were sold to foreign investors early in the transition. However, other transition governments took longer to realize that privatization to foreign buyers is not only a source of revenue but also a means of improving bank performance to support intermediation in the new market economy.

The proportion of assets in foreign-owned banks rose from virtually zero in the early 1990s to more than half in most countries a decade later. By 2005, the average share of assets in foreign-owned banks was 84.5% in the four CEE countries and 61.9% in the four SEE counties. In most cases, privatization by itself was not sufficient to improve bank performance; rather joint ownership with foreign strategic investors was the crucial determinant in behavioral change (Bonin, Hasan, and Wachtel, 2005a). The FSU countries are an

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exception; foreign banks are not a major factor in Russia or in any other former Soviet republic, except for the Baltic countries. To some extent, this outcome follows from banking regulations that inhibit foreign entry and from reluctance on the part of many governments to accept foreign dominance of the banking sector. For example, although Russia has relaxed its limits on the overall size of the foreign banking sector, it sets minimums for the number of Russian employees and board members in foreign banks. In addition, unstable supervisory environments and weak legal protection have deterred foreign interest in such investments.

The characteristics of banking in Russia differ considerably from patterns found in CEE and SEE. In addition to three dominant SOCBs, Russia has a large number of mostly very small private commercial banks and many pocket banks having industrial owners. Some of these banks were involved in speculative activity and many were insolvent when the Russian government defaulted on its debt in 1998. At the time, weak bankruptcy laws and poor regulation made it difficult to close institutions so that the managers or owners were able to strip banks of any remaining good assets. The severe crisis in the banking sector did not have too large an impact on the real economy because the credit to GDP ratio was considerably lower in Russia than such ratios in the CEE transition countries and cash was used widely for transactions throughout the FSU. Exacerbating the economic crisis in 1998 was uncertainty about the economic and legal environment.

Since the crisis, the Russian banking sector has shown some signs of improvement. Although more than 1,200 banks still operate, this number is roughly half of the total in 1995 (Table 1) due to consolidations and closures. In addition, the influence of foreign banks is increasing as three foreign-controlled banks (including Citibank) are among the 15 largest banks in Russia. Moreover, financial intermediation has increased as the bank asset to GDP ratio is double its level before 1998, though still lower than in the European transition countries. Nonetheless, some of the private banks still operate as private financial services institutions for their energy-sector owners and provide little overall intermediation. The banking system is still fragmented with many small and poorly capitalized institutions characterized by poor governance, inadequate risk management and high operating costs. Although deposits have increased, household savings are still largely held in the state savings bank, Sberbank, or in cash (Steinherr, 2006). Sberbank and Vneshtorgbank, the former foreign trade bank, have begun to provide credit to the private sector even though the government has no current plans to privatize either of these SOCBs. Sberbank is the dominant bank in Russia holding more than 25% of all banking assets at the end of 2005. The next two largest banks in Russia were also SOCBs; Vneshtorgbank had about 7% market share and Gazprombank had 4.5% market share. At that time, no other Russian bank had a market share above 2.4% (Barisitz, 2007, Table 5.20, p. 130).

In all countries, successful restructuring and privatization in the financial sector depend on the establishment of an effective institutional and legislative infrastructure to support proper regulation. In addition to developing an arms-length legislative framework for banking regulation and supervision, bankruptcy laws and international accounting standards are required to change the behavior of economic agents who are accustomed to operating in a non-market environment. Moreover, training of bank supervisors and other types of professional human capital development are needed to promote effective implementation of the legislation. Although the basic legal framework for modern banking was established early in the transition, additional related elements that are crucial for its effective functioning took more time to develop. In particular, a modern banking sector needs a functioning credit information system, which includes a credit registry and ratings agencies, and a reliably functioning court system to mediate contract disputes.

Hungary took the lead among the transition countries in promoting such institutional development with a legislative shock therapy program in 1992. In January, the government promulgated new, modern banking legislation, instituted international accounting standards, and revised its bankruptcy law to include a draconian trigger that resulted in a large number of company insolvencies. In addition, Poland developed a computersupported system of bank oversight at the beginning of the transition and had in place rather stringent bankruptcy legislation for private firms even before the political change. Other countries took considerably longer to address these problems and, as a consequence, bank restructuring and privatization took longer to complete.

