Retail Banking in Hungary: A Foreign Affair?

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A Foreign Affair?*

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Abstract

Over the last decade, Hungary has experienced more foreign bank entry than any country in world, starting with foreign greenfield operations and then followed by the privatization of four of its largest banks to strategic foreign owners. Currently about two thirds of all banking assets in Hungary are foreign owned; the only major bank without a foreign owner is Országos Takarékpénztár és Kereskedelmi Bank (OTP). During a decade in which lending to households declined in real terms until recently and household deposits remained relatively steady at around 20% of GDP, OTP lost its monopoly in retail banking to foreign-owned banks. By the end of the decade, OTP held shares of just over 50% in both household deposit and credit markets. In the last half of the decade, foreign banks increased substantially their market shares and currently hold more than 40% of all household deposits and about 40% of all loans to households. In this paper, we identify the important role played by foreign greenfield operations in intermediation within the household sector, especially from 1997. We provide evidence that, once they take control of formerly state-owned banks, strategic foreign investors move aggressively into retail banking. As the decade came to a close, retail banking was a growth industry in Hungary and foreign-owned banks were actively participating in both markets.

Foreign entry provided healthy competition to OTP and prodded this widely held domestically controlled bank to develop new products and better services for Hungarian households. Over the last half of the decade, bank cards have been introduced to Hungarian households and transactions using these cards have grown by a factor of more than five. Over half of the population uses bank cards twice a month on average, almost exclusively for cash withdrawals from their current accounts. By investing heavily in information technology and using its extensive branch network, OTP has become the market leader in this new, growing business with more than 40% of all ATMs and bank cards issued in Hungary and more than 70% of all bank card transactions. Our analysis of OTP's behavior indicates that domestically controlled banks with local expertise may have a significant role to play in retail banking in small, open transition (or emerging) economies.

Non-Technical Summary

With 56.6% of its banking assets in majority foreign-owned banks in 1999, Hungary has the highest degree of foreign bank ownership among all emerging market economies. Banking assets to GDP stood at 68.4% in 1999 so that this measure indicates significant foreign penetration into the financial sector. Early entry of foreign greenfield operations and privatization of the major commercial banks to foreign investors over a three-year period resulted in foreign subscribed capital equal to two-thirds of total banking equity by the end of the decade. Hungary's banking sector is concentrated with the top five banks accounting for 56.2% of assets and 47% of corporate lending. Amidst this foreign-dominated banking sector, a majority domestic-owned bank, Országos Takarékpénztár és Kereskedelmi Bank (OTP), is the largest bank in Hungary with 25% of all banking assets. OTP is a dominant force in retail banking with more than a 50% share of traditional household business and over 70% of the bank card market. We argue that foreign bank competition provided the impetus to drive OTP to improve its products and services while its monopoly position in retail banking was being steadily eroded.

The literature on foreign bank entry contrasts the welfare-enhancing benefits to the host country's banking sector with the cream-skimming of high-quality clients that weakens domestic banks. In transition countries, the inherited legacies of segmented banking and state-ownership pose special problems for banking sector development. Recent studies (Buch, 1997 and 2000) indicate the foreign banks are essential to this process as their presence counters soft lending and generates competitive pressure after achieving a threshold market share.

This paper documents the rationalization of the retail-banking sector in Hungary over the last decade. From a monopoly position at the beginning of the decade with 98.4% of loans to households and 93.2% of household deposits collected, OTP steadily lost market share until it held 55.7% of household loans and 52.4% of household deposits by the end of the decade. Much of this lost market share was taken up by foreign greenfield banks that, starting from negligible amounts in 1993, made up 22.7% of the credit market and 15.9% of the deposit market by 1999. Bank privatization played a crucial role as four of the seven largest in Hungary were sold to foreign owners from 1994 to 1997. Three of these banks moved aggressively into collecting household

deposits and two increased their lending to household significantly after their privatization. By the first half of 2000, foreign-owned banks held 42.3% of household deposits and 39.6% of retail loans in Hungary.

