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by Evan Kraft

Abstract

After a period of entry mainly through greenfield investment, foreign banks purchased several of the largest Croatian banks in late 1999 and 2000. This paper follows a previous study completed in early 2000 and reviews the effects of foreign entry on the Croatian banking market, using the results of written and oral interviews and balance sheet data. The main findings are that foreign banks have played a major role in increasing competition, bank efficiency and the quality of banking products and services. In addition, regression analysis shows that de novo foreign banks founded through greenfield investment have significantly better asset quality than other banks, and have increased overall lending as well as lending to households and lending to enterprises more rapidly than other types of banks.

JEL: G21, F23, P34

Key words: foreign banks, foreign direct investment, Croatia, banking

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Contents

1 Introduction
2 Experience with Foreign Banks in Latin America and Transition Countries 2
2.1 General Remarks: Why Banks Expand to Foreign Markets, and What
Effects Can be Expected
2.2 Latin America
2.3 The Case of Argentina
2.4 Transition Countries
3 Foreign Banks in Croatia
3.1 Basic Chronology of Foreign Entry and Reasons for Entry
3.3 Innovation: New Products and Services, and Technology Transfer 17
3.4 Foreign Banks' Impact on Competition, Quality and Assortment of
Banking Products and Services, and Efficiency
3.5 Balance Sheet Data on the Performance of Foreign Banks
3.6 Capital Imports and Credit Growth
3.7 Foreign Banks and Consolidation of the Domestic Banking System 29
3.8 The Case of Riječka Banka
4 Conclusions
Bibliography

FOREIGN BANKS IN CROATIA: ANOTHER LOOK

1 Introduction

In early 2000, a team of researchers from the Croatian National Bank interviewed Croatian banks, asking about the impact of foreign banks on the Croatian banking market (Galac and Kraft 2000). It turned out that this date marked the end of an initial phase of foreign bank entry, in which the main impact of foreign banks came through the entry of de novo foreign banks with relatively small market shares. During the two years since then, foreign banks have gained majority market share through the acquisition of several of the largest Croatian banks. Thus, the whole nature of the foreign banks' influence has changed dramatically.

The changes that have occurred in the Croatian banking market in the last two years have also been dramatic. Competition has increased substantially, especially among what might be called the "second tier" banks (banks ranked from third to seventh or eighth in terms of total assets). Interest rates have fallen to low levels in real terms. For example, short-term loans to companies were as low as 8.8% in April 2002, with one-month loans costing 7.6%, while inflation had been 4.8% in 2001 as a whole. The range of financial products and services has increased substantially, with products such as futures, options and pension funds appearing for the first time, and other products introduced slightly earlier, such as forwards, forfaiting, revolving credit cards and asset management, taking on greater importance. Banks have also formed financial groups to offer these and other services, bringing a new level of services and sophistication of operations to the Croatian market.

This article will analyze the new situation, drawing both on balance sheet data and new interviews with both the foreign and domestic banks. After a brief review of theoretical literature, the article discusses the impact of foreign banks in other countries, with special focus on the Latin American experience and the experience of other transition countries. Then, the Croatian experience is analyzed, using both balance sheet data and data gathered in our interviews. In the last section, some conclusions are drawn.

¹ To be precise, the average price level in 2001 was 4.8% higher than the average price level in 2000.

2 Experience with Foreign Banks in Latin America and transition countries

2.1 General Remarks: Why Banks Expand to Foreign Markets, and What Effects Can be Expected

Why do banks expand their operations to other countries? There may be "push" factors relating to the home market. If profits in the home market are low due to high levels of competition, macroeconomic weakness or regulatory burdens, banks may look to foreign markets to increase profits.²

At the same time, there can be "pull" factors that make foreign markets particularly attractive. One factor is access to a new client base. This is particularly important in countries where GDP growth is fast and is expected to be fast in the future, as is the case for transition countries at the moment. Another factor is low competition in the foreign market. Less stringent banking regulation can be an enticement, as well as the presence of home country clients in the foreign market (the "follow the client" motive).

It should be noted that banks face a choice about how to expand abroad. They may decide to deal directly with foreign clients, for example by underwriting syndicated loans or by accepting deposits over the Internet. Or they may choose to form a branch or subsidiary in the foreign market. The choice to operate a branch or subsidiary in the foreign market (as opposed to doing business in the foreign market without a physical presence) depends on the advantages to be gained from physical presence. These may include better regulatory treatment, exemption from capital controls or other restrictions on firms' foreign borrowing, or the need to have personnel "on the ground" to carry out business.

In addition, foreign expansion may be useful to a bank as a source of risk diversification if the foreign market's business cycle is not highly positively correlated with the domestic market's business cycle. For example, for a European bank, investment in Latin America is likely to provide such diversification, since European recessions and Latin American recessions do not necessarily happen at the same time. The behavior of the Croatian economy in 2001 and early 2002 provides another example: while European Union countries were experiencing a slowdown, Croatia's economy continued to grow steadily, providing risk diversification for those EU banks operating in Croatia.

These are the main reasons why profit-oriented banks may seek to expand their business outside their domestic markets. Presumably, entry into the foreign market will increase the bank's profitability. The bank engaging in FDI would find its investment justified if the rate of return on the FDI venture was higher than on the rest of its operations, or if other effects, such as scale economies, risk diversification or smoother cash flows, helped improve overall profitability.

In addition, following Clarke, Cull, D'Amato and Molinari (1999), we can presume that foreign banks will seek to enter segments of the banking market where they have

² The discussion below draws on Sagari 1992, Buch 2000, Focarelli and Pozzolo 2001 and Konopielko 1999.

the greatest comparative advantage. The most common sources of comparative advantage include greater size and accompanying economies of scale or scope, cheaper or easier access to funds, and proprietary technology or knowledge. Generally speaking, we would expect foreign banks to have knowledge advantages in such activities as mass market retail banking, where standard products can be efficiently used without a great deal of special knowledge about the domestic market. Foreign banks would be expected to have comparative disadvantages in activities requiring a great deal of special knowledge about the domestic market, such as small business lending.

So much for the reasons why banks engage in FDI. What effects will the foreign banks have on the markets they enter?

Much FDI by banks is actually from one developed country to another. However, in this case, Claessens, Demirgüç-Kunt and Huizinga (2001) show that FDI ventures generally are less profitable than domestic banks. In other words, in these cases, it seems that foreign banks cannot make up for their lack of information about the local market, and do not possess technological advantages.³

More interesting for the Croatian case is FDI by banks from more advanced countries to less advanced countries. In these cases, the entering banks usually possess greater know-how and better technology than the domestic banks. Skill and technology transfer are thus a basic expected effect of foreign bank entry (banking FDI). This may happen internally, through better management techniques, information technology and the like, and may also be diffused in various ways (by imitation, through consultants). Greater know-how may be embodied in new products and services as well. (See Bonin et al. 1998, and the discussion in Galac and Kraft 2000.)

In addition, the mere entry of foreign banks adds new players to the domestic market, thereby increasing competition. However, the degree to which competition will be increased depends upon the extent of FDI and the aims of the foreign players. If the foreign banks are only interested in limited market segments, the effects on competition will be small. If they are interested in the broader markets, their effect on competition may be large.

Another possible effect of foreign banks is the utilization of economies of scale and scope. Since foreign banks are often large, market-leading banks, they may operate at larger scale than domestic banks. Although there is controversy about the extent of scale economies in banking, there is some reason to believe that large foreign banks will have scale efficiencies smaller domestic banks do not possess. And there is even more reason to believe that foreign banks will be able to take advantage of economies of scope, since usually foreign banks are more likely to be either universal banks or members of financial conglomerates that offer a wide range of products and services.

In addition to these positive effects, foreign bank entry may have some negative effects. Domestic banks may be unable to meet foreign competition and may leave the market, whether through acquisition or failure. While from an economic point of view this amounts to replacement of less efficient banks by more efficient banks, it may

³ See also DeYoung and Nolle (1996) for a case study, and Peek, Rosengreen and Kasirye (1999) for further analysis.

cause some disruptions (e.g. unemployment in particular areas) and some political concerns (increased foreign control).

Another danger related to foreign bank entry is the possibility that changes in economic conditions in the foreign bank's home country may have a negative effect on bank activity in the local market. For example, Peek and Rosengreen (2000) show that the collapse of the Japanese asset markets in the early 1990's and the Japanese recession caused Japanese banks in America to decrease their lending activities in the US. This is just the flip side of the diversification argument; foreign banks may be willing to expand lending despite a recession in the local economy, and they may contract lending when the local economy is doing well, simply because of problems in their home country. Overall, the effect should be to smooth out lending fluctuations, particularly if the set of foreign banks in a country comes from a well-diversified set of countries. But if most of the foreign banks are from one country or a set of countries with synchronized business cycles, then the country receiving FDI may feel strong effects of a recession in the FDI-creating country or countries.

Another possible effect of foreign banks is decreased lending to small enterprises. Generally, it has been found that larger banks find it more cost-efficient to focus on large customers and on customers with standardized needs. Although techniques such as credit scoring have made it possible for large banks to handle some types of smaller loans, they cannot substitute the intangible, personal knowledge of the client in some situations. (Berger and Udell 2002) Thus, "relationship lending" is still considered to be a useful technique, and a technique that is best practiced by small banks. Since foreign banks tend to be large and tend to lack close relationships with clients, they may be poorly situated to provide credit to smaller businesses.

However, even if foreign banks do neglect small business (which is not certain), it may be that smaller domestic banks focus on this market segment as an area in which they have comparative advantage. Furthermore, the entry of efficient foreign banks may lower market interest rates, both because of increased efficiency and because of increased competition. Lower interest rates, of course, increase the quantity of loans demanded, which may offset the decreased availability of loans for small businesses. In other words, it is not clear at a theoretical level that foreign bank entry will actually decrease overall credit availability for small businesses.

In this case, as in many others, theory, while useful, cannot provide definitive answers. Therefore, I turn to the empirical evidence.

2.2 Latin America

The entry of foreign banks into the banking markets of Latin American countries gathered momentum in the 1990's. By the end of the decade, foreign banks controlled more than 50% of total banking assets in Argentina, Mexico, Peru and Venezuela, over 40% in Chile, and over 20% in Brazil and Columbia (Crystal, Dages and Goldberg 2001).