## 4 The maturation of transition banking sectors

The distinctive characteristic of the rationalization of banking sectors discussed in virtually all transition countries is the rapid emergence of foreign-dominated ownership. As Table 2 reports, the asset share of foreign-owned banks was less than 50% in 1999 in all ten of the countries listed, except for Hungary and Poland. By 2005, Table 3 indicates that only the Russian and Slovenian banking sectors exhibited such a small level of foreign participation. The asset share of foreign-owned banks in CEE and SEE countries is now among the highest of any banking sector in the world with Croatia, the Czech Republic, and Slovakia recording percentages above 90% and Hungary not far behind at 84% in 1995. In addition, Serbian banking experienced a remarkable transformation over a five-year period; foreign ownership increased from a negligible amount in 2000 (0.5%) to 66% in 2005. Russia and Slovenia remain outliers on this measure with foreign participation at only about 11% and 23%, respectively, in 2005. However, the asset share of state-owned banks was lower in Slovenia at 12% than in Russia (38%), Serbia (24%), and Poland (21.5%). Hence, Slovenia appears to be an anomaly among European transition economies with respect to the ownership structure of its banking sector.

### See Table2 and Table3 below

Regarding the pace of restructuring, the results from 1995 to 1999 are mixed. The EBRD index of banking reform increased for six of the countries but it actually decreased for Russia and Romania with no change in the index recorded for Serbia and Slovakia (Table 2). By 1999, only Hungary had a rating of 4.0 on a scale from 1.0 to 4+, where the highest score reflects full convergence to performance norms and regulation standards of advanced industrial economies. By 2005, the Czech Republic and Croatia joined Hungary with scores of 4.0 while six of the seven other countries recorded an increase in the index from 1999 (Table 3). Hence, banking sectors in most transition countries have reached, or are rapidly approaching, their counterparts in developed market economies with one major difference, namely, an extremely high foreign bank presence. Russia and Slovenia are the outliers on both counts.

Based on the legacy of segmented sectors and exacerbated by consolidation programs, banking concentration is high in most transition countries. In 2005, the three-firm concentration ratio ranged from a high of over 65% in the Czech Republic to about 33% in Bulgaria, with six of the ten countries listed in Table 3 having a ratio above 40%. Moreover, the five-firm concentration ratio in all SEE countries was 50% or above. Only Poland and Russia had five-firm ratios below this threshold. However, high concentration ratios have not prevented competition from developing in many of these banking sectors. As Table 4 indicates, interest rate spreads declined considerably since the beginning of the transition, which may be attributable more to reduced risk in the macroeconomic environment than to increased banking competition.

### See Table4 below

Considerable differences exist among countries with respect to interest rate spreads. In 2005, Hungary had the lowest spread while Romania and Serbia still had spreads above 10%. Of these ten countries, only Hungary, Slovakia, and Slovenia had average spreads from 2001 to 2005 under 5%, which we take to indicate a reasonably competitive banking sector. Interestingly, the Czech Republic, Croatia, and Poland had lower average inflation rates during this period but higher interest rate spreads. By 2005, Bulgaria joined the countries having interest rate spreads below 5%. Of these four countries, Croatia and Slovenia have relatively high three-firm concentration ratios at over 50%. Regarding foreign participation in the banking sector, Slovenia is the outlier with less than 23% of assets in foreign-owned banks in 1995. Moreover, the Czech Republic and Poland have high percentages of banking assets in foreign banks and low inflation rates but relatively high interest rate spreads. Thus, the experiences of the European transition countries indicate that neither high foreign participation in the banking sector nor low inflation is a sufficient condition for competitive interest rate spreads.

The ratio of bank deposits to GDP is a measure of both banking sector development and public confidence in the banking system. By comparing the entries in Tables 2 and 3, we find considerable differences across countries in this ratio and in its changes from 1999 to 2005. In the Czech Republic and Slovakia, the ratio of bank deposits to GDP was fairly high in 2005 although it had decreased considerably since 1999, which may suggest some decline in public confidence. In Croatia, the ratio of bank deposits to GDP increased dramatically to the highest of any of the ten countries by 2004, which reflects both a credit boom and increased confidence in banks. The 2005 ratios for Hungary, Romania, and Russia show modest growth of around five percentage points from 1999 while Poland experienced virtually no change in this ratio. Both Bulgaria and Serbia experienced considera-

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ble increases in deposits to GDP from 1999 to 2005. Public confidence in banks is important to a well-functioning banking system in any transition economy. Based on the ratio of deposits to GDP, the evidence is mixed but the laggards are improving rapidly.

