Impact of Foreign Bank Admission at Domestic Banking Sectors in Transitional Economies on Financial Institutions and Enterprise Restructuring*

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Abstract

Possible effects of foreign bank admission to the domestic bank sectors of transition countries are studied. In a theoretical model we derive conditions for admission of foreign banks to create additional incentives for domestic banks. We argue that efficient implementation of bankruptcy legislation is a necessary pre-condition for the foreign bank admission. The paper provides a framework to analyse mixed outcomes of foreign bank admission in Hungary and Poland, and allows to derive policy implications for Russia.

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1. Introduction

In the capitalist economies, banks play the role of the intermediaries between lenders and borrowers. Two of the most important reasons for their efficiency are that banks diversify risks due to the large number of projects they face (Diamond, 1984) and that they experience increasing returns to scale in search and monitoring activities that are needed to determine potentially profitable projects. They thus solve at least partially the adverse selection problem at the financial markets (see, e.g., Freixas and Rochet, 1997, for the detailed overview of recent contributions). Incurring some costs in the search and monitoring of loans banks choose the best ones to allocate the collected deposits at so as to maximize their profits.

However, in the socialist economies banks did not play such an intermediary role. Banking system undertook no independent evaluation of the recipients and the interest rates on the bank credits were set administratively as well as the deposit interest rates. The failure to pay the loan rates in the past did not affect the necessity of granting in the future so the banks had no real incentives to search for good loans (Kornai, 1992). Thus with the beginning of the transition period banks have faced the severe problem of the need to screen and monitor the projects as that became crucial for their solvency. As the banks has small experience and little skills in these activities the cost of search and monitoring were extremely high for them. That in turn leads to their passivity as monitors (description of the sources of this passivity and discussion of the consequences of such passive behavior is given at Mitchell, 1999).

Low effort in monitoring leads to the situation when bad loans are financed and the risk of insolvency is high. It implies high loan and deposit rates charged by the banks. High loan interest rates force firms to choose risky policy to cover the future payments create and disincentives for the real sector restructuring (Schnitzer, 1998).

The problem of low monitoring efforts is also aggravated by the inefficient implementing of bankruptcy legislation that makes the bankruptcy threat less credible (K. Mitzsei, 1993).
Thus high search and monitoring cost coupled with the incredibility of bankruptcy state keep the financial system in the institutional trap (Polterovich, 1998): High interest rates increase the share of bad loans while the low quality of loans leads to the high interest rates.

What are the mechanisms that could contribute to the resolution of this problem? It’s worth to mention that the institutional design of the appropriate bankruptcy procedures and their efficient implementing is the task that could be solved by the State (for the list of policy recommendations see K. Mitzsei (1993), for the discussion of broad experience from different countries in transition (Lastra and Schiffman, 1999), for the design of optimal bankruptcy procedures in transition economies Aghion, Hart, and Moore, 1992) while the high monitoring costs is the problem that could not be treated in such a direct way.

We argue that one of the possible mechanisms that could contribute to the resolution of this problem is the liberalization of the foreign bank presence at the domestic bank sector.

The consequences of foreign bank admission at the domestic bank sectors in the number of East-European countries are always the subject of broad discussion in academic circles as well between the bankers of these countries (typical examples are presented by Business Journals Euromoney, 1993, Business Central Europe, 1995/1996) and in general public. The possible impact of such admission in the countries which still protect themselves from the foreign competition by the means of strict restricting legislation is also discussed (brief analysis of Russian case is given in Aleksashenko, 1999) although less intensively. The existing opinions on whether the impact is (or will be) positive or negative are rather controversial while most of the researchers agree on following:

i). In the most countries where foreign banks were admitted they influence substantially the structure of the bank sector and enhance competition (Anderson and Kegels, 1998, Bonin and Szekely, 1994, and Dijkstra, 1996, for the overview of the Hungarian case);

ii). In the most cases the domestic banks were placed at the relatively bad position comparing to the position the foreign ones. Here the number of factors is
distinguished (lack of managerial expertise (Sabi, 1996, Euromoney, 1993), heavy burden of bad loans in the portfolios Dijkstra, 1996, Dittus, 1994, high reserve requirements or other pressures to finance government deficit),

iii). Foreign banks’ activity in long-term lending is revealed (Dijkstra, 1996, Sabi, 1996);

It seems that in the beginning of transition period the admission of foreign banks at the domestic markets was treated as the easy remedy to enhance competition and improve efficiency of the bank system that could be carried out without any prerequisites to be fulfilled. While now this period gave place to the total disappointment in such a policy.