This process has provided a new source of empirical information on the behavior of foreign banks. I will summarize the findings of some of the major recent studies.

1. Credit growth: Dages, Goldberg and Kinney (2000) look at the rates of growth in lending by foreign and domestic banks during and after periods of banking crisis. Specifically, they look at Argentina and Mexico during and after the "Tequila Crisis" of 1995. They estimate credit growth as a function of GDP growth, a set of bank characteristics and foreign or domestic ownership. The key result is that foreign banks expand lending even when domestic GDP is stagnating or falling. This means that foreign bank lending provides a counter-cyclical support to the economy.

There are two reasons for this finding. First, the foreign banks were in a process of expanding market share. Apparently, despite temporary bad times, the foreign banks felt that the markets in Argentina and Mexico held long-term promise. Because of this, they thought it would be worthwhile to acquire market share even at the risk of some losses due to macroeconomic weakness. Second, the foreign banks' funding sources were not limited by the local recession, unlike the domestic banks. Foreign banks could more easily call on their mother banks, which were located in countries in Europe or America that were not in recession.

The findings of Dages, Goldberg and Kinney thus partly confirm the risk diversification argument made above. The foreign banks, because their funding sources at home were strong due to economic prosperity, were willing to loan during recessionary periods in Argentina and Mexico, thus partly offsetting the credit contraction by domestic banks.

2. Bank characteristics: Crystal, Dages and Goldberg (2001) find that, in the 7 largest Latin American countries, Moody's financial strength ratings of banks acquired by foreigners increased relative to domestic private banks between 1997 and 2000. Also, foreign banks rely less on deposits, maintain higher shares of liquid assets, show stronger loan growth, have higher loan provisioning expenses or higher reserves/non-performing loans, higher average recoveries and have higher risk-based capital ratios.

When we analyze these findings, we see two things. First, the foreign banks are less dependent on domestic market funding sources, above all deposits, than domestic banks. This fits with the story above: foreign banks are drawing on their financial strength outside the country to fight for market share.

Second, it seems that foreign banks are more conservative in their risk management and provisioning policies. Their higher loan provisioning expenses suggest greater caution in dealing with potential losses. The same is true of their higher risk-based capital ratios. The higher level of recoveries suggests that the foreign banks actually were more conservative in acknowledging loan losses than strictly necessary. Alternatively, it may indicate that they were better at workout and loan collection than their domestic rivals.

Crystal, Dages and Goldberg also find that foreign banks are not generally more profitable than domestic banks. Nor do they find evidence that foreign banks "cherry pick" or only seek out the very best clients or business. Instead, in all the countries studied, foreign banks entered broad markets, both in the retail

and wholesale aspects of the banking business. This broad participation in markets ensured that the foreign banks' influence would be strong.

Importantly, they do not find evidence that foreign banks "cut and run" - that is, that they leave the country at the first sign of trouble. I will return to this issue below when I discuss the crisis of the Argentine currency board in late 2001 and early 2002.

3. Lending to small business: Two studies are available on this topic, one by Berger, Klapper and Udell (2001) and one by Clarke, Cull and Martinez-Peria (2001). Berger, Klapper and Udell (2001) show that both foreign banks and large banks tend to lend less to small, "opaque" firms. This confirms the hypothesis above that foreign banks may be unwilling to lend to small enterprises. However, the authors point out that the aggregate effects of consolidation are unclear, since smaller domestic banks may seek to fill the market niche left by the larger banks and foreign banks.

Clarke, Cull and Martinez-Peria (2001) use survey evidence on a large international sample. They find that increased foreign bank presence is actually associated with better lending terms (lower interest rates, lower fees, longer maturities) for all firms. The benefits seem to be larger for large firms, but nonetheless, they emphasize that all firms receive better terms. This study suggests that the aggregate effects mentioned by Berger, Klapper and Udell in fact compensate for the reluctance of big banks to lend to small firms. That is, even though foreign banks themselves do not lend as much to small firms, by increasing competition and lowering interest rates, they indirectly help make credit more available to small firms.

2.3 The Case of Argentina

Thus, the existing empirical literature tends to show rather favorable effects of foreign bank entry in Latin America. However, the story would not be complete without a consideration of recent dramatic events in Argentina.⁵ Since events are moving rapidly, it should be noted that the discussion below was written in June and July 2002.

When discussing Argentina, it is very important to understand the nature of the crisis. Argentina adopted a currency board system in which one Argentine peso was set by law at a value of one US dollar. The adoption of the currency board in 1991 was motivated by the failure of myriad attempts to stabilize inflation from the 1970's onward. Argentina, along with Brazil, had become on of the world's leaders in inflation year after year.

Under the convertibility law, Argentine citizens were guaranteed the right to convert their pesos to dollars and vice versa without limitation. Giving such a guarantee was a bold gamble for a country with a history of chronic inflation, high fiscal deficits

⁴ Similar conclusions have been drawn by US researchers, who find that despite the bank mergers of the 1980's and 1990's, credit to small business has actually expanded. See Berger, Saunders, Scalise and Udell (1998).

Due to the rapidity of events in Argentina, it is hard to cite definitive accounts. Blejer (2002), Jonas (2002), Kiguel (2001) and Roubini (2001) are all useful.

and strong social conflicts. However, it was felt that the currency board would provide an anchor that would prevent the development of inflationary expectations and to a certain extent force both the government and social actors (unions, employers) to adjust their actions to the constraints of the convertibility law.

For most of the 1990's, the currency board was remarkably successful. Argentina enjoyed rapid economic growth and the lowest inflation in half a century. Real GDP growth exceeded 5% every year from 1991 to 1997, except for 1995, when the Tequila crisis produced a sharp drop of 2.85%. Even including the slower growth year of 1998, the yearly average real GDP growth in the "honeymoon phase" of the currency board was 5.8%. Inflation fell from an astronomical 2325% in 1990 to only 4.2% in 1994, and actually turned negative in 1999 and 2000. In addition, the country's foreign debt was decreased, partly through privatization of major state companies.

Argentina also made many important reforms in its banking system, revamping the regulatory system and privatizing many banks. Foreign banks were allowed to enter, and they eventually took a major share in total banking assets. Clarke, Cull, D'Amato and Molinari (1999) show that the foreign banks specialized in areas where they had comparative advantage, including retail markets. Their greater efficiency and broader product assortment had a substantial favorable impact on the banking market.

However, in the last years of the 1990's, the currency board system began to falter. Economic growth turned negative in 1999, and unemployment, already high, began to rise. The foreign debt grew, and fiscal deficits, especially those of the powerful provincial governments, began to grow. Argentina remained reliant on global capital markets to finance its fiscal debt, and, during the shocks of the Asian, Russian and Brazilian crises of 1997-99, Argentina faced greater difficulty borrowing and higher interest rates, even though it was not directly part of these crises. These adverse external shocks further increased Argentina's already large external obligations.

By 2001 it was clear that Argentina was in great difficulties. There were essentially three options: first, to try to keep the currency board and to drastically cut fiscal deficits and wage demands. This was the policy of Economics Minister Domingo Cavallo, and, while it partially stabilized the budget deficits, it did little to restore economic growth. The second option was to adopt the US dollar as the country's currency, permanently removing the exchange rate issue and question of confidence in the peso from the agenda. The third option was to end the convertibility law and let the peso decline in value relative to the dollar.

The third option was eventually taken in December 2001 under popular pressure. The hope was that a radical depreciation of the currency would boost exports and restore economic growth. But Argentina is a very closed economy, with exports amounting to only about 10% of GDP. Thus, the effects of exchange rate depreciation on increasing exports cannot be too big. Furthermore, most savings are held in dollars, while a large proportion of bank loans are made in pesos. This mismatch did not matter as long as the currency board held, but when the peso depreciated, the peso equivalent of these dollar savings increased. Basically, banks had almost no way of avoiding

⁶ Data for GDP and inflation from International Financial Statistics.

large losses. Naturally, under such circumstances, bank lending basically dried up, so that even those firms ready to take advantage of the positive effects of depreciation on export prices could not get loans to help them expand output.

The fact that enormous losses were imposed on the banks explains why the banks were unwilling and unable to handle depositors' demands during the breakdown of the currency board. Even before the currency board had been formally abandoned, the government froze depositors' access to their foreign exchange savings accounts. Understandably, this move caused outrage among the population. But with massive devaluation looming, leaving depositors the freedom to withdraw their money would have resulted in a run on the banks and possibly the collapse of the whole banking system. Furthermore, it would have caused a run on the country's foreign exchange reserves, which would have not only brought down the currency board but would also have caused a default on the country's international debt.

After the currency board was abandoned, the government announced that borrowers would be allowed to repay their dollar loans with an equal amount of pesos. At the same time, dollar deposits were converted to pesos at an exchange rate of 1.4 pesos per dollar. This implied massive losses. The government's decision hit both domestic and foreign banks alike. Rioters have especially targeted the foreign banks, perhaps under the idea that these banks are financially strong enough to absorb the losses imposed by the crisis and to allow Argentine depositors to get their money. From the bankers' side, this is a completely unrealistic expectation: their banks are insolvent, and they simply cannot honor all the claims upon them. The bankers very likely feel that there is no reason why the banks should be the only ones to bear the losses caused by the crisis.⁷

Understandably, many foreign banks are now questioning whether to maintain their operations in Argentina. This, however, is not a general argument against foreign banks, but a result of the government's handling of the economic crisis of the currency board. Domestic investors also will undoubtedly be reluctant to operate banks under the conditions imposed by the Argentine government. This is not what is meant by "cut-and-run". That would be a situation where an individual foreign bank that incurred losses due to bad management or other business problems refused to recapitalize their subsidiary, instead leaving the country. But all the foreign banks in Argentina, and even domestic banks, are now in a position to question whether it is wise to perform banking services in Argentina at all, if the government's attitude is so unfavorable.

It is too early to tell what the result of the Argentine crisis will be for the foreign banks. At the moment, foreign investors stand to lose substantial amounts, and many have already formed loss provisions. However, it would certainly be possible for the government to change its stance and make the situation livable for the foreign banks.

⁷ To be clear, while the local subsidiaries of large foreign banks are insolvent, of course the parent banks are not. However, it would be unrealistic to expect such banks to cover the losses of their Argentine subsidiaries without some assurances that the government will not continue with its policies that have been so harmful to the banks. So far, no such assurances have been forthcoming.