According to the EBRD Transition Report of 2006, the banking sectors of transition economies have exhibited considerable growth and diversification since 2000, although further progress in financial deepening is considered to be both feasible and desirable. On the lending side, four of the ten transition countries listed in Tables 2 and 3 experienced increases in the ratio of loans to GDP of more than 20% from 1999 to 2005. Ratios in 2005 (or 2004 when indicated) in Slovenia and Croatia were around 56%, which equaled the worldwide average of domestic credit to the private sector as a percent of GDP. Hungary at about 45% and Bulgaria at about 35% have the next highest ratios. Of the other six transition countries, only Slovakia had a ratio of loans to GDP above 30% by 2005 with the other five between 21% (Romania) and 28% (Czech Republic and Poland). As a further basis for comparison, the EU average for this measure of financial depth was 86% in 2005. Hence, even the four leading transition countries are well below the EU average in providing credit to the private sector.

In the same document, the EBRD reports that the share of loans to households increased sharply in CEE and SEE countries with much of the increase due to mortgage lending. By 2005, domestic credit to the household sector as a percent of GDP ranged from a high of over 34% in Croatia to less than 10% in Romania, Russia, and Serbia (Table 3). Retail credit accounted for well over half of all loans in Croatia and around half of the total in the Czech Republic and Poland. Mortgage lending as a percent of GDP in 2005 ranged from highs of around 12% in Croatia and Hungary to moderate levels of about 8% in the Czech Republic and around 5% in Bulgaria and Poland to virtually nothing in Romania and Russia (Table 3). Non-mortgage household credit is particularly large in Croatia (22.3% of GDP). To what extent the recent explosion of retail credit in some transition countries will lead to instability in the banking sector is yet to be determined but it will be influenced considerably by the use to which credit has been put and the possibility of real estate bubbles occurring.

Household credit, in particular mortgage lending, depends on well-defined property rights over collateral and an effective legislative infrastructure to facilitate the collection of collateral in case of default. Hence, the dramatic growth of both types of lending in many

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transition countries reflects significant improvements in supportive institutions. Nonetheless, differences in retail lending ratios across these ten countries are large. Consistent with the other measures of financial intermediation, retail credit data indicate considerable progress in banking in Bulgaria, Croatia, and Hungary. More sluggish development in the Czech Republic, Slovakia, and Poland may be inferred from the intermediation data. Romania, Russia, and Serbia appear to be either laggards or late starters in all areas of banking sector reform. Finally, Slovenia is an anomaly in that its ratio of loans to GDP is near the top of all ten countries in 2005 but retail credit, and especially mortgage lending, lag well behind these activities in many other countries.

## 5 Evaluation of transition banking and prospects for the future

Although banks in the transition countries have made rapid strides in improving performance and services since the early 1990s, the banking sectors in the European transition economies still do not posses the financial depth of their EU counterparts nor are banking services as well developed in these countries. Nonetheless, with few exceptions (primarily in the FSU), the transition in banking is complete. State mono banking structures have been replaced by privately owned, market-oriented, well-capitalized banking institutions that are independent from the government and from state-owned clients. The legal environment has improved with respect to bankruptcy laws, collateral laws, and confidence in the application of the law. Furthermore, banking regulatory and supervisory capabilities have developed considerably. Thus, any evaluation of the structure of banking in transition countries must be positive. However, banking conduct is a somewhat different matter; any evaluation of what banks are doing and how they are contributing to economic performance in the transition economies must be more nuanced.

The ratio of bank credit to GDP depends on the financial structure of a country; it will be larger in bank-centered financial systems than in countries having more-developed capital markets. For the transition countries, the financial depth ratio is well below industrial country levels, although the numbers are not unusual for countries having similar GDP levels. In some CEE countries, this ratio has fallen as bad loans have been removed from balance sheets while GDP has grown. Deepening has occurred in the major FSU countries with the achievement of financial stability and the resulting return of public confidence in banks. Financial deepening or increasing intermediation has been shown to be associated with more rapid economic growth in cross-country studies (Wachtel, 2001). Thus, the increased credit ratios in the SEE should be viewed as a positive development even though they have been met with concern in some countries, i.e., in Croatia where the ratio went from 35.7 to 55.8 in five years as Tables 2 and 3 indicate and in Bulgaria where it increased from 10.7 to 34.9 over the same period. The main concern is that credit deepening has come in the form of rapid growth in mortgage lending and other forms of consumer credit.