However little effort still was made to analyze the determinants of the unsuccessful experiences in the number of countries and to determine rigorously the conditions under which the domestic bank sectors would benefit substantially from the foreign competition and what are factors that should be certainly eliminated before foreign bank admission will take place (for one of the exceptions see Bonin and Leven (1996)).

We do believe that there exists a positive impact that the foreign banks could provide at the domestic banks sectors being admitted under certain conditions. One of the most important prerequisites is the effective bankruptcy law legislation for credit institutions that provide banks with the harder budget constraints (for the consequences of soft budget constraints see Kornai (1992), Berglof and Roland (1995), Berglof and Roland (1997)) and creates the strong incentives for the bank to evade of the insolvency states. On the contrary, the incredibility of bankruptcy procedure implementation provides banks with the incentives to carry out excessive risky policy and induce low monitoring and search efforts.

In the framework of the model presented below we show that the presence of foreign banks that are more active in search and monitoring activities could improve the situation and lead the bank system to move to the efficient equilibrium that is characterized by the low interest rates and high level of restructuring activity in real sector. We than argue that such an admission would have the positive impact on the bank system only in the case of efficient implementing of bankruptcy
legislation otherwise it could change the situation even to the worse resulting in large withdrawal of deposits and best loans from domestic banks.

The rest of the paper is organized as follows. Section 2 introduces a simple theoretical model. In Section 3, some evidence, based on Hungary and Poland experience, is discussed. Section 4 derives policy implications and concludes.

2. Theory

There are four types of agents in the economy: firms, depositors, and \( M \) domestic and \( N \) foreign banks.

Firms

There is a continuum \([0,1]\) of heterogenous firms. Each firm requires one indivisible unit of investment for a single project and can exert either low efforts in implementing the project, \( e = L \), or high efforts, \( e = H \) after the investment is made. Each firm applies to a bank for credit. Since banks are capacity constrained, loan interest rates may differ across banks and firms. The willingness of firm’ management to exert high efforts depends on this loan rate interest only: the higher is the interest rate, \( R \), the less likely is the firm to exert high efforts.\(^1\)

Specifically, we assume that each firm has some threshold interest rate (different for different firms) that separates interest rates that are too high to exert high efforts from those that are sufficient for \( e = H \). Let \( \alpha = \alpha(R_1, \ldots, R_{M+N}) \) denote the share of firms that choose the high level of efforts given that banks have choosen their \( R_i \)s. This share \( \alpha \) is decreasing with loan interest rates, \( \frac{\partial \alpha}{\partial R_i} < 0 \).

Note that we abstract from any corporate governance issues on the firms’ level. However, there is a little loss of generality in doing this, since the qualitative results remain the same in a more sophisticated model.

\(^1\)Applying this analysis to transition, one might assume that a firm can implement some costly restructuring only if the loan interest rate is sufficiently low.
Depositors

Depositors are identical, risk-neutral, and have outside option that gives them certain return of $r_0$. Each depositor allocates one unit of indivisible resources.