⁸ Actually, Mario Blejer, former President of the Central Bank of Argentina, refers to the government's treatment of the banks as "rape." See Blejer (2002).

Some of the losses may have to be borne by depositors, who could be given back only a certain percentage of their money, or by the government (in reality, taxpayers), who could provide public funds to offset at least some of the losses imposed on the banks. Unless Argentina wants to nationalize all its banks, some way to share the losses will have to be found.

2.4 Transition Countries

As in Latin America, transition countries have recently experienced a substantial increase in foreign bank ownership. In fact, in many transition countries, foreign bank shares of total assets substantially exceed the levels seen in Latin America. In part, this is due to the weaknesses of local banks in transition countries. Such banks have no tradition of functioning in a market system and often made large amounts of loans under communist times that were never repaid. The rise of foreign bank shares is also a result of the European integration process, which has encouraged EU banks to see the transition countries as eventual parts of the unified EU banking markets. Furthermore, EU integration has encouraged transition countries to remove barriers to entry as part of the adoption of EU laws and regulations. Table 1 shows the latest available figures for foreign bank ownership shares.

Table 1: Foreign Bank Share of Total Banking Assets in Transition Countries

	2001	1999
Estonia	97%	62%
Latvia	97%	66%
Czech Republic	93%	48%
CROATIA	89%	31%
Albania	87% ^a	63%
Slovakia	83%	
Lithuania	81%	45%
Bulgaria	75%	47%
Poland	69%	56%
Hungary	62%	65%
Macedonia	53%	12%
Slovenia	16%	11%

^a June 2000.

Sources: Group of Banking Supervisors from Central and Eastern Europe, central bank reports and direct communication with central banks, Baleta and Xhepa (2001).

Clearly, levels of foreign bank ownership above 75% are no longer uncommon, and only Slovenia stands out as having less than 50% foreign ownership at the end of 2001.9

Integration in European banking is progressing, although perhaps not as rapidly as expected after the signing of the Maastricht Treaty. One region where integration

⁹ The author was unable to obtain data on Romania at the time of writing.

has progressed the farthest is Scandinavia, with cross-border mergers between Swedish, Finnish, and Norwegian banks seemingly creating a unified banking market. The Baltic countries have been included in this, as big Scandinavian banks have become the market leaders in Estonia, Latvia and Lithuania. The result has been a major increase in the variety of banking services offered in these countries, with Estonian bank customers showing a particularly high level of use of electronic banking services.

In the countries of Central and Eastern Europe, there have been two driving forces for increased foreign bank entry. First, the regional strategies of a relatively small number of European banks, including Unicredito, Raiffeisenbank, Bank Austria, KBC and Erste, has propelled these banks to seek large market shares in at least some of the countries of the region. Second, the privatization approach pioneered by Hungary, in which majority stakes in the largest banks have been offered to strategic foreign investors, has been adopted by almost every country in the region.

To begin with the first point, the German-Austrian HVB has subsidiaries in some 13 transition countries in Central and South East Europe and the Baltics. Right behind them is the Austrian-based banking group Raiffeisen, with subsidiaries in 12 countries. Unicredito (Italy), Erste und Steiermaerkische (Austria), Citibank (US), Dresdner Bank (Germany) and Volksbank each have subsidiaries or majority stakes in banks in five to ten CEE countries. Finally, four banks operate subsidiaries or majority-owned banks in three countries each: ABN Amro (the Netherlands), KBC (Belgium), Societe Generale (France) and BNP Paribas (France).

Another way of looking at this issue is by total assets. This differs from the above, since those foreign banks that have bought market-leading banks tend to have larger total assets than those foreign banks that have entered via greenfield investment. Indeed, KBC turns out to have the largest total assets in the region, EUR 24.3 billion, followed by HVB with 21.6 billion, Erste with 20.4 billion and Unicredito with 18.1 billion. From either perspective, it is clear that a relatively small group of foreign banks accounts for the lion's share of banking FDI in the region. ¹⁰

Regarding the second point, it became obvious during the transition that the largest domestic banks were unable to meet the competition of European banks. In fact, in many countries, the largest banks had suffered large losses and governments were unable to fully recapitalize them. For these reasons, governments sold the country's largest banks to foreigners (Hungary, the Czech Republic, Slovakia, Croatia, Poland, Bulgaria, Estonia, Latvia, Lithuania, Macedonia). That is to say, the recent large-scale entry of foreign banks was not a spontaneous process in which domestic banks voluntarily decided to sell out to foreign investors but a government-directed privatization process. That is not a value judgement; as I will try to show below, most of these transactions seem to have had positive results. But it is worth noting that these decisions were made consciously by governments, and (by and large) not by banks and their owners.

Turning now to the effects of privatization, Mager (2002) and Abel and Siklos (2001) discuss the effects of the big wave of privatizations to foreign strategic investors in Hungary in 1995-96. They both agree that Hungary had been unable to recapi-

¹⁰ These figures are from a report by Bank Austria/Creditanstalt summarized by Bulić (2002).

talize its banks, despite consolidation programs and three waves of recapitalization in 1992-94. The country's banks were undercapitalized, inefficient and unprofitable before the privatizations. The system-wide capital adequacy was only 4% in 1993. The privatizations restored profitability, ensured sufficient capital (over 16% by 1997), improved management and quality of services, provided a wider range of products and services, and led to investments in information technology and branch networks, fierce competition and falling interest margins.

Another interesting case is that of Estonia. This small Baltic country faced a sharp banking crisis in 1992, shortly after it achieved independence. The crisis was successfully overcome, and the banking system was privatized over the ensuing years. However, the Russian crisis had strong effects on Estonia, leading to new problems. Precisely at that time, large Scandinavian banks entered the market. The table below shows some basic quantitative indicators of these developments.

Table 2: Selected Indicators of Banking in Estonia

	1996	1997	1998	1999	2000
Number of banks	13	11	6	7	7
o/w private	12	11	5	6	7
o/w state	1	0	1	1	0
Concentration index C3	58.8	69.7	93.0	92.4	91.1
Total assets, EUR m	1467	2594	2620	3008	3695
ROE, %	30.6	34.9	-10.1	9.2	8.4
ROA, %	2.9	3.3	-1.2	1.5	1.2
Capital adequacy, %	12.4	13.6	17.0	16.1	13.2
Total assets/GDP	43.8	63.4	55.7	61.7	67.7
Majority foreign ownership/ total assets, %	2.6	2.3	90.2	89.8	97.4

Source: Bank of Estonia (www.ee/epbe/en/statistical.html).

What we see is that the foreign banks helped overcome the sharp crisis in 1998. Despite large losses, the capital adequacy of the system was strengthened, and total assets grew again as a share of GDP in the next years. The Estonian banking system is highly concentrated but is now highly integrated into a broader Scandinavian market, so that an acceptable level of competition seems to have been achieved. The range of services available seems to be quite large, with Estonians using such innovative services as e-banking extensively.

One interesting peculiarity of the Estonian banking market is the rapid growth in leasing and factoring. The foreign banks entering Estonia are Swedish and Finnish financial conglomerates. They find it more convenient to employ leasing than regular loans in many cases, since leasing allows them to maintain ownership of the asset and thus minimizes time spent in court. Remarkably, leasing and factoring together have grown from 3% of GDP in 1996 to some 12% in June 2001 (Eesti Pank 2001).

The most controversial case of foreign ownership in transition countries is probably the involvement of the Japanese financial conglomerate Nomura in the privatization of IPB in the Czech Republic. Nomura bought the bank, which had suffered major

losses, in 1997. It declared that it was not especially interested in remaining the owner of the bank, but merely sought to sell the bank. Apparently, Nomura was simply interested in selling certain key assets held by IPB and was not interested in improving its operations.

Unfortunately for Nomura, IPB collapsed in the summer of 2000. The Czech National Bank stepped in and sold IPB to one of its main rivals, CSOB, owned by the Belgian KBC. There were allegations of fraud made against Nomura, although court judgement has yet to be made.

If we put the fraud allegations aside, the main point of the story is the following. Nomura appeared to have calculated that the purchase of the bank would be profitable to it even if IPB failed, as long as it was able to sell the assets in question. Thus Nomura never had any interest in improving IPB's management processes or ensuring its long-term viability. Clearly, Nomura was an unfit owner in this sense, even though, as the owner of the bank, it had the right to sell whatever assets it chose. However, the Czech government did not have any other bids for the bank and felt a need to resolve the situation.

In retrospect, it is clear that the Czech government did not do an adequate job of screening Nomura's application. The Nomura case is another warning of the dangers of bank privatization - the difficulty of finding a fit and proper owner for a troubled bank.

Despite the Nomura case, the general assessment of foreign bank entry in transition countries should certainly be positive. The general pattern of improved capitalization, better products and services, greater competition and lower interest margins can be seen in all the transition countries that have high levels of foreign ownership. Problems exist, some owners are unable to succeed in the different transition environment, others withdraw for their own reasons, and there are even cases of fraud or mismanagement. In short, foreign ownership has its problems and shortcomings. But overall, looking at transition country banking systems, the progress achieved due to foreign entry seems rather clear.

3 Foreign Banks in Croatia

3.1 Basic Chronology of Foreign Entry and Reasons for Entry

The first foreign bank entered Croatia in late 1994. Until 1999, foreign banks' share in total assets was small, and most of the foreign banks were de novo banks (newly-formed subsidiaries of their parent banks). That situation changed dramatically in late 1999 and early 2000, when the second, third and fourth largest banks by total assets were sold to foreign strategic investors. Additionally, in the first months of 2000, a majority of the shares of the largest bank came into the possession of foreign investors via sales on the London Stock Exchange.

To gain more information about the foreign banks' motivations for coming to Croatia and other aspects of foreign banks' behavior and their impact on the Croatian market, the CNB Research Department conducted a survey during March and April of 2002. The survey consisted of two parts. First, a written questionnaire was sent to all

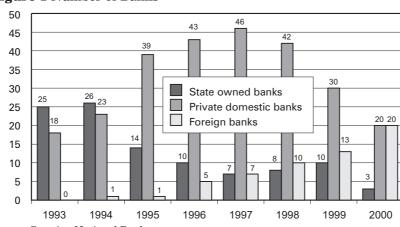


Figure 1 Number of Banks

Source: Croatian National Bank.