Lending to households has grown rapidly in many countries. In 2005, it was more than one-half of total bank lending in Croatia and in the Czech Republic. Despite rapid increases in household credit, ratios of household credit to GDP are still not large by developed country standards. However, the ratio of household credit to the financial wealth of the consumer sector is high in Croatia and elsewhere suggesting some vulnerability of consumers to economic shocks (EBRD Transition Report, 2006). Although rapid credit increase might have long term growth benefits in general, it could also be a sign of excessive risk taking and financial vulnerability.

The expansion of household lending in transition countries may be related to the dominance of foreign-owned banks. Once the legal environment is in place, lending to households is a commodity business that can be entered easily through the application of banking technology from abroad. In contrast, lending to enterprises requires developing client relationships and having the ability to evaluate unique situations, both of which require expertise that is generally lacking in foreign banks. Using a recent EBRD survey, Haselmann and Wachtel (2006) show that banks in many transition economies have shifted their asset portfolios out of government securities towards mortgages and consumer credit. Foreign banks in particular have increased consumer lending and only maintained the existing level of lending to enterprises. The EBRD/World Bank surveys of enterprises in transition countries indicate that many firms are financially constrained in the sense that they are unable to obtain bank lending. Based on these surveys, the EBRD concludes that "despite some regional variation, bank loans still play a limited role in enterprise financing" (EBRD Transition Report, 2006, p. 47). Since lending to enterprises is important to

support economic growth, this finding has important implications for any evaluation of the conduct of banking in transition countries.

Foreign banks have had a positive influence on the banking environment by introducing technology, operational efficiencies, and new products and services. However, Haselmann and Wachtel observe that foreign banks have focused on lending to households and large firms. In addition, the EBRD surveys provide little evidence of increased lending to small and medium enterprises (SMEs). To some extent, the lack of SME lending in a foreign-bank-dominated country is understandable because such lending requires local knowledge. However, the large foreign banks were created by mergers and acquisitions of local entities so that this knowledge should not be prohibitively difficult to acquire. Moreover, the surveys suggest that improvements in the legal environment for banking have been associated with greater risk taking and more credit extended to SMEs (EBRD Transition Report, 2006; Haselmann and Wachtel, 2007). Frequently, the survey respondents indicate that a lack of creditworthy borrowers and difficulty in evaluating risks were the main reasons for slow loan growth. In their lending activity, banks in transition countries tend to favor large firms and foreign affiliates currently. However, improvements in the legal and regulatory institutions are expected to induce more SME lending. Hence, environmental improvements such as good bankruptcy laws, efficient ownership structures, reliable court systems for their application, credit registries, and defined legal rights to collateral should lead to more lending to SMEs and more support of local entrepreneurs in the future (de Haas and Lelyveld 2006).

Overall the growth in banking in transition countries has increased considerably the availability of financial services, many of which were simply not obtainable before. Whether banks can become formidable engines of sustainable economic growth in transition economies is an open question. Many large enterprises, particularly in the EU new member states, are able to take advantage of recent increases in European capital market integration and obtain financing from abroad. Furthermore, non-bank financial institutions are emerging in the transition economies. Nonetheless, the rapid expansion of credit in some countries has become a source of concern because of the accompanying potential increases in risk to the banking sectors. In addition, much of the lending by banks in some transition countries, particularly the SEE countries that experienced hyperinflation in the 1990s, is denominated in foreign currencies and many deposits are denominated in non-

national currencies as well. Thus, the balance sheets of banks in these countries are exposed to foreign exchange risk. In Croatia, 70% of mortgages are denominated in Euros. Even though the deposit base of these banks is also in Euros, foreign exchange risk is not eliminated by this matching because a domestic slowdown or exchange rate shock would affect the ability of domestic borrowers to repay in Euros.

These risks and indeed many of the problems, faced by banks in transition countries are familiar to banks in small, open, emerging-market economies around the world. Moreover, the tradeoff between bank consolidation and bank concentration is relevant to other small banking sectors. Although consolidation eliminates inefficient and undersized institutions, it also increases concentration, which may limit competition and create systemic risks. To some extent, free entry and foreign bank participation can mitigate this anticompetitive tendency. Although foreign bank penetration is a worldwide phenomenon in emerging-market economies, it is more prevalent and more concentrated in a subset of home countries in transition economies. European banks, mainly from the Netherlands, Italy, and Austria, are most active due to particularly strong trading relationships or to a desire to enter expanding new markets close to their own countries. Overall, foreign-owned banks have maintained their lending activities in the presence of local shocks, although their aggressive growth targets may be a source of instability in the future.