By the end of the decade, retail banking was growing in Hungary after steady declines in activity in real terms throughout the decade. The new plastic era of debit cards and ATMs dawned around the middle of the decade. With personal checking almost non-existence, Hungarians use their debit cards primarily to withdraw cash from ATMs for transaction purposes. With three times more branches than its nearest competitor, 43% of the ATMs, and a state-of-the-arts IT system, OTP captured 71% by volume of the bank card business in 1999. This 65% Hungarian-owned bank with the same Hungarian CEO for the last eight years has positioned itself to compete successfully in the new growth industry of retail banking in Hungary. This paper demonstrates that domestic banks can play an important role in the banking sector of an emerging market country even when foreign bank penetration is significant so long as they use their comparative advantage properly to meet the competitive challenge.

Key words: Hungarian banking, retail banking in emerging markets, foreign bank entry
JEL classification numbers: G1, P2, F3

1. Foreign Entry into Banking: The Transition Economies Are Different

Hungary has the highest level of foreign ownership in the domestic banking system among emerging market countries. At the end of 1999, the ratio of assets of banks in which foreigners owned more than 50% of total equity to total assets of the Hungarian banking sector was 56.6% up from 19.8% in 1994 (IMF, 2000). When the threshold level for foreign control is lowered to at least 40% foreign ownership in a bank, the IMF figure increases to 80.4% in 1999. In Latin America, only Chile has more than 50% of its banking sector controlled by foreign interests and that was 53.6% in 1999 by both measures. In other Central European countries, 52.8% of banking assets were held by majority foreign owned banks in Poland while this figure was 49.3% in the Czech Republic in 1999. However, these levels were reached much later in both countries than in Hungary as only 2.1% of the banking assets in Poland and 5.8% in the Czech Republic were controlled by foreigners in 1994. Furthermore, when the threshold is lowered to 40%, foreign control in 1999 increases only to 50.7% in the Czech Republic and remains at 52.8% in Poland. By allowing foreign banks to set up *de novo* greenfield operations and by privatizing its large commercial banks to strategic foreign investors, the Hungarian government permitted foreign banks to penetrate deeper and more quickly into its banking sector than has any other government in the region.

Even before the political change, the Hungarian government had been receptive to foreign bank activity. The first such venture, founded in 1979, Central-European International Bank (CIB) began as an offshore dollar-based bank. The founders were a consortium of German, Italian, and Japanese partners, with the National Bank of Hungary (NBH) as a minority shareholder. For most of the previous decade, CIB was actually two

large banks. In 1998, these two entities were merged and the NBH sold its stake to the Italian partners. CIB is now fully owned by an Italian banking group. Citibank Budapest was established in 1985 with Citibank taking 80% of the shares and the NBH holding the remaining 20%. In 1993, Citibank purchased NBH's shares so that it is now the sole owner of the bank. In addition to CIB and Citibank, 17 other banks with majority foreign ownership were operating branches in Hungary in 1993 (Bonin, *et. al.*, 1998). In that year, foreign bank equity equaled 12.4% of the subscribed capital in the Hungarian banking sector.

After several recapitalizations of large state-owned banks by the Ministry of Finance, bank privatization began in Hungary in 1994 with the sale of the foreign trade bank, Magyar Külkereskedelmi Bank (MKB), founded in 1950. Beginning in 1994, foreign ownership in bank equity increased annually from 16.4% to 35.7% in 1995, 49.0% in 1996 and to 60.8% in 1997 (Karvalits, 2000). By the end of 1997, five of the seven largest banks in Hungary were foreign owned. At the end of 1999, foreign subscribed capital amounted to 65% of the total equity of the Hungarian banking sector.

Indicators of both monetization of the economy and market concentration in the banking sector have decreased over the last decade in Hungary. Banking assets to GDP fell from 90.9% in 1991 to 68.4% by 1999 while the market share in term of assets of the five largest banks decreased from 80.2% in 1990 to 56.2% by 1999. In terms of corporate lending, the market share of the top five banks was reasonably constant over the last half of the decade and stood at 47% in 1999. Of these five banks, only Országos Takarékpénztár és Kereskedelmi Bank (OTP), or as it is now known in English, the National Savings and Commercial Bank, does not have a foreign majority owner. Table 1

contains a list of the 35 commercial banks in Hungary divided into three groups by the NBH based on a bank's share of total banking sector assets in 1998. Of the large banks, Postabank, established as a private bank, is the only bank other than OTP that remains domestically owned. Nationalized in 1998, Postabank is now state-owned. The current, but controversial, plan is to merge Postabank with OTP in exchange for shares of the latter.