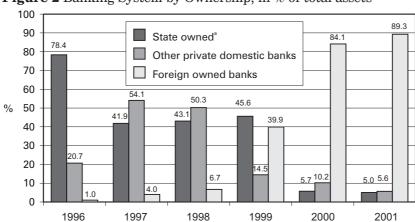


Figure 2 Banking System by Ownership, in % of total assets

 $^{\rm a}$ State owned+private with significant public stake

Source: Croatian National Bank.

banks operating in Croatia. Some questions, it should be noted, were directed only to the foreign banks. Second, follow-up interviews were conducted by a team of researchers from the CNB. 40 of the 42 active banks in Croatia participated in the interviews.

When asked about their motivations for entering the Croatian market, the foreign banks gave the answer that high interest margins were the strongest reason for entry. This was especially true of banks entering in the second half of the 1990's, when margins in Croatia were very high. Following this, with almost equal scores, were the search for new clients and the unused credit potential of Croatian households and businesses. At this point, competition in the foreign banks' home markets was rated slightly lower, and following clients from the home country was rated much lower.

Interestingly, when foreign banks were asked about their reasons for staying in the Croatian market at the moment, high interest margins were much less important. Most important is the search for new clients. Just behind this is the unused potential first of households and then of businesses. Following this comes competition in the home country, showing that push factors are becoming more important. Next comes geographic proximity, which is probably relevant for banks with regional expansion strategies. Interestingly, following clients from the home country has increased in im-

portance somewhat but remains much lower than other motivations. Increased foreign trade and FDI would increase the importance of this factor.

Table 3: Importance of Reasons for Entry and for Remaining in the Croatian Market

	At ti	ime of e	ntry		Now		In	In the future			
Activity	Average score ^a	Number of answers	Share in total banking assets	Average scoreª	Number of answers	Share in total banking assets	Average score ^ª	Number of answers	Share in total banking assets		
Competition in the home country	3.97	10	29.81%	4.19	10	29.81%	4.37	10	29.81%		
Search for new clients/new business	4.15	10	29.81%	4.33	10	29.81%	4.51	10	29.81%		
Following clients from the home country	2,86	10	29.81%	3.17	10	29.81%	3.62	10	29.81%		
Unused credit potential of the Croatian economy	4.10	10	29.81%	4.24	10	29.81%	4.06	10	29.81%		
Unused credit potential of Croatian households	4.14	9	29.36%	4.29	9	29.36%	4.20	9	29.36%		
Geographical proximity	4.07	10	29.81%	4.15	10	29.81%	3.72	10	29.81%		
Similar mentalities	3.49	10	29.81%	3.49	10	29.81%	3.50	10	29.81%		
High interest margins	4.58	10	29.81%	3.66	10	29.81%	3.27	10	29.81%		

Scale: 1 – unimportant, 2 – less important, 3 – average importance, 4 – above average importance, 5 – extremely important. ^a Weighted by bank assets. Source: CNB written questionnaire.

Looking now at the future, banks see the search for new clients as the main reason for staying in Croatia in the future. Second comes competition in the home country, indicating that the effects of the single European market in banking may have an even greater effect on Croatia in the coming period. The foreign banks seem to be slightly more optimistic about the potential of Croatian households than that of Croatian businesses (4.20 vs. 4.06). And, they clearly expect margins to fall in Croatia, as indicated by the fall in the importance of margins in motivations for staying in the Croatian market.

3.2 Strategy in the Croatian Market: Target Groups and Products

As we have seen, economic theory suggests that foreign banks will concentrate on areas in which they have comparative advantage. Very often this is retail banking, where foreign banks may have well-developed products, services and expertise. In other cases, foreign banks have comparative advantage in activities that require specialized knowledge, technology or resources such as investment banking, derivatives or private banking (Clarke, Cull, D'Amato and Molinari 1999).

At the same time, foreign banks are expected to have comparative disadvantages in areas requiring detailed knowledge of local conditions. Lending to small enterprises is a classic example of such an activity. It is expected that domestic banks will dominate such market segments.

In Croatia, foreign banks report that their main emphasis at the time of entering the market was on high net worth individuals, small and medium enterprises, households and "blue-chip" firms. The emphasis on SME's is somewhat surprising and at odds with expectations. Yet, at the moment, foreign banks continue to focus on the same groups, with the addition of micro enterprises and craftsmen, just ahead of blue-chip firms. And, in their view of the future, the foreign banks see SME's just behind high net worth individuals, followed by households, micro enterprises and sole traders, and blue-chips.

Table 4: Importance of Types of Clients

	At 1	time of e	entry		Now		In	In the future			
Activity	Average score ^a	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets		
Foreign investors	2.78	10	29.81%	2.59	10	29.81%	2.96	10	29.81%		
Home-country investors	2.98	9	23.33%	3.11	9	23.33%	2.93	9	23.33%		
Other foreign or international companies	2.49	10	29.81%	2.74	10	29.81%	2.89	10	29.81%		
Domestic "blue chips"	3.85	10	29.81%	4.03	10	29.81%	4.03	10	29.81%		
Large domestic companies	3.24	10	29.81%	3.37	10	29.81%	3.30	10	29.81%		
Domestic small and medium enterprises	4.11	10	29.81%	4.54	10	29.81%	4.90	10	29.81%		
Micro-enterprises and sole traders	3.75	9	29.36%	4.18	9	29.36%	4.33	9	29.36%		
High net worth individuals	4.34	9	29.36%	4.91	8	27.35%	4.92	9	29.36%		
Households	3.90	9	29.36%	4.74	8	25.08%	4.78	9	29.36%		

Scale: 1-unimportant, 2-less important, 3-average importance, 4-above average importance, 5-extremely important. ^a Weighted by bank assets. Source: CNB written questionnaire.

Several points can be made here. First, it is clear that the foreign banks have not come to Croatia merely to take the most profitable market niches ("cherry-picking"). Instead, it is clear that they seek to serve broad markets in both the retail (household) and corporate (business) sectors.

Second, some foreign bankers indicated that large Croatian companies have become more able to borrow directly abroad. In addition, some of the better large companies have turned to direct finance. Thus the opportunities to lend to large domestic companies have been shrinking.

Third, in the interviews, some foreign bankers noted that they found it natural to build their businesses in Croatia from the largest to the smallest companies. Servicing large companies does not require a branch network and can be developed immediately upon entry into the market. Servicing smaller and medium-sized clients requires a branch network, which takes time to establish.

Fourth, it may be that the high interest expressed in small business lending reflects the fact that foreign banks tend to mainly employ Croatian managers who have good knowledge of local conditions. Our first survey (Galac and Kraft 2000) indicated that both domestic and foreign banks assess that foreign banks have as good a knowledge of local conditions as do domestic banks. Or, alternatively, the interest in small

Table 5: Foreign Representation in Governing Structures and Management

Ratio of foreign to domestic	Median	Comments
Management board	0	Three banks have 1:1 ratios, while all others have only domestic personnel.
Supervisory board	4:1	In a third of the banks, there are no domestic people, and in more than half, there are less than 2.
Managers, excluding management board	5:95	Two banks have more than 50% foreign managers at the first level below the management board, and one-third of the banks have no foreigners at all.

Source: CNB bank survey interviews.

Table 6: Importance of Activities

Activity	At t	ime of e	ntry		Now		In	the futu	re
	Average score ^ª	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets
Foreign direct investment in Croatia	3.68	10	29.81%	3.54	10	29.81%	3.73	10	29.81%
Portfolio investment in Croatia	2.18	10	29.81%	2.55	10	29.81%	2.94	10	29.81%
Croatian exports	4.29	10	29.81%	4.49	10	29.81%	4.56	10	29.81%
Croatian imports	3.71	10	29.81%	3.71	10	29.81%	3.57	10	29.81%
Purchase of fixed capital/modernization	4.02	10	29.81%	4.21	10	29.81%	4.40	10	29.81%
Purchase of working capital	4.11	10	29.81%	4.09	9	29.53%	4.29	10	29.81%
Enterprise restructuring and domestic M&A's	2.46	10	29.81%	2.97	10	29.81%	3.33	10	29.81%
Expansion of domestic companies abroad	2.68	10	29.81%	2.61	10	29.81%	2.75	10	29.81%
Households – consumption	3.35	9	29.36%	3.50	9	29.36%	3.80	9	29.36%
Households – transportation	4.07	9	29.36%	4.15	9	29.36%	4.15	9	29.36%
Households – real estate	4.30	9	29.36%	4.86	9	29.36%	4.86	9	29.36%
Foreign direct investment by Croatian firms abroad	1.79	9	29.36%	2.23	9	29.36%	2.38	9	29.36%
Portfolio investment by Croatian firms abroad	1.42	9	29.36%	1.49	9	29.36%	1.72	9	29.36%

Scale: 1-unimportant, 2-less important, 3-average importance, 4-above average importance, 5-extremely important. $^{\rm a}$ Weighted by bank assets. Source: Written questionnaire.

business may be simply the result of dissatisfaction with the current state of larger Croatian businesses.

In our current set of interviews, we asked banks about the number of foreign managers in the banks. The answers show that there still are very few foreign managers below the level of the management board, and that in most cases the majority of the management board consists of Croatian citizens.

Another source of information about the foreign banks' strategies comes from their views about which activities are most interesting to them. At the time of entry, the foreign banks were most interested in financing real estate transactions by households and Croatian exports. Following this were working capital lending, auto lending to households and fixed capital/modernization lending. These activities cover both consumption and production/investment. At a somewhat lower level of intensity were foreign direct investment in Croatia and financing Croatian imports.

At the moment, we see even higher importance attached to real estate and Croatian exports, with fixed capital/modernization also increasing its importance. The outlook for the future looks similar, with the same three activities leading in importance. It is noteworthy that both real estate lending and fixed capital/modernization lending are long-term. Long-term lending has been sorely lacking in Croatia in recent years, and its increase would be most welcome.

3.3 Innovation: New Products and Services, and Technology Transfer

On their arrival in Croatia, the foreign banks rated the basic deposit-taking and loan-granting business with the public as their main activity. Foreign payments were also a major line of business. Other activities were rated substantially lower, with only foreign exchange trading and lending to the government and public enterprises receiving ratings above 3 on our 5-point scale.