The relationship between parent banks and their local partners is a mixed blessing. In some cases, the parent bank provides assistance for a troubled local institution, e.g. KBC from Belgium supported its troubled Polish subsidiary, Kredytbank. However, parent bank support can not be taken for granted, e.g. Bayerische Landesbank walked away from its Croatian subsidiary, Rijecka Banka, when fraud was uncovered. In addition, ownership changes in the parent bank can affect the structure of banking in the host country. When HVB joined the Unicredito banking group, several Polish subsidiaries were merged to create the largest bank in Poland with a market share in excess of 25% despite objections from the Polish authorities. These close connections with specific foreign banking sectors combined with high concentration in local banking may leave some transition countries vulnerable to economic shocks in other countries, e.g., Netherlands, Italy or Austria.

Banking regulation in the European Union follows the home country principle in that the home country regulators supervise the consolidated balance sheet of multinational banks. At the same time, the host country regulators have responsibility over the local subsidiaries. Hence, a potential for conflict arises if a home country regulator does not have sufficient interest in a foreign subsidiary that is a small part of a multinational bank but an important player in the financial sector of the host country. Unfortunately, the lack of explicit coordination of bank regulation across borders is a problem that the EU will probably avoid facing until the first cross-border banking crisis hits.

In summary, considerable strides have been made in developing mature banking sectors in virtually all European transition countries. However, this positive evaluation must be tempered by some concerns about future stability due to the dominance of foreign banks from a handful of countries. The less-advanced transition countries, largely the smaller republics of the FSU, are just beginning to create modern banking sectors. These countries now have models to emulate; hence, their progress toward achieving mature and effective banking institutions warrants careful watching to see if the relevant lessons have been learned.

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## References

- Abarbanell, J. and Meyendorf, A. (1997). Bank privatization in post-communist Russia: the case of Zhilsotsbank, *Journal of Comparative Economics*, **25**, 62 96.
- Barisitz, S. (2007). Banking in Central and Eastern Europe 1980 2006: A Comprehensive Analysis of Banking Sector Transformation in the former Soviet Union, Czechoslovakia, East Germany, Yugoslavia, Belarus, Bulgaria, Croatia, the Czech Republic, Hungary, Kazakhstan, Poland, Romania, the Russian Federation, Serbia and Montenegro, Slovakia, Ukraine, and Uzbekistan. New York and London: Routledge.
- Bonin, J. P. (2004). Banking in the Balkans, the structure of banking sectors in Southeast Europe, *Economic Systems*, **28**, 141-153.
- Bonin, J. P. and Wachtel, P. (2003). Financial sector development in transition economies: lessons from the first decade, *Financial Markets, Institutions, and Instruments*, **12**, 1–66.
- Bonin, J. P. and Wachtel, P. (2005). Dealing with financial fragility in transition economies in D. Evanoff and G. Kaufman (eds). Systemic Financial Crises: Resolving Large Bank Insolvencies. Singapore, World Scientific Publishing, 141 – 159.
- Bonin, J. P., Hasan, I. and Wachtel, P. (2005a). Bank performance, efficiency and ownership in transition countries, *Journal of Banking and Finance*, **29**, 31–53.
- Bonin, J. P., Hasan, I. and Wachtel, P. (2005b). Privatization matters: bank efficiency in transition countries, *Journal of Banking and Finance*, **29**, 2155-2178.
- De Haas, R. and Lelyveld, I. V. (2006). Foreign banks and credit stability in Central and Eastern Europe: a panel data analysis, *Journal of Banking and Finance*, **30**, 1927-1952.
- European Bank for Reconstruction and Development, *EBRD Transition Report*, various issues.
- Hasan, I. and Marton, K. (2003). Banking in transition economy: Hungarian evidence, *Journal of Banking and Finance*, **27**, 2249-2271.