What is the likely impact of such extensive foreign ownership on the banking products and services provided to Hungarian households? The literature on foreign bank entry concentrates on its effects on the efficiency and stability of the entire domestic banking sector. Although foreign penetration should enhance the efficiency of the domestic banking sector and, hence, be welfare improving, it also puts competitive pressure on weak domestic banks. The early literature concludes that foreign banks have traditionally followed their customers who had already established a position in the host country through foreign direct investment. Since these foreign multinationals were not likely to use domestic banking services, foreign banks were not competing directly with domestic banks for customers according to this view. However, recent literature indicates that foreign banks are now entering host countries in a more aggressive manner attempting to acquire domestic clients and to take market share away from domestic banks (Seth, Nolle and Mohanty, 1998). Thus, foreign bank entry is a double-edged sword as it is welfare enhancing for the host country's banking sector as a whole but often threatening to the market position of already weak domestic banks as foreign banks cream skim by taking away good clients.

Claessens, Demirgüc-Kunt and Huizinga (1998) study the effects of foreign bank entry in eighty countries, both developed and developing, over an eight-year period from 1988 to 1995. By investigating performance differences between domestic and foreign banks, these authors find that meaningful foreign entry was followed by a reduction in both the profitability and the overhead expenses of domestic banks. In their analysis, the efficiency effects in emerging markets did not depend on foreign banks gaining significant market share. Goldberg, Dages, and Kimney (2000) find evidence in Argentina and Mexico that foreign entry increased the stability of the domestic banking sectors because loan growth increased while the volatility of this growth decreased. However, banking sectors in transition economies are different from their counterparts in either developed or developing countries due to the legacies of the monobank system and culture. During the Communist period in Hungary, a separate state savings bank, OTP, and a separate foreign trade bank, MKB, existed alongside the NBH, which acted as the recorder of all domestic commercial transactions. In 1987, a two-tier system was created by dividing up the commercial portfolio of the NBH among three newly created banks: Magyar Hitel Bank (MHB), Kereskedelmi és Hitel Bank (K&H), and Budapest Bank (BB). At that time, all five of these large banks were state-owned and, with the possible exception of MKB, their personnel lacked experience with modern banking techniques and culture.

For transition economies, Buch (1997) argues that foreign bank entry improves the production of financial services, promotes competition, facilitates the privatization of domestic banks, and transfers know-how and new technology to the host countries. In her view, foreign banks are essential to the rapid development of a modern banking sector in

transition economies. In a later paper, Buch (2000) presents data on interest spreads to suggest that the achievement of a threshold level of foreign ownership of banking assets may be necessary before much competitive pricing pressure is felt by domestic banks. Interest rate spreads in Poland and the Czech Republic have been relatively constant from 1995 to 1999 whereas, in Hungary, the spread has declined by almost 50% since 1997. By the end of 1997, the three commercial banks created from the NBH portfolio and the foreign trade bank had been privatized to strategic foreign investors and the share of the corporate credit market held by foreign banks exceeded 70%. In Poland and the Czech Republic, this same figure was under 20% at the end of 1997. This evidence is consistent with a hypothesis that foreign banks do create a more competitive market environment in transition economies, but only after they have attained sufficient aggregate market share.

Buch (2000) considers data on classified credits to indicate that the mere presence of active foreign banks has a positive influence on combating soft lending in transition economies. In Poland, the share of classified credits decreased from a peak of around 30% in 1993 to around 10% in 1998. In Hungary, qualified credits were 29.1% of the total loan portfolio in 1993 on the eve of the first major bank privatization (Karvalits, 2000). That ratio had dropped to 7.9% by the end of 1997 but, in 1998 due primarily to the Russian crisis, it increased to 10.5%. In 1999, qualified credits as a percentage of total loans stood at 8.4% in Hungary. In the Czech Republic, the share of classified credits remained high at around 30% throughout the last half of the decade. This stagnation is due partly to restrictive entry practices regarding greenfield foreign operations but, more importantly, to the passive attitude toward proper commercial

banking practices taken by the foreign owner of IPB, the only large Czech bank to be privatized until recently. This spring, IPB was taken over by the Czech National Bank after a scandal involving the tunneling of assets from the bank's investment funds by the foreign owner, the Japanese investment bank Nomura. Until 1999, other large Czech banks were state-owned, a factor that contributed to a soft lending environment. Hence, evidence from the transition economies is consistent with the hypothesis that a credible threat of competition from foreign banks disciplines domestic banks and leads to an improvement in the quality of their portfolios, so long as the soft lending environment is not perpetrated, or tacitly approved, by the government.