At the moment, the two original priorities remain strong. In addition, providing domestic payments has jumped to second place, with a high 4.64 score. Domestic payments are a core banking business in most countries, so this is not surprising. Also noteworthy is a substantial increase in the importance of lending to government and public enterprises, whose rating rose from 3.21 in the early period to 3.81. In addition, the following activities rose by more than 1 point and had scores above 3.0: securities trading, both regular and financial leasing and pension funds. These activities represent important financial innovations in Croatia.

In the future, the foreign banks place strong importance on leasing and securities trading (scores above 4). Pension funds, foreign exchange trading and lending to the government and public enterprises all have scores above 3.75, and asset management and brokerage above 3.50.

When we asked for more detail about particular products, we found that the following products were considered highly successful, with scores over 4.0: financial leasing, private banking, revolving credit cards and pension fund management. Three of these four products are mass-market products that can be expected to have large impacts on the whole economy.

Table 7: Importance of Banking Products and Services

	At	time of e	entry		Now		Ir	In the future			
Activity	Average score ^ª	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets		
Deposit and lending business with private non-financial sector	4.82	10	29.81%	4.89	10	29.81%	4.90	10	29.81%		
Lending to the government and public enterprises	3.21	10	29.81%	3.81	10	29.81%	3.77	10	29.81%		
Lending to financial institutions	2.78	10	29.81%	2.43	10	29.81%	2.21	10	29.81%		
Domestic payments	2.31	10	29.81%	4.64	10	29.81%	4.85	10	29.81%		
Foreign payments	4.27	10	29.81%	4.49	10	29.81%	4.71	10	29.81%		
Foreign currency dealing	3.40	10	29.81%	3.40	10	29.81%	3.76	10	29.81%		
Trading domestic riskless securities	2.27	10	29.81%	3.04	10	29.81%	3.11	10	29.81%		
Money market trading	2.36	10	29.81%	2.59	10	29.81%	2.81	10	29.81%		
Business leasing	2.36	8	24.36%	3.39	9	27.67%	4.43	9	27.67%		
Financial leasing	2.19	8	24.36%	3.24	9	27.67%	4.29	9	27.67%		
Securities trading	2.47	8	24.36%	3.63	9	27.67%	4.50	9	27.67%		
Equities trading	1.58	8	24.36%	2.63	9	27.67%	3.50	9	27.67%		
Derivatives trading	1.49	8	24.36%	1.94	8	24.36%	2.77	9	27.67%		
Asset management	1.47	8	24.36%	2.50	9	27.67%	3.60	9	27.67%		
Commission business	1.78	9	27.67%	2.14	9	27.67%	2.56	9	27.67%		
Life and non-life insurance	1.37	8	24.36%	1.96	9	27.67%	2.56	9	27.67%		
Pension funds	2.45	8	24.36%	3.72	9	27.67%	3.91	9	27.67%		
Brokerage	2.75	9	26.50%	3.07	10	29.81%	3.74	10	29.81%		

Scale: 1-unimportant, 2-less important, 3-average importance, 4-above average importance, 5-extremely important. ^a Weighted by bank assets. Source: Written questionnaire.

The next most successful products are callable loans and open savings, with scores above 3.5. These are relatively specialized products. Perhaps more interesting is the somewhat lower scores held by important banking products such as domestic payments, forfaiting and factoring. These would be expected to be basic banking products. The low score for domestic payments may simply reflect initial difficulties in the transition to a new payments system. With regard to factoring and forfaiting, banks indicated weaknesses in the current legal framework. Since these products provide liquidity to firms, it is important that these legal problems be corrected, since the potential impact on the economy could be quite positive.

It is also interesting to note that derivative products are assessed as rather less successful. Surprisingly, forwards and futures received very low scores, despite the widespread perception of currency risk in Croatia. Banks cite lack of demand for such

Table 8: Success of New Products and Services

Product/service	Year of introduction	Average score	Number of answers	Share in total banking assets	Reason for failure	Reason for success				
Forwards	1998	2.38	7	18.81%	% There is no tradition and no demand; clients are uneducated; clients do not accept this product; limited market; inadequate experience; underdevelopment of the financial markets					
Futures	2001	2.00	1	4.28%	% There is no tradition and no demand; limited ma					
Options	2002	3.00	1	2.01%	There is no tradition and no de	emand; limited market				
Swaps	1997	3.05	5	16.54%	There is no tradition and no demand; limited market	Better client education				
Financial leasing	1997	4.18	3	12.77%	Delayed due to search for strategic partner; Off shore	Client needs				
Operational leasing	1997	2.49	3	12.77%	Delayed due to search for stra unwillingness; Off shore	tegic; client				
Factoring	1996	3.19	3	10.59%	Just at the beginning now; laws unclear	Simplicity (risk)				
Forfaiting	1999	3.00	3	8.28%	No tradition; laws unclear					
Domestic payments	2001	3.30	5	14.19%	IT adaptation; open questions; slowness of government structures	; High quality of service				
Cash and asset management	1999	3.04	5	16.65%	Lack of adequate instruments;	; Limited sales				
Private banking	1996	4.42	5	16.48%	Small scale	Adaptation to the structure of clients; high quality of services				
Call deposits	1996	3.08	4	9.34%	Client habits	High quality of services; liquidity limits				
Call loans	1997	3.78	4	9.34%		Better fund management in companies; high quality of services				
Revolving credit cards	1999	4.40	3	16.38%	Market saturated with similar products	Adaptation to the clien				
Open savings	1996	3.69	3	6.57%		Higher interest rates; high quality of services				
Rental savings	1997	2.48	7	22.81%	Clients not used to this; lack o interest; market conjuncture	ofHigher interest rates; high quality of services				
Pension fund management	2001	4.43	3	15.08%		Success of pension reform; Custody				
A potential "twin" of building societies	2002	-	1	1.89%						

Scale: 1-unimportant, 2-less important, 3-average importance, 4-above average importance, 5-extremely important. $^{\rm a}$ Weighted by bank assets. Source: Written questionnaire.

products. Given that many firms, such as hotels, have foreign exchange receipts at unfavorable times (when the kuna is at its strongest), this seems strange. Options and swaps are assessed somewhat more favorably, although banks claim that these products have also been poorly received by clients.

Moving now to technology transfer, we find that such transfer was relatively limited before 2000. Only 3 to 5 banks of the 14 to 17 that answered this question recorded technology transfer. But these banks actually made up over 40% of total banking assets, so in that sense the impact was perhaps more substantial. Looking at the answers for 2000-2001 and for 2002, we see that technology transfer seems to be growing in importance. The largest number of banks report adopting marketing knowledge and techniques, but new products and services, wholesale knowledge and techniques, risk management processes, internal control processes, and management skills and methods also received high scores.

Table 9: Transfer of Skills and Knowledge from Foreign Banks

		Ве	fore 2000			2000-2001				2002			
Knowledge / skills / systems		Number of banks		Share in total banking assets		ber of nks	Share in total banking assets		Number of banks		Share in total banking asset		
	Yes	Total	Yes	Yes/total resp.	Yes	Total	Yes	Yes/total resp.	Yes	Total	Yes	Yes/total resp.	
Information systems	3	16	29.13%	42.35%	1	15	1.03%	14.86%	3	14	7.79%	15.77%	
New products and services	4	14	31.87%	41.63%	6	16	32.51%	42.57%	8	15	39.17%	43.54%	
Project assessment methods	5	17	30.83%	42.96%	3	14	2.73%	14.55%	5	14	4.40%	15.77%	
Management methods and skills	3	15	29.88%	42.01%	5	15	4.13%	14.89%	7	14	12.08%	15.77%	
Marketing knowledge and techniques	3	15	29.87%	42.01%	5	15	2.90%	14.89%	10	14	13.70%	15.77%	
Retail knowledge and techniques	3	15	29.88%	42.01%	5	15	2.91%	14.89%	8	14	6.71%	15.77%	
Wholesale knowledge and techniques	3	15	29.88%	42.01%	3	13	2.38%	13.94%	7	15	9.62%	16.11%	
Risk management processes	4	16	30.21%	42.35%	4	14	3.00%	14.55%	8	14	13.12%	15.77%	
Internal control systems	4	16	30.21%	42.35%	5	14	4.07%	14.55%	8	14	7.58%	15.77%	

Source: Written questionnaire.

The significance of these answers is somewhat marred by relatively low response rates (somewhat more than one-third of the total number of banks replied). But the trend to greater technology transfer over time seems clear.

3.4 Foreign Banks' Impact on Competition, Quality and Assortment of Banking Products and Services, and Efficiency

In the years before 2000, foreign banks were not major players in the Croatian market. Their share in assets and deposits remained low, and they were generally content to offer interest rates only slightly below those of domestic banks. However, since 2000, and particularly this year, competition has heated up, and the effects of foreign bank entry can be seen much more clearly.

The table below shows the evolution of various aspects of foreign bank impact. Clearly, the impact before 2000 was not large. At that point, foreign banks' effects on interest rates on loans and interest margins were assessed as of average importance (scores near 3.0). Other impacts were even lower. However, when we move to 2000-2001, all of these impacts grow, with six scores now over 3.5. Finally, in 2002, four scores are above 4.0: market competition (4.88), bank efficiency (4.04), improvement of the quality of products of products and services (4.04) and profitability (4.01). These scores confirm the main expectations about foreign bank entry.

It is also worthwhile looking at the areas where foreign banks scored lower. Their involvement in the management of non-financial enterprises in which they have shareholdings, and their involvement in the management of non-financial enterprises that are large debtors, are rated low. This shows that the "German-model" of close bank involvement in non-financial sector enterprise management has not taken hold in Croatia.