Banks

Banks collect resources from depositors, and allocate these resources as loans to firms to maximize expected returns net of deposit rate payments. Each bank attracts and allocates one unit of resources. To allocate credits, a bank needs to search for potentially profitable opportunities and to monitor debtors thereafter. For the sake of simplicity, we make no explicit distinction between these two activities. Rather, we assume that the manager, who is the sole owner of the bank, may exert efforts of $\theta$, $0 \leq \theta \leq 1$, to reduce the probability $p(\theta)$ of default by the debtor, $p'(\theta) < 0$. Efforts are costly: namely, if the bank’s $i$ manager exerts efforts $\theta_i$, his cost is $C_i = C_i(\theta_i, \theta_{-i}; \alpha)$ with $\frac{\partial C_i}{\partial \theta_i} > 0$, where $\theta_{-i} = (\theta_1, \ldots, \theta_{i-1}, \theta_{i+1}, \ldots \theta_M)$ is the level of efforts chosen by other bankers, and $\alpha$ is the share of firms that have chosen the high level of efforts, $e = H$. Increased efforts of other firms (increased competition) lead to increasing costs of the firm $i$ : $\frac{\partial C_i}{\partial \alpha} < 0^2$. Also, the monitoring cost decreases with the overall quality of projects, i.e. share of the high-efforts firms: $\frac{\partial C_i}{\partial \alpha} < 0$.

Given some level of efforts $\theta_i$, the bank faces the probability of debtors default, $p(\theta_i) = 1 - \theta_i$. In the case of default, the bank does not receive the loan and incurs additional loss of $Y_i$. We interpret $Y_i$ broadly as a parameter reflecting the efficiency of banks bankruptcy legislation. Thus, the bank’s $i$ maximization problem is as follows:

$$\max_{\theta_i, R_i, r_i} \{ \pi_i = (R_i - r_i)\theta_i - Y\theta_i - C_i(\theta_i, \theta_{-i}; \alpha) \}.$$ 

To this point, we have made no distinction between foreign and domestic banks. The main difference between foreign and domestic banks lies in costs of monitoring. Assume that we have $N$ identical domestic banks with some cost function

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2 These assumptions about the cost function can be easily derived from fundamentals. We make this derivation implicit to simplify the exposition.
$C_d$ and $M - N$ identical foreign banks with some cost function $C_f$. We maintain the following assumptions, which are crucial for subsequent analysis:

**Assumption 1.** For any $\theta = (\theta_i, \theta_{-i})$ and $\alpha$, $C_d(\theta, \alpha) < C_f(\theta, \alpha)$.

**Assumption 2.** For any $\theta$ and $\alpha$, $\frac{\partial C_d(\theta, \alpha)}{\partial \theta_d} > \frac{\partial C_f(\theta, \alpha)}{\partial \theta_f}$.

These assumptions are very intuitive. The first assumption states that domestic banks have an initial advantage: monitoring costs for foreign banks are higher than the respective costs of domestic banks. However, foreign banks have lower marginal costs, i.e. an incremental increase in efforts of foreign bankers results in small additional losses relative to those of domestic banks.

Restructuring leads to the rise of quality of loans that the banks face. Thus, the enterprises’ restructuring leads to the fall in the monitoring and search costs for the banks.

For domestic banks it’s more costly to monitor loans:

Thus the presence of the foreign banks at the market has the double effect on the monitoring cost:

(i) First, it enhances competition and therefore monitoring costs increase;

(ii) Second, the quality of loans raises, since a more intense restructuring policy is carried out and therefore monitoring costs decrease;

We then assume that as the loan interest rate declines firms choose more intensive restructuring policy and the faster the monitoring costs decrease when $R_i$ is large the change in probability of insolvency affects monitoring cost substantially.

**Timing**

The timing of the model is as follows:

$t = 1$ Each bank $i$ chooses a loan interest rate $R_i$.

$t = 2$ Each firm $j$ determines the level of efforts $e_j \in \{L, H\}$. Monitoring costs for banks realize.
\[ t = 3 \] Each bank \( i \) announces a deposit interest rate \( r_i \) and chooses a level of monitoring \( \theta_i \in [0, 1] \).

\[ t = 4 \] Depositors allocate their resources.

\[ t = 5 \] The quality of projects that was financed realizes.