- Haselmann, R. (2006). Strategies of foreign banks in transition economies, *Emerging Markets Review*, **7**, 283-99.
- Haselmann, R. and Wachtel, P. (2006). Institutions and Bank Behavior, New York University, Stern School of Business Working Paper EC06-16.
- Haselmann, R. and Wachtel, P. (2007). Risk taking by banks in the transition countries, *Comparative Economic Studies*, **49**, 411-29.
- Organization for Economic Cooperation and Development, (1999), OECD Economic Surveys, Issue 5: Hungary.
- Steinherr, A. (2006). Russian banking since the crisis of 1998, *Economic Change and Restructuring*, **39**, 235-59.
- Wachtel, P. (2001). <u>Growth and finance what do we know and how do we know it?</u> International Finance, 4, 335-362.

### Appendix

### Table 1Banking Sector in Early Transition, 1995

	Number of Banks	Asset share of	Credit/GDP,	Nonperforming Loans %	EBRD
	(Foreign Owned Banks)	Foreign Banks, %	%	of total	Index
Czech Republic	55 (23)	15.9	46.7	26.6	3.0
Hungary	43 (21)	41.8	22.7	12.1	3.0
Poland	87 (18)	4.2	12.7	23.9	3.0
Slovakia	33 (18)	32.7	26.3	41.3	2.7
Russia	2,297 (21)	< 1	8.7	12.3	2.0

### South Eastern Europe (SEE)

	Number of Banks (Foreign Owned Banks)	Asset share of Foreign Banks, %	Credit/GDP, %	Nonperforming Loans % of total	EBRD In- dex
Bulgaria	41 (3)	< 1	21.1	12.5	2.0
Croatia	54 (1)	< 1	22.9	12.9	2.7
Romania	24 (1)	< 1	7.8	37.9	3.0
Serbia	112 (3)	< 1	9.2*	12.0	1.0
Slovenia	39 (6)	3.8	27.3	9.3	3.0

### Notes: \* indicates data for 1996.

The number of banks with the number of foreign-owned banks in parentheses is taken from the country tables in EBRD Transition Report, various issues. FOB is the asset share of foreign-owned banks in total banking assets from Barisitz (2007), except for Slovenia. Slovenian data are from Bonin (2004). Credit/GDP is domestic credit to the private sector at year end from Barisitz, except for Slovenia. Slovenian data are from EBRD Transition Report, 2003. Non-performing loans as a percent of total loans at year end from Barisitz, except for Slovenia. Slovenian data are from EBRD Transition Report, 2003. EBRD Index is the EBRD index of reform of banking sector reform from EBRD Transition Report, 2003; it takes values between 1.0 and 4.0+.

### Table 2Banking Market Characteristics in Later Transition, 1999

Central Eastern Europe (CEE) and Russia

	Ownership –	Asset shares	Interm	EBRD	
	State owned Foreign owned		Deposits/ GDP	Loans/ GDP	Index
Czech Republic	41.2 27.1		66.1	44.6	3.3 (+)
Hungary	7.8 65.3		36.4 24.6		4.0 (+)
Poland	23.9 69.5		35.4	27.1	3.3 (+)
Slovakia	50.7 24.6		57.1	48.4	2.7 (0)
Russia	41.9 (1998) 10.6*		10.2 (2000)	13.1 (2000)	1.7 (-)

South Eastern Europe (SEE)

	Ownership –	Asset shares	Interm	EBRD	
	State owned Foreign owned		Deposits/ GDP	Loans/ GDP	Index
Bulgaria	50.5 44.7		21.3	10.7	2.7 (+)
Croatia	Croatia 39.8		34.0	35.7	3.0 (+)
Romania	Romania 50.3		20.5	10.6	2.7 (-)
Serbia	90.9# 0.5#		9.7	29.6	1.0 (0)
Slovenia	42.2 4.9		32.0##	35.8	3.3 (+)

Notes: \* indicates share in registered statutory capital. # indicates data for 2000 and state-owned includes social ownership. ## indicates data for 2000 and for primary deposits only.

1. Ownership is the asset share of state-owned and foreign-owned banks, respectively, in total banking assets from Barisitz, except for Slovenia. Slovenian data are from EBRD *Transition Report*, 2005.

2. Deposits of and credit to the private sector at year end are in percents of GDP from Barisitz (2007), except for Slovenia where data for deposits are from Bonin (2004) and data for credits are from EBRD Transition Report, 2005.

EBRD Index is the EBRD index of banking sector reform from EBRD *Transition Report*, 2005; it takes values between 1.0 and 4.0+. Also, (+) indicates an increase in the index from 1995, (0) indicates no change, and (-) indicates a decrease in the index from 1995.