Table 10: Importance of the Entry of Foreign Banks for the Croatian Market

	E	Before 200	00	2000-2001				2002-on		1	Γren	ıd
Trends/processes	Average score ^a	Number of answers	Share in total banking assets	Average score ^a	Number of answers	Share in total banking assets	Average score	Number of answers	Share in total banking assets	+	-	0
Lending interest rates	3.05	33	77.75%	3.62	33	77.75%	3.19	33	77.75%	6	2	25
Fees	2.31	33	77.75%	3.13	33	77.75%	3.16	33	77.75%	7	1	25
Interest margins	3.13	33	77.75%	3.57	33	77.75%	3.15	33	77.75%	6	2	25
Product and service assortment	2.05	30	74.85%	2.80	30	74.85%	3.19	30	74.85%	8	0	22
Market competition	2.44	33	77.75%	3.75	33	77.75%	4.88	33	77.75%	7	0	26
Bank profitability	2.86	33	77.75%	3.67	33	77.75%	4.01	33	77.75%	6	0	27
Bank efficiency	2.80	33	77.75%	3.53	33	77.75%	4.04	33	77.75%	6	0	27
Central bank regulation	2.56	31	76.35%	3.36	31	76.35%	3.34	31	76.35%	4	1	26
Involvement of banks in managing non-financial corporations in which they have equity holdings	2.55	29	76.54%	2.64	29	76.54%	2.55	30	76.82%	4	1	25
Involvement of banks in managing non-financial companies that are major bank debtors	2.56	27	74.72%	2.60	27	74.72%	2.45	27	74.72%	1	2	24
Introduction of new banking products and services	2.51	32	76.68%	3.17	32	76.68%	3.68	32	76.68%	6	0	26
Increasing the quality of existing products and services	2.97	32	76.68%	3.65	32	76.68%	4.04	32	76.68%	6	0	26

Scale: 1 – unimportant, 2 – less important, 3 – average importance, 4 – above average importance, 5 – extremely important. ^a Weighted by bank assets. Source: CNB written questionnaire.

One paradox in the data is that the average assessment of foreign banks' impact on interest rates falls in 2002 to only 3.19. This seems to be in contradiction with the assessment that the foreign banks have strongly contributed to competition. From our interviews, it appears that the reasons for this is that banks feel that interest rates have fallen about as far as possible, so that nothing (not even foreign banks) is likely to make them fall further.

Also, while foreign banks are given credit for increasing the quality of products and services, their role in increasing the range of products and services is rated somewhat lower. In part, this may reflect the fact that the largest domestic banks did introduce important product and service innovations in the period before 2000. (These banks are now owned by foreigners.) It may also reflect the fact that both domestic and foreign banks can learn how to use various banking products from consultants, and thus technology transfer does not have to occur via foreign banks per se.

3.5 Balance Sheet Data on the Performance of Foreign Banks

The tables below show some basic indicators of the performance of foreign banks in Croatia. In the years 1999-2001, de novo foreign banks had the highest return on average assets (ROA), but privatized banks had higher return on equity (ROE). This reflects the fact that privatized banks, which are mostly large banks, had relatively lower levels of capital, and thus higher ROE. Only in 2001 did de novo foreign banks actually have lower levels of capital, after rapid expansion in most cases without the addition of new capital. In the 2001 data, the data for privatized foreign banks is shown both with and without Riječka banka, since the large losses created by fraudulent activity at that bank might cloud the picture of these banks as a group. (See below for detailed discussion of the Riječka banka case.)

Regarding net interest income, the de novo foreign banks had the highest levels, mainly due to better asset quality (their interest rates were generally lower on both the lending and deposit side, and their margins were similar to other banks). Operating costs have fallen the fastest at the de novo banks, with domestic banks actually increasing their operating cost ratio. The increase in operating costs at domestic banks in 2000 may be due to the fact that several banks with low operating costs were sold to foreign investors.

Except for 1999, domestic banks have actually had the highest capital adequacy ratios. They have also been the smallest banks on average, again except for 1999.

To summarize, de novo foreign banks have performed best on ROA, operating costs/assets and net interest income (except for 2001). Privatized foreign banks have performed best on ROE (except for 2001), while domestic banks have had the highest capital adequacy ratios (except for 1999). All this lends support to the argument that foreign banks have increased efficiency in the Croatian banking system.

Two other pieces of evidence may also be introduced. Kraft, Hofler and Payne (2002), using a stochastic cost function, estimate the cost efficiency of Croatian banks from 1994 to 2000. They find that de novo foreign banks are substantially the most cost efficient in each year, and that foreign banks as a group are more efficient than domestic private or state banks.¹¹

Table 11: Balance Sheet Data by Bank Type, 1999 – 2001

2001 data	ROA	ROE	Net interest income/assets	Operating costs/assets	Capital adequacy ratio	Total assets (average per bank, 000 HRK)
Domestic	1.10	7.67	3.76	3.82	25.3	727
De novo foreign	1.90	22.75	3.51	2.29	16.9	3,581
Privatized foreign	0.53	5.38	2.95	2.60	17.6	7,346
without Riječka	1.27	12.93				
All banks	1.34	13.22	3.12	2.70	18.5	3,314
2000 data	ROA	ROE	Net interest income/ assets	Operating costs/assets	Capital adequacy ratio	Total assets (average per bank, 000 HRK)
Domestic	0.49	3.02	3.92	3.97	32.3	831
De novo foreign	1.84	15.35	4.50	2.81	30.0	1,838
Privatized	2.07	18.36	3.66	2.91	19.7	10,689
All banks	1.70	13.60	3.81	3.14	21.4	2,560
1999 data	ROA	ROE	Net interest income/assets	Operating costs/assets	Capital adequacy ratio	Total assets (average per bank, 000 HRK)
Domestic	0.49	3.94	3.82	3.56	26.4	1,511
De novo foreign	1.96	12.27	5.85	3.35	28.4	1,110
Privatized	1.45	14.80	4.38	3.19	20.9	7,328
All banks	0.91	7.68	4.16	3.43	20.6	1,937

Source: Croatian National Bank.

Table 12: Relative Efficiencies of Private, State and Foreign Banks by Year

	1994	1995	1996	1997	1998	1999	2000
Private	1.418	1.448	1.440	1.438	1.510	1.406	1.237
State	1.341	1.305	1.240	1.308	1.345	1.264	1.358
Foreign			1.138	1.152	1.100	1.151	1.056
Banks with 50% foreign	1.394	1.177	1.119	1.046	1.041		

Sources: Kraft, Hofler and Payne (2002) (Note: the scores denote the ratio of the bank's actual costs to the computed minimum possible cost (the cost frontier)). Therefore, a lower score means lower costs and better efficiency).

¹¹ Jemrić and Vujčić (2002) undertook a similar analysis using data envelopment analysis. Their "intermediation approach", which is analogous to the model used in the stochastic frontier analysis above, yields the result that that foreign banks were more cost-efficient than domestic private and state-owned banks for all years from 1996-2000.

Jemrić and Vujčić also consider what they call an "operating approach." This model differs from the standard model used in most bank efficiency studies in that it does not consider deposits to be inputs. In the two variants of the operating approach, Jemrić and Vujčić find that foreign banks were the most efficient group in 1995, 1999 and 2000, with one of the two variants also indicating that foreign banks were more efficient in 1998 as well. In both variants, the average efficiency of the foreign banks over the whole period is greater than the average efficiency of the domestic private banks and the domestic state banks.

Regarding the impact of privatization and the arrival of foreign banks on the efficiency of domestic banks, Kraft, Hofler and Payne find that privatization to domestic owners does not seem to result in any substantial improvement in efficiency in the first 2 to 3 years. The efficiency of all banks (except for the small category of State-owned banks) increased substantially in 2000, suggesting that greater competition and perhaps the arrival of the foreign strategic investors in the largest banks did increase efficiency.

Another piece of evidence comes from an examination of asset quality (defined as the percentage of risk assets and risky off-balance sheet items classified as A). In the regression analysis below, I include a dummy variable for de novo foreign and privatized banks, and control for four important bank characteristics (operating cost ratio, net interest income to asset ratio, capital adequacy ratio and return on assets). The first column shows the regression using all the independent variables, and the second shows the regression after the elimination, one by one, of those of the bank characteristics that proved insignificant. The regression coefficients show that, even when all these characteristics are controlled for, de novo foreign banks have significantly better asset quality than other banks. (The implicit standard of comparison is domestic banks.)

Table 13: Determinants of Asset Quality

	Asset quality,		et items to total assets and off-balance sheet items)
Constant	0.82° (15.05)	0.85 ^a (43.37)	
De novo foreign	0.13 ^a (5.40)	0.12 ^a (6.04)	
Privatized foreign	0.03 (0.88)	0.03 (0.87)	
Net interest margin	0.00 (0.31)		
Operating costs/assets	0.00 (0.22)		
ROA	-0.01 (0.42)		
Capital adequacy ratio	0.00 (0.05)		
Adjusted r-squared	0.06	0.16	
Observations	38	38	
F statistic	1.40	4.49	

Absolute value of t-statistics in parenthesis. $^{\rm a}$ Significant at 1% confidence.

White Heteroskedacticity-Consistent Standard Errors and Covariance were used.

De novo foreign banks had the advantage of not having bad loans from the socialist period. In addition, they started doing business after the war, and thus were not affected by this as well. However, their continued high level of asset quality does indicate that they have done a good job of risk management thus far. In the future, however, they will be faced with the challenge of making sure that their rapid growth in lending does not endanger asset quality.

3.6 Capital Imports and Credit Growth

In Table 3, foreign banks operating in Croatia cited competition in their home country as a key reason for coming to Croatia. This reason was ranked fourth of the eight answers at the moment and second in the future, behind only the search for new clients. Indeed, interest rates in Croatia continue to be substantially higher than in Euroland, and opportunities for rapid expansion are much greater in Croatia.

For these reasons, it would be logical to expect that foreign banks would seek to invest resources in Croatia. However, some commentators have suggested that foreign banks seek to gather deposits in Croatia and place them in their home countries. This argument runs counter to the market saturation argument made above.

One way of looking at this is simply to note net FDI in banking. This amounts to over USD 800 million, or well over HRK 6 billion. This represents 21% of total FDI, a substantial inflow of resources into Croatia.

Another way of looking at this question is to look at the behavior of banks' net foreign assets, which shows capital flows in addition to FDI. The graph below shows the movement of NFA since mid-1999. Several things can be seen from the graph. First, the de novo foreign banks have consistently decreased their NFA (in other words NFA has become more and more negative for these banks). Generally, these de novo banks are attempting to rapidly increase their market share in Croatia. Even though their deposits have grown rapidly, they need extra funding from abroad to achieve their expansion goals. They borrow from abroad and place the funds in Croatia. Thus, there is no question that these banks have imported capital into Croatia.