Performance comparisons between domestic and foreign banks have been used as evidence of the benefits of foreign entry for the banking sectors in transition economies. Using averages across ownership class from 1996 to 1998, the IMF reports the following data for the three fast-track Central European countries (IMF, 2000, Table 6.2, p.166). In the Czech Republic, returns on equity for foreign banks were 14.4% but **minus**1.6% for domestic banks while comparable figures for Poland were 24.1% and **minus** 0.1%. In Hungary, the difference was more dramatic, 16.1% for foreign banks versus **minus** 26% for domestic banks. In the Czech Republic, the percentage of problem loans was significantly greater in domestic banks, 28.5% to 18.8%, while in Poland domestic banks actually had a smaller percentage of problem loans, 9.1%, to 11.1% for foreign banks. In Hungary, foreign banks had fewer problem loans as a percent of total lending, 10.6% versus 15.1%; however, the margin was not as wide that in the Czech Republic. However, comparisons of this sort must be interpreted carefully because they may fail to account for classification changes due to the ongoing privatization of domestic banks.

Furthermore, if foreign banks cherry pick and buy the more profitable domestic banks first, some of the differences observed in transition economies may be due to selection bias. Hence, we do not rely on such comparisons for judging the impact of foreign bank entry in Hungary in this paper.

Retail banking takes on even more distinct characteristics in transition economies due to the inherited monopolistic structure from the monobank regime. In Hungary, OTP dominated retail banking at the beginning of the decade, as did its counterpart, Ceska Sporitelna in Czechoslovakia. Due to its extensive branch network throughout the country, OTP collected virtually all of the household deposits and held all of the housing loans on its balance sheet. For rational markets to develop for both household lending and deposit collection, OTP had to lose its monopoly position in retail banking. The interesting question was: from where would the competition come?

In this paper, we analyze the role played by foreign banks in rationalizing retail banking over the last decade in Hungary. To account for the changing classification due to the privatization of state-owned domestic banks, we consider two types of foreign banks. Foreign greenfield operations consist of independent de novo branches set up in Hungary by foreign banks. "Foreign owners" refers to banks that were originally state-owned banks but have been subsequently privatized to foreigners. In section 2, we present data to show that, after almost a decade of decline, retail banking is currently a growth industry in Hungary. By examining the market shares for banks grouped by size and ownership type, we document the dramatic expansion of foreign bank participation in both household credit and deposit markets over the latter half of the decade. Taking the shares of six individual large banks in both of these markets, we provide evidence that

privatization to a majority foreign owner increases a bank's retail activity. Section 3 investigates the impact of this foreign competition on the one large healthy remaining domestic bank, OTP. Although its monopoly position has eroded throughout the decade, OTP has managed to maintain a dominant position in retail banking. The bank has moved aggressively into the new bank card business by combining its extensive branch network with state-of-the-arts information technology. Section 4 concludes with an assessment of the role played by foreign banks in balancing retail markets and in prodding OTP to provide improved services and new products to Hungarian households.

2. Retail Banking in Hungary: A Growth Industry

2.1: The Structure of Retail Banking

Table 1 contains a list of the 35 commercial banks in Hungary divided into three groups by the NBH based on a bank's share of total banking sector assets in 1998. Of these, three were liquidated during 1999 so that information on their assets is not available. For the others, assets in billions of forints and market share at the end of 1999 are provided in the table (data are taken from Hungarian Banking Association, 2000). Using the 4% threshold to designate a bank as large, Bank Austria-Creditanstalt would have become a member of this class by the end of 1999. The balance sheet of this bank grew by 45.2% in 1998 and 27.7% in 1999 (Sebestyén, 1999). As a group, the seven large banks held 65% of all banking assets, while the twelve medium-sized banks held an aggregate share of 29.1% in 1999.

In addition to these 35 commercial banks, there were four specialized credit institutions and four home savings and loan associations operating in Hungary in 1999

bringing the total of financial institutions in the banking system to 43. The largest of these specialized institutions is the state-owned Hungarian Development Bank (MFB), founded in 1991, having 179.2 billion HUF in assets in 1999. Second in size, the Hungarian Export-Import Bank held assets valued at 64.6 billion and is the state-owned bank financing international trade. Founded in 1997, FHB- Land Credit and Mortgage Bank has the Ministry of Finance (47.2%) and MFB (40.3%) as its principal owners and held assets valued at 8.6 billion. The fourth specialized financial institution, Cetelem Bank, is a French-based financial institution specializing in consumer finance that held assets worth 2.5 billion in 1998 (the 1999 figure is unavailable).