### Table 3Banking Market Characteristics in 2005

#### Central Eastern Europe (CEE) and Russia

	Ownership		Intermediation – ratio to GDP				Concentration		EBRD
	State	Foreign	Deposits	Loans	HH loans	Mortgages	3-firm	5-firm	Index
Czech R.	2.5	94.5	55.9*	27.3*	13.9	7.9	65.4	75.6	4.0 (+)
Hungary	7.0	84.5	40.1	44.8	15.7	11.6	41.9	56.6	4.0 (0)
Poland	21.5	74.2	34.6*	27.4*	12.6	5.1	33.4	45.3	3.7 (+)
Slovakia	1.1	97.3	47.7*	32.5*	13.0	3.6	47.7	66.3	3.7 (+)
Russia	38.1	11.2**	17.7	25.7	4.9	0.2	37.0	41.7	2.7 (+)

### South Eastern Europe (SEE)

	Ownership		Intermediation – Ratio to GDP				Concentration		EBRD
	State	Foreign	Deposits	Loans	HH loans	Mortgages	3-firm	5-firm	Index
Bulgaria	1.7	72.8	36.0*	34.9*	14.7	4.8	32.8	49.9	3.7 (+)
Croatia	3.4	91.2	59.8*	55.8*	34.3	12.0	55.3	75.3	4.0 (+)
Romania	6.5	59.2	26.1	20.9	7.3	0.6	48.3	59.8	3.0 (+)
Serbia	23.9	66.0	25.1	25.0	7.6	1.4	37.3	53.2	2.7 (+)
Slovenia	12.0	22.6	n/a	56.4	14.5	3.6	50.4	73.3	3.3 (0)

Notes: \* indicates data for 2004. \*\* indicates share in registered statutory capital.

Ownership is the asset share of state-owned and foreign-owned banks, respectively, in total banking assets from Barisitz, except for Slovenia. Slovenian data are from EBRD Transition Report, 2006.

Deposits of and credit to the private sector at year end are in percents of GDP from Barisitz, except for Slovenia. Slovenian data for deposits are from Bonin (2004) and data for credits are from EBRD Transition Report, 2006. HH/GDP is the ratio of total outstanding bank credit to households at year end to GDP from EBRD Transition Report, 2006. Mortgage is the ratio of mortgage lending to households at year end to GDP from EBRD Transition Report, 2006.

Concentration measures are computed as market shares of the top number of banks indicated and from Barisitz, except for Slovenia. Slovenian data are for 2000 from Bonin (2004).

EBRD Index is the EBRD index of banking sector reform from EBRD Transition Report, 2005; it takes values between 1.0 and 4.0+. Also, (+) indicates an increase in the index from 1999, (0) indicates no change, and (-) indicates a decrease in the index from 1999.

### Table 4Interest Rate Spreads and Inflation, 1991-2005

### Central Eastern Europe (CEE) and Russia

	I	nterest Rate Sprea	d	CPI Inflation Rate		
	1991-1995	2001-2005	2005	1991-1995	2001-2005	2005
Czech Republic	6.5 (1992-95)	6.5	6.0	12.1 (1992-95)	2.2	2.2
Hungary	8.0	2.5	2.2	24.9	5.2	3.3
Poland	10.5	7.1	5.9	38.7	2.2	0.7
Slovakia	6.1 (1993-96)	4.8	4.5	12.4 (1993-96)	5.8	3.7
Russia	43.9 (1996-98)	8.7	7.5	39.1 (1996-98)	13.7	10.9

South Eastern Europe (SEE)

	I	nterest Rate Sprea	d	CPI Inflation Rate		
	1991-1995	2001-2005	2005	1991-1995	2001-2005	2005
Bulgaria	29.4	6.1	4.9	127.4	5.0	6.5
Croatia	13.6 (1994-96)	8.7	8.3	1.4 (1994-96)	2.4	3.6
Romania	21.5 (1993-96)	15.8	11.5	110.6 (1993-96)	16.0	8.6
Serbia	86.4 (1996-98)	15.8	11.7	37.5 (1996-98)	18.3	17.5
Slovenia	6.9 (1995-97)	4.3	4.5	8.9 (1995-97)	4.9	2.3

### Notes

1. Spreads are computed as the difference between lending rates and deposit rates from the country tables in EBRD Transition Report, various issues. Maturities are always less than one year but they differ across countries.

2. CPI is inflation computed by year end changes in the Consumer Price Index. Data are taken from the country tables in EBRD Transition Report, various issues.

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