When we look at the privatized banks, we see a more complicated picture. The most important privatizations occurred in the first half of 2000 (Privredna, Splitska and Riječka, as well as the purchase of a majority of Zagrebačka banka's shares by foreign shareholders via a GDR issue). The NFA of these banks was near 0 in the first and second quarters of 2000 (HRK 962 million on 31 March 2000, and HRK –240 million on 31 March 2000, and HRK –240 million on 31 March 2000.

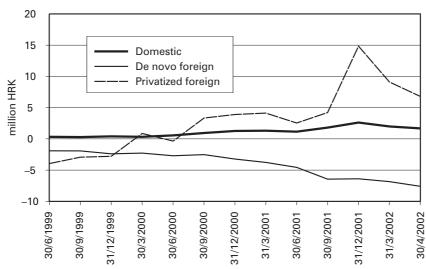


Figure 3 Net Foreign Assets by Type of Bank

Source: Croatian National Bank

lion on 30 June 2000). However, NFA then began to rise sharply, averaging HRK 3.7 billion in the period from 30 September 2000 to 30 September 2001.

Does this mean that the foreign owners sought to export capital, taking Croatian deposits and using them abroad? One way to answer this is to look at the behavior of domestically-owned banks. They were also exporting capital during the period under review, increasing their NFA from only HRK 231 million on 31 March 2000 to some HRK 1.7 billion on 30 September 2001. Considering that the total assets of the domestic banks are roughly one-seventh those of the privatized foreign banks, we might say that domestic banks were proportionally exporting more capital than the foreign banks.

But this whole discussion misses the point. Both the privatized foreign banks and the domestic banks simply did not find satisfactory investment opportunities in Croatia. Loan growth at domestic banks was very slow in 2000 and did not pick up enough in 2001 to require these banks to decrease their NFA.

NFA at both domestic and privatized foreign banks grew sharply again in the last quarter of 2001, thanks to the enormous deposit inflow caused by the euro conversion process. Banks, unsure whether there might be substantial withdrawals of deposits after the New Year, generally chose to place this money in foreign banks temporarily. Once it became clear that there would not be a large wave of withdrawals, the banks began to expand lending, and decreased their NFA. In the first half of 2002, the privatized foreign banks decreased their NFA by some HRK 9.8 billion, and domestic banks decreased their NFA by HRK 1.1 billion.

In short, the behavior of both domestic and foreign banks is driven by the availability of investment opportunities in Croatia. Both types of banks may expand net foreign assets at moments when they have strong deposit inflows and do not perceive good opportunities to place their money in Croatia. Such expansion of NFA is usually temporary. Both types of banks will also rapidly decrease their NFA if they perceive good opportunities to place their money in Croatia.

This point is corroborated by our survey results. Foreign banks were asked what percentage of deposits and loans were given to foreign (non-resident) customers. Generally speaking, the answer was that such business was very minimal. If anything more can be discerned from the answers, it is more common for foreign banks to have a larger proportion of foreign deposits in their liabilities than to have a larger proportion of foreign loans in their assets.

Table 14: Core Business with Foreign Nationals

Ratio of foreign to domestic	Median	Comments
Client deposits	5:95	Mainly 0:100 at privatized banks, at de novo foreign banks from 1:9 to 5:1.
Loans to clients	0:100	Mainly 0:100, except for four small banks with ratios of 1, 5, 50 and $70/100$.

Source: Bank interviews.

A final way of looking at the question of resource availability is to look at credit growth. The table below shows the growth in lending to various sectors of the economy by type of bank.

Table 15: Lending by Bank Type and Sector, 1999-2001, in thousand HRK and %

	Financial sector	Govern- ment	Public enterprises	Other enterprises	House- holds	Foreigners	Total
Domestic banks							
Loans in 1999	220899	134022	71462	5119584	4036810	131798	9714577
Loans in 2001	133476	776210	150439	4283862	3247327	82045	8673363
Growth, %	-39.6	479.2	110.5	-16.3	-19.6	-37.7	-10.7
De novo foreign bar	nks						
Loans in 1999	264707	293665	278535	2894957	1733470	20529	5485865
Loans in 2001	290737	418082	695847	7167499	5533884	94422	14200472
Growth, %	9.8	42.4	149.8	147.6	219.2	359.9	158.9
Privatized to foreign	iers						
Loans in 1999	785033	2562693	1387049	14993307	12070406	338505	32136996
Loans in 2001	762483	2905920	2317707	17662386	19760360	170662	43579519
Growth, %	-2.9	13.4	67.1	17.8	63.7	-49.6	35.6
Privatized to foreign	ers after 1999)					
Loans in 1999	527002	1271149	1229263	6124837	5077359	294523	14524134
Loans in 2001	488627	1525519	1607029	8481115	10011550	104390	22218230
Growth, %	-7.3	20.0	30.7	38.5	97.2	-64.6	53.0
All banks							
Loans in 1999	1270639	2990380	1737046	23007848	17840686	490832	47337438
Loans in 2001	1186696	4100212	3163993	29113747	28541571	347129	66453354
Growth, %	-6.6	37.1	82.1	26.5	60.0	-29.3	40.4

Source: Croatian National Bank.

This table shows clearly that the foreign banks have increased lending much more rapidly than domestic banks have. In particular, foreign banks have increased their lending to households especially rapidly. There are many reasons why banks have turned to consumer lending. One reason is that default rates on consumer loans are much lower than on corporate loans; banks have been very successful with the use of co-debtors, guarantors and collateral in consumer loans. Another reason is that the consumer market was very undeveloped in Croatia, leaving a great deal of room for offering new products. Lending to consumers was only 6% of GDP in 1995 and now is up to 20%. While this is far from the EU level of 50% it is considerably above the levels in most other transition countries.

While the aggregate data shows that foreign banks as a whole have rapid credit growth, it might be that there are other bank characteristics that better explain credit growth. A good way to test this is to use regression analysis. In particular, following the method of Detragiache and Gupta (2002), I regress credit growth on bank ownership dummies and five other important bank characteristics. The credit growth variable is simply the total amount of credit outstanding at the end of 2001 divided by the

amount of credit outstanding at the end of 1999. The other variables are defined as averages or end-year figures for 1999.

Table 16: Determinants of Loan Growth

	Loan g	jrowth	th Consumer loan growth		Enterprise l	oan growth
Constant	0.10 (0.22)	1.17 ^b (13.11)	0.71 (0.60)	1.33 ^b (9.44)	0.10 (0.15)	0.59 (1.65)
De novo foreign	0.78 ^a (2.13)	0.93 ^b (2.97)	1.74* (2.30)	1.80° (2.45)	1.04 ^a (2.48)	1.22 ^b (3.15)
Privatized foreign	0.22 (1.45)	0.19 (1.40)	0.25 (0.98)	0.30 (1.45)	0.17 (0.86)	0.27 (1.10)
Net interest margin (-2)	0.02 (0.72)		-0.08 (1.21)		-0.05 (1.61)	
Operating costs/assets (-2)	0.05 (1.08)		0.14 (1.42)		0.11+ (1.88)	0.14 ^a (2.09)
ROA (-2)	0.05 ^a (2.28)	0.05° (2.18)	0.14 ^a (2.03)	0.11 ^a (2.03)	0.06+ (1.87)	
Capital adequacy ratio (-2)	-0.43+ (1.93)		-0.22 (0.57)		0.53 (1.05)	
Asset quality (-2)	1.06 (1.61)		0.60 (0.44)		0.88 (0.96)	
Adjusted r-squared	0.37	0.36	0.35	0.36	0.39	0.36
Observations	41	41	41	41	41	41
F-statistic	4.28	8.43	4.01	8.52	4.64	8.46

White Heteroskedacticity-Consistent Standard Errors and Covariance were used. Absolute value of t-statistics in parentheses. + Significant at 10%. ^a Significant at 5%. ^b Significant at 1%. (–2) means two years before (in this case 1999 characteristics for growth between 1999 and 2001).

The results show that, once we control for bank characteristics, we find that de novo foreign banks did indeed increase credit significantly faster than the other banks in both major segments of the market. Also, in general, banks that had higher ROA's in 1999 increased their lending faster, everything else being equal. Privatized foreign banks did not increase credit significantly faster than domestic banks. Some of the privatized foreign banks spent a great deal of time and effort on inward-focused activities such as upgrading information systems, changing internal procedures and reclassifying their credit portfolios. Thus it is not surprising that they did not seek to expand their lending rapidly in this period. Similar phenomena were seen in Hungary in the initial post-privatization period, and in Latin America (Crystal, Dages and Goldberg 2001).

One question that might be asked about these results is whether bank size might be a determinant of the rate of loan growth. Clearly, it is harder for large banks to expand their loan portfolios at the same rate as small banks, since the absolute amount of potential clients is limited. However, adding a log total assets variable to these specifications did not improve the models' explanatory power, and the variable itself proved insignificant in specifications with the bank characteristic variables and in specifications where the other bank characteristic variables were omitted.

A final issue regarding resource flows is the allocation of dividends. In principle, foreign banks can be expected to allocate dividends to their shareholders, the majority of whom are likely to be foreign. Therefore, over the long-term, dividend outflows, or repatriation of profit, would constitute a resource outflow.

In the case of Croatia's foreign banks, it seems that so far most of these banks have chosen to reinvest whatever profits they have made. This has been dictated by the ambitious expansion plans of the banks. In the future, however, profit repatriation should be expected and will play its role in the country's balance of payments.

Table 17: Profit Retention by Foreign Banks

Percent profit retained	Number of banks
100%	6
90 – 95%	3
60 - 90%	2
50-60%	1
21 – 49%	0
5 - 20%	2
No profits	2
Total responding	16

Source: Bank interviews.

In conclusion, there is little doubt that the arrival of foreign banks has increased the availability of resources in the Croatian economy. De novo foreign banks have not only contributed resources through FDI but have also actually increased their net foreign liabilities in order to fund rapid credit expansion. Among the privatized banks, aside from FDI inflows, there have been fluctuations in NFA, with NFA increasing notably in the euro conversion period and decreasing substantially in 2002.

3.7 Foreign Banks and Consolidation of the Domestic Banking System

Regarding the further consolidation of the system, domestic banks rate merger with other domestic banks as their most likely option in the period to 2005. Survival on their own is the next likely option. However, over a longer period, sale to a foreign investor and merger with a foreign bank grow strongly in significance, just below merger with a domestic bank.