The largest of the four housing and loan associations is OTP Building Society, founded in 1997 and wholly owned by OTP, with assets of 23.1 billion HUF in 1999. Fundamenta was founded in 1996 by the Bank of Hungarian Savings Cooperatives along with a German building society as its majority (86%) foreign owner and held 14.9 billion assets. HVB Mortgage Bank is owned wholly by HypoVereinsbank, Germany's second largest credit institution, and is a real estate bank with assets valued at 4.1 billion. Otthon Building Society was founded in 1998 by one of Austria's largest building societies taking a majority interest (70%) and held 1.5 billion in assets in 1999. In addition to these 43 banks, there were 217 savings and credit cooperatives operating in Hungary in 1999. The shares in total assets by classification of all credit institutions in Hungary in 1999 were 90.3% for commercial banks, 5.8% for savings and credit cooperatives, and 4.0% for specialized credit institutions and housing and loan associations (calculated from NBH, 1999, p.101).

2.2 A Decade of Retail Banking in Hungary

After almost a decade of decline, the retail credit business is poised to take off and become a growth industry. Although commercial banks have lost market share to cooperative credit institutions during this period, they are taking an active part in the current expansion. Table 2 indicates that credits to households from the entire financial sector were 5.3% of GDP in 1990 but that ratio declined steadily from a peak of 8% in 1991 to 2.6% in 1998. In real terms, household credits declined in each year beginning in 1992 until 1999. The trends are similar for commercial banks, although their market share declined from a peak of 87.2% in 1991 to 81.8% in 1998. Finally, 1999 witnessed strong real growth as credits to households from the financial sector increased at an annual rate of 25.4% to bring the credit to GDP ratio back up to 3.1%. This growth was distributed almost equally between commercial banks and cooperative credit institutions. The growth trend in household credit continued for the first six months of 2000 as the half-year growth rate of nominal credit was 15.6%, which would be close to the 1999 nominal growth rate of 35% if this increase continued in the second half of 2000. In summary, lending to household is currently a growth activity in Hungary and commercial banks play the largest role by far in the expansion.

The household deposit market has been relatively stable throughout the decade and it also indicates significant current growth. Over the decade, commercial banks actually gained share in this market relative to cooperative credit institutions. Table 3 shows that the ratio of household deposits to GDP increased from 17.2% in 1990 to 22.3% in 1992 and then stabilized at around 21% for the middle of the decade. In the last few years, household deposits have been about 20% of GDP. Although, as Table 3

indicates, household deposits decreased in real terms in 1993, 1995, 1996 and 1998, real deposit growth was a strong 7.7% in 1999. The six-month increase in nominal deposits for the first half of 2000 was 22.2% up substantially from an annual nominal growth rate of 17.7% in 1999. Household savings institutions began taking deposits in 1997 and their market share has grown to 1.7% in only two years. The deposit market share of commercial banks increased from 84% in 1990 to 89.9% in 1999 while that of cooperatives fell from 16% to 8.4%. In summary, the main primary deposit collecting institutions in Hungary are commercial banks.

To measure the extent to which primary deposits are returned to the household sector as loans, we compute the household credit to deposit ratios for financial institutions by type and size in Table 4. An institution having a high credit to deposit ratio is involved mainly in intermediation within the household sector, whereas one having a low ratio is using household deposits primarily to fund corporate lending and support the other assets on its balance sheet. Over the decade, the overall credit-to-deposit ratio has decreased, especially for commercial banks, indicating that increasingly more intermediation is taking place between household and non-household sectors. In 1990, the credit-to-deposit ratio for the financial sector as a whole was 30.6%; this ratio declined from a peak of 41.7% in 1991 to 15.6% in 1999. In 1991, the household credit-to-deposit ratio for commercial banks (44.3%) was actually larger than the same ratio for cooperative credit institutions (38.2 %). Although these ratios were almost equal in 1992, credits to deposits fell consistently over time for commercial banks so that, by 1999, the ratio was less than half that of cooperatives, i.e., 14.2% versus 34%. Household savings institutions are just now beginning to lend from their deposit base so that their ratios are

relatively insignificant. In summary, commercial banks used their primary deposits to fund assets outside of the household sector increasingly over the decade while cooperative credit institutions relied more heavily on household loans to place their deposits.