**Absence of Foreign Banks**

First, we consider incentives domestic banks face, and their performance in the absence of foreign ones. Our first result is that in this case domestic banks choose higher loan interest rates and lower level of monitoring than their foreign counterparts. (To have a benchmark, we assume that foreign banks can be left alone in the domestic market.)

**Proposition 2.1.** Left alone, domestic banks would have chosen higher loan interest and lower monitoring level than foreign banks.

**Corollary 2.2.** Profit of foreign banks is higher than that of domestic banks, \( \bar{\pi}_f > \bar{\pi}_d \).

**After Entrance of Foreign Banks**

The next proposition highlights the positive role of admission of foreign banks. Increased competition forces domestic banks to lower their loan interest rates, and at the same time to increase monitoring efforts.

**Proposition 2.3.** There exists a symmetric equilibrium with \( R_d < \bar{R}_d \) and \( \theta_d > \bar{\theta}_d \).

Decreased interest rates, in turn, lead to a higher share of firms choosing high efforts.

**Proposition 2.4.** In the symmetric equilibrium with foreign banks, the share of firms implementing good projects is higher than in the absence of foreign banks.
The Role of Bankruptcy

The parameter $Y$ reflects the strength of bank regulation in the case of insolvency.

**Proposition 2.5.** If $| \frac{\partial^2 C}{\partial R \partial Y} | > | \frac{dR}{dY} |$, then $\frac{dR}{dY} > 0$.

Thus, for high monitoring costs, severe punishment in bankruptcy itself is not efficient: an increase in $Y$ leads to small changes in probability of insolvency and results primarily in the rise of loan interest rates.

In the case of non-admission policy "bad" equilibrium is realized:

Banks charge high loan interest rate $R$ $\implies$ Firms choose low level of efforts $\implies$ monitoring costs $C$ for the banks are high $\implies$ Probability $q$ of insolvency is high $\implies$ Banks choose high deposit rate $r$ $\implies$ Banks charge high loan interest rate $R$.

Otherwise, the "good" equilibrium is realized:

Banks charge low loan interest rate $R$ $\implies$ Firms choose high level of efforts $\implies$ monitoring costs $C$ for the banks are low $\implies$ Probability $q$ of insolvency is low $\implies$ Banks choose low deposit rate $r$ Banks charge low loan interest rate $R$.

**Discussion**

When there are only domestic banks that function at the bank sector the "bad" equilibrium emerges. The reason is that the high monitoring costs induce domestic banks to provide low effort in monitoring of loans that leads to the high probability of insolvency state, high deposit and loan interest rates i.e. "bad" equilibrium emergence. In other words, the loan interest rate the domestic banks are ready to charge is too large for the firms to start restructuring.

The situation could change substantially if the foreign banks enter the domestic bank sector. In fact the bankruptcy legislation for this banks is severe and effective enough to provide the foreign banks with the incentives to aspire for low probability of insolvency whatever the domestic banks choose to do. Thus, foreign banks choose low probability of insolvency, low deposit rates and thus can charge low loan rates. This in turn provides the incentives for the firms to carry out
restructuring policy and, consequently, decreases the search and monitoring costs for the foreign as well as for domestic banks as the average quality (or frequency) of the good loans rises.

The decrease of monitoring costs for the domestic banks provides them with incentives to increase the level of monitoring effort. Moreover, an intense monitoring policy carried out by the foreign banks increases the opportunity costs of non-monitoring for domestic banks (foreign ones take away good loans and it’s more important to screen the residuary ones). All that increases the monitoring effort supplied by the domestic banks and in turn will decrease the probability of insolvency state and could results into change for ”good” equilibrium and could lead them to switch to ”good” equilibrium.

Thus the foreign banks admittance provide the possibility to get out of the ”institutional trap” that is presented by the ”bad” equilibrium due to two factors:

(i) Foreign banks admittance diminishes the exit costs that are necessary to change to the good equilibrium state;

(ii) Foreign banks act as disciplining device for the domestic ones;

Why this mechanism is efficient only under the condition of effective bankruptcy legislation implementation in the country?