Is there a future for domestic banks? Kraft (2001) discusses the consolidation process and suggests that there will be market niches for smaller banks with exceptional knowledge of local conditions. In addition, DeYoung, Goldberg and White (1999) provide evidence from the US that relationship lending with small business is generally most successfully practiced by small and young banks. They argue that a constant flow of new banks is needed, since older banks "grow up", become larger and often lose their close relationship to their customers.

This research is interesting, since it suggests that, despite the international trend to large bank mergers and the emergence of a single European banking market, small

Table 18: Probability of Future Scenarios

	Through 2005				After 2005			
Scenario	Average score ^a	Number of answers above 3	Number of answers	Share in total banking assets	Average score ^a	Number of answers above 3	Number of answers	Share in total banking assets
Remain independent	2.08	7	17	16.90%	1.87	5	17	16.90%
Merger with domestic bank	3.72	4	16	16.63%	3.20	5	14	9.64%
Buy-out by domestic bank	1.66	0	15	15.21%	1.86	1	16	15.82%
Buy-out of domestic bank	1.69	1	16	16.29%	1.65	1	17	16.90%
Merger with foreign bank	1.53	0	16	16.29%	2.71	1	17	16.90%
Buy-out by foreign bank	1.67	2	16	16.29%	3.05	5	17	16.90%
Buy-out of foreign bank	1.24	0	16	16.29%	1.28	0	17	16.90%
Hostile offer for minority share	1.23	0	16	16.29%	1.24	0	17	16.90%
Hostile offer for majority share	1.30	0	15	15.21%	1.34	1	16	15.82%

Scale: 1 - hardly possible, 2 - very unlikely, 3 - uncertain, 4 - very likely, 5 - almost certain. $^{\text{a}}$ Weighted by bank assets. Source: CNB written questionnaire.

banks may continue to have an important role to play. It is not clear, however, whether this will continue to be the case in the future, in the light of these larger trends.

3.8 The Case of Riječka banka

During March 2002, it was revealed that Riječka banka had lost an estimated USD 98 million due to fraudulent foreign exchange transactions by the bank's main currency dealer. These losses eroded the bank's capital base but did not lead to insolvency. A run on the bank developed, with depositors withdrawing over EUR 200 million in the second half of March and the beginning of April.

The bank's situation was stabilized by liquidity support from the Croatian National Bank and later by a syndicated loan from other Croatian banks. ¹² The foreign strategic partner, Bayerische Landesbank, sold its majority share in the bank to the minority shareholder, the State Agency for Deposit Insurance and Bank Rehabilitation, for a symbolic \$1. A new foreign partner, Erste Bank, subsequently bought a majority stake in the bank.

¹² See Croatian National Bank, *Annual Report 2001*, Section 3.9 for a full explanation of the crisis at the bank and the remedial actions taken.

The crisis at Riječka banka has generated substantial controversy over the role of foreign banks. The losses at Riječka banka were the result of fraudulent transactions that began while the bank was under domestic ownership (of the State Agency for Deposit Insurance and Bank Rehabilitation). These transactions, which included the booking of non-existent deposits and fictitious arbitrage transactions, were recorded in the bank's bookkeeping system by the main currency dealer himself or by an accomplice or accomplices. The fact that the main dealer recorded transactions was a major breach of standard banking procedures. Under no circumstances should the person who completes a transaction also book the transaction, since the potential for manipulation is simply too great. The official procedures of the bank provided for the separation of transactions and bookkeeping (or "front office" and "back office"). However, it is now clear that these procedures were not honored, and that separation was not maintained in practice. Once the fraudulent transactions were booked, it was very difficult for anyone else to find out what had actually happened or to uncover the fraudu.

The losses were not detected by the management, both under the majority owner up to early 2000, the State Agency for Deposit Insurance and Bank Rehabilitation (DAB) and under the majority owner that assumed control in 2000, Bayerische Landesbank. The failure of BLB and several external auditors to detect the fraud is a warning sign of weaknesses in both management and auditing. The Riječka banka crisis shows that even a reputable foreign bank may be unable to detect problems in an acquired bank in another country. In fact, similar comments can be made about the crisis at Allfirst, a US subsidiary of Allied Irish bank in late 2001, and the failure of Barings Bank in 1995. In both of these cases, a rogue trader operating in a foreign subsidiary of the bank managed to incur heavy losses that were not detected in time by management either at the foreign subsidiary or in headquarters.

The Riječka banka case should be a warning both to foreign and domestic bankers. For foreigners, the Riječka case shows how important thorough due diligence procedures and detailed knowledge of the acquired bank can be. Banks acquiring other banks in foreign countries will certainly want to increase their efforts to get full information about the bank they are acquiring after this (and similar) incidents.

For domestic banks, the Riječka banka incident is a sobering warning about corporate governance. Simply having separation of front and back office written in bank procedures is not enough to ensure that it really happens in practice. Domestic banks, along with foreign ones, will certainly want to re-examine all aspects of their internal procedures in the light of the events at Riječka banka.

Although the crisis at Riječka banka was painful, it is important to note that the bank did not fail and that the savers did not lose money. In fact, the bank was solvent at all times. It received liquidity support from the Croatian National Bank, but this cannot be equated with the rehabilitation of failed banks in the past. The support given to Riječka banka came in several forms: repurchase of CNB bills; purchase of foreign exchange; and fully collateralized liquidity loans (backed by CNB bills and MoF treasury bills). In all of this, the Croatian National Bank did not undertake any risk, and no taxpayer money was given to Riječka banka. A government guarantee was granted for one loan for the technical reason that the Law on the Croatian Na-

tional Bank provides that the CNB may not give loans with maturities above two years without a government guarantee. However, that loan, and all the other CNB loans to Riječka banka, were repaid less than a month after the beginning of the crisis, when a consortium of Croatian banks made a syndicated loan to Riječka banka.

In other words, the Riječka banka crisis did not cost Croatian taxpayers anything. Furthermore, BLB effectively admitted that it had failed as majority owner to detect the fraud and therefore lost the money it had invested in the bank. The agreement between BLB and the Croatian government to transfer BLB's shares to the Croatian government for a symbolic price of \$1 allowed the government to find a new purchaser for the bank (Erste Bank). In this way, the government was able to gain revenue of EUR 50 million and to find a reputable owner willing to fully recapitalize the bank.

The crisis at Riječka banka shows the damage that a rogue trader can cause if internal control mechanisms fail in a bank. It also shows that even reputable foreign banks are not immune to problems. However, it would be a very strange conclusion indeed to argue, as some commentators have, that the crisis showed that the bank should never have been privatized, especially not to foreigners. The problems of Riječka banka clearly began before privatization. There is no reason to think that these problems would have been detected earlier by the domestic management, which, even after receiving an anonymous letter about the fraud forwarded to it by the CNB in 1999, had been unable to find anything wrong.

The decision of Bayerische Landesbank to walk away from Riječka banka, selling its shares to the Croatian government for a symbolic \$1, should probably be seen in the light of BLB's domestic problems. Large losses on loans to the Kirch media group, and the imminent privatization of the bank imposed by the European Commission, were probably the reasons why BLB did not want to stay involved with Riječka banka. It is important to recognize that this is a significant risk of foreign bank entry: the domestic banking market may be strongly affected by developments in other countries. Fortunately, in this case, BLB's problems were not part of systemic problems affecting Germany or its neighbors, and it was possible to find another strategic partner quickly.

4 Conclusions

In contrast to the situation during our last report on the impact of foreign banks two years ago, it is now clear that the impact of foreign banks in Croatia has been substantial. As in several other transition countries, foreign banks now control the overwhelming majority of the banking market in Croatia. Their arrival has contributed to a higher level of competition, improved efficiency and better quality of products and services. Balance sheet data indicates that foreign banks have been more profitable, had lower operating costs, and maintained better asset quality than domestic banks.

There have, however, been differences between the performance of de novo foreign banks and banks privatized to strategic foreign investors. In such areas as asset quality and credit expansion, de novo foreign banks stand out. This last characteristic, while perhaps welcome to Croatian households and firms who have received loans, may also present a danger, since international experience shows that rapid credit growth has often led to asset quality problems.

In addition, the crisis at Riječka banka shows that privatization to strategic foreign investors does not necessarily eliminate all problems. Neither the managers appointed by the new owners nor the managers hired previously and retained by the new owners were able to detect the massive fraud at Riječka banka. Fortunately, the fraud was uncovered before it wiped out the bank's whole capital, and the situation was worked out without costing taxpayer money. Nonetheless, the Riječka banka case represents an important challenge for foreign owners seeking to detect problems at potential acquisition candidates. It also represents a challenge to managers seeking to detect fraud and more generally to limit operational risk, and it represents a challenge to the traditional methods of auditors. Finally, it represents a challenge to banking supervisors.

What are the policy implications of our findings about foreign banks? First, in the light of Croatia's orientation towards EU membership, the overall framework for banking is essentially given. Banking markets must be open for competition and for the entry of EU licensed banks. Croatian banks must find their place within this European market, and eventually within the global financial markets.

Second, current foreign investment in Croatian banking has mainly come from nearby EU countries (Italy, Austria and Germany). Since the business cycle of these countries is likely to be highly correlated with Croatia's, neither these banks nor Croatia gets much diversification benefit. Entry of banks from other areas whose business cycles are less correlated with Croatia might be beneficial, as in the case of Malaysia (Detragiache and Gupta 2002). However, Croatia cannot and should not engage in any discrimination regarding bank sales or licenses, so such a diversification process could only be promoted through voluntary efforts to encourage non-European banks to invest in the Croatian market.

Third, there is some evidence that continued entry of new banks can be a healthy phenomenon, in particular in promoting lending to small and medium enterprises. Regulation should be carefully crafted to avoid creating unnecessary barriers to entry. Of course, fit and proper tests, appropriate minimum capital standards and other prudential requirements should continue to be applied to new applicants for banking licenses. But policy should not deter all entry.

Fourth, banks in Croatia are increasingly turning to long-term lending. Our survey found that banks see real estate lending and fixed capital lending as major priorities. These long-term assets are not matched by long-term liabilities. To some degree, this mismatch is a natural outcome of the banks' role as maturity transformers. But the Croatian National Bank should study whether there are legal or regulatory barriers to the development of appropriate long-term liabilities, or to techniques such as securitization that can be used to sell long-term assets.

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