In the case of ineffective bankruptcy legislation the domestic banks choose the policy that leads to the high probability of insolvency state (low level of monitoring effort) and to high deposit rates. If they are not sensible to the bankruptcy threat they will be also insensible to the rise of opportunity costs that is due to the withdrawal of good loans by the foreign banks. That will induce the depositors to switch from the domestic banks to the foreign ones that will negatively influence not only banks’ profit but their stability too.

3. Evidence

Foreign Banks in Russia

New Russian banks - weak points:
Lack of expertise abilities:

Former state banks and newly emerged banks in East-European countries were oriented toward short-run making money policy. They were just trading companies to make money rather then banks and saw no rationale for intensive monitoring of loans. Slogan of Promdei Bank (Chroatia) expresses the essence of this naive approach: ”The possibilities are enormous. Let’s make money together” (Euromoney Magazine, September 10, 1999).

Absence of reputation (Alexaschenko, Voprosy Economiki, 7, 1999)

General information on foreign banks’ activity in Russia:

The number of credit institutions with foreign investments that had licenses for performing banking operations in Russia reduced by nine and came to 133, including 131 banks and 2 non-banking credit organizations (official information of CBR, March 2000).

The share of non-residents in the aggregated statutory capital of Russian banks was 10.71 percent as of January 1, 2000, against 6.35 percent as of January 1, 1999, which demonstrates growing interest of foreign credit institutions in Russia. The CB registered totally 177 credit organizations with foreign capital as of January 1, 2000.

Foreign credit organizations work mostly in central Russia’s regions: Moscow, St. Petersburg, Moscow region, Tyumen region, Kemerovo region, Orenburg region, and Tver region. Some foreign credit institutions also work in Primorsky Krai and Udmurt republic.

In the opinion of banking specialists, Austrian banks are currently the most actively working foreign banks in Russia (Austria Creditanstalt, and Raiffeizanbank).

Currently only six foreign banks work with private depositors. Even such worldwide known giants as Chase Manhattan Bank International, Deutsche bank, Credit Suisse First Boston have not demonstrated any interest in this field of banking activity. Nevertheless, Michael Perriren (chairman of the board of directors of Reiffeisenbank Austria) is sure that all western banks operating in Moscow
will start providing services to private clients by the end of 2000.

Foreign bank activity in domestic enterprise financing:

A. Loans are given directly by foreign banks rather through Russian commercial banks:

Regardless of numerous scandals in this country western banking institutions have not lost their interest in Russia having, however, significantly revised their methods of operation. Unlike in the past when western credits in real economy sector were handled by Russian commercial banking institutions, the former will handle the loans all by themselves with Russian commercial banks no longer involved. Similar methods can be traced in the government policy of this country. (FI-NANSOVAYA ROSSIYA, No 45, p. 3, Dec 9, 1999).

B. Numerous foreign banks are active in providing services for real sector:

As for providing services for enterprises, Sberbank does not seem to be a monopolist: Private depositors are interested in reliability, while enterprises are interested in services, because they work with banks every day. Private banks, especially the small ones, offer much more services, comfort, low tariffs, flexibility, and individual approach.

Mezhdunarodny Moskovsky Bank - the leader in providing services for Russia’s enterprises among private banks (10 percent of the aggregated resources placed by corporate bodies in top 100 Russia’s banks). The main advantage of Mezhdunarodny Moskovsky Bank is its composition of the shareholders. Leading European and Japanese banks have 70 percent of the shares. The bank uses its shareholders for improving its image, promoting up-to-date banking and management technologies, but it does not use them only as a source of financial support. ("Banking boom will not come soon" by V. Andreev, chief expert of the Center for Economic Analysis of Interfax, Izvestiya, March 14, 2000, p.6.)

C. Foreign banks and private depositors:

Foreign banks start real struggle for Russian private depositors. On April 5, 2000 3 foreign banks announced a reduction in minimum deposit requirements (Raiffeizanbank: new minimal amount of deposit - $1000 in contrast to $5000
before).

Foreign banks’ position at Russian banking sector:

Activities of some of the foreign subsidiaries look very successful. Deutsche Bank and CityBank took second and third positions respectively in terms of balance sheet income among all Russia’s banks.

The banks owned by well known foreign financial corporations (Citybank, ING Bank, BNP Dresdner Bank, or ABN AMRO Bank) have all chances to take leading positions in Russian bank system. However currently they prefer to look at Russian clients from a distance and confine their activity to providing services for the subsidiaries of their global international clients.

Bank Austria Creditanstalt (Russia) and Raiffeisenbank Austria have been the only foreign banks that entered market of retail services. Both of the banks opened three branches in Moscow each. Raiffeisenbank Austria even announced about ambitions to attract 20,000 private clients before the end of 1999. At the same time such success can not be regarded as prolific, because capacities of both of the banks are much bigger. Assets of Bank Austria Group (Bank Austria Creditanstalt-Russia is a member of the group) exceed the total assets of Russian bank system by 2.4 times. Assets of Raiffeisen Bankengruppe (Raiffeisenbank Austria is one of the members of the group) exceed the total assets of Russian bank system by 1.6 times.

Referring to major foreign banks operating in Russia (CityBank, ABN-AMRO Bank, ING-Bank) whose potential capacity tenfold exceed capacity of Austrian financial institutions, they have not even announced plans of attracting Russia’s clients so far (the reason is that subsidiaries of these banks operate in about hundred countries. Comparing to other countries, Russia still is not attractive for banking activity).

A very favorable situation is currently observed on Russia’s market to transfer from financing export to sharing statutory capitals of import substituting companies. Profitability of these companies will be rising along with the devaluation of the ruble. The situation looks favorable owing to decline of competitiveness of
Russia’s banks on the domestic market, because they lost "long" liabilities and broke reliable ties with the producers. Russia’s banks can not attract major investments, syndicated loans inclusively, because of constantly low credit ratings of the banks. A number of western credit institutions immediately took this advantage to expand activity in financing different projects, advanced technology projects inclusively, and all kinds of consulting. ”Western bank will have to work hard to succeed” (L.Makarevich, expert of ARB, Biznes v Rossii, supplementary edition to Rossiijkaya Gazeta, October 23, 1999, p.1,8.)

Services of Western banks will still be in great demand in the near future. Foreign companies, joint ventures, and pure Russia’s enterprises will demonstrate increasing demand for settlement and cash services, as well as for auditing and consulting services.

Policy of Russian Government and opinions of Russian economists:

In June, 1999 The Russian central bank raised the ceiling on foreign participation in the country’s banking sector from 12 percent to 25 percent

The approach of Russian colleagues to foreign banks is changing. According to V.Kossov, deputy minister of economy in charge for domestic and foreign investments, ”recovery of Russia’s banking system means that favorable conditions to expand activity of foreign banks should be created. Apart from beneficial influence for Russia’s banking system, it will prepare the basis for the growth of Russia’s economy, and it will also canalize foreign investments.” (”Foreign banks at the cross-road” by A.Ivochkin, Finansovaya Rossiya, N10, March 16-22, 2000, p.7.)

4. Policy Implications

The previous experience in foreign bank liberalization of the number of East-European countries as well as the results of the model proposed give rise to the list of policy implications:

(i) Bankruptcy legislation and its efficient implementation should be provided both for credit institutions such the banks are and enterprises. Otherwise the soft
budget constraints imposed will lead to the inefficient outcomes.

(ii) The proper incentives for the foreign banks to enter and carry out long-term policy should be provided. To encourage banks to invest in long-term loans and work with the whole range of depositors the stable legal rules guaranteed and transparent accounting system should be provided. Otherwise banks will be oriented to carry out short-term policy and withdraw best loans (the most profitable and safe) from the domestic markets;

(iii) The conditions that allow domestic banks to be competitive in the competition with the foreign ones should be efficiently designed (bad loan reorganization, bank consolidation, government protection).

References