2.3 Size Matters: Indirect Evidence of Foreign Activity

Looking only at the averages for commercial banks masks important differences among banks of varying size. Because banks move from the state-owned category to another classification after privatization, it is useful to consider trends over the entire decade when banks are classified by size in addition to ownership type. From 1994 to the present, the number of banks considered in the "large" category by the NBH has been effectively constant at 7. Prior to 1998, CIB consisted of two separate entities so that the count was 8 but these two were merged into a single bank in 1998. The number of medium-sized banks has held constant at 12 since 1994. With the exception of General Banking Trust, which was sold to a Russian bank in 1996, all medium-sized banks were foreign banks throughout the period (see Table 1). From 1994 to 1997, the number of small banks decreased from 24 to 19 as a result of consolidation; this number was reduced further to 16 by the beginning of 1999.

Although moving erratically throughout the decade, Table 4 indicates that the credit-to-deposit ratio for medium-sized banks becomes larger than that of large banks beginning in 1998. More dramatic is the credit-to-deposit behavior for small banks; beginning in 1994, this ratio exceeds that for all other financial institutions by a wide margin. Currently, small banks are returning more than six times as much of their

deposit base to the household sector than are other banks and almost two and a half times as much as are cooperative credit institutions. Part of the reason for this dramatic difference can be attributed to the small deposit base of these banks. Until 1995, small banks held less than 2% of all household deposits (see Table 6). However, the market share of small banks grew rapidly so that, by 1996, small banks held about 4% of all household deposits. Hence, the high credit-to-deposit ratios for small banks from 1996 onwards are important indicators of intermediation within the household sector in Hungary. For the most part, small banks are currently using the household deposits that they collect to lend to households while larger banks are using them primarily to support corporate lending and other types of assets.

Turning to the retail activity of commercial banks only, Table 5 indicates that the large banks have lost their monopoly position in credit markets as medium-sized and small banks gain significant market share over the decade. Large banks decreased credits to the household sector in real terms in every year from 1992 to 1998. In 1992, large banks provided virtually all of the credit to households as they held a commanding market share of 99.3%. By 1999, this share had decreased to 67.2% and fell still further to 65.1% after the first six months of this year. Large banks continued to lose market share even though the real credits that they have extended to households grew by 17.8% and the six-month increase in nominal credits in 2000 is 12.1% or about the same annual rate as in 1999. During the decade, large banks went from a monopoly position in household credit markets in 1992 to having less than two-thirds of the market currently. In summary, the consumer credit market has been rationalized as large banks faced increased competition and lost retail business to smaller banks.

In contrast to large banks, medium-sized and small banks exhibited substantial and sustained real growth in credits to households beginning in 1997. Specialized credit institutions were licensed for operation beginning in 1997; as a group, they now have about a 1% share of the household credit market. As Table 5 shows, from a market share of 0.3% in 1992, medium-sized banks accounted for 13.5% of all household credits by 1999 and 14.6% after the first six months of this year. Having a market share of only 0.4 in 1992, small banks increased their market share dramatically in 1994 to 6.8% and again in 1997 to 18.8%. Since small and medium-sized banks are foreign controlled for the most part, Table 5 provides indirect evidence of the heightened activity of foreign banks in the retail credit market in Hungary over the last few years as the combined market share of small and medium size banks is currently 33.5%.

The dramatic changes in market share by small banks are explained mainly by changes in the Hungarian tax code. In 1994, a few banks made substantial loans to households for the purpose of purchasing investment funds that were then used as collateral for the bank loans. Changes in the treatment of these funds in the personal income tax code made this especially attractive to households. Among the small banks actively participating in this venture were Polgári Bank, which lent 9 billion HUF. Among medium-sized banks, Creditanstalt actively pursued this business by lending to households 4 billion HUF. In 1997, a change in the tax treatment of car leasing led to an expansion in car loans. Merkantil Bank increased its lending by 3 billion HUF and Porsche bank made additional car loans equaling one billion HUF in that year. Currently, the market share of small banks in household credits is 18.9% up slightly from 18.6% at the end of 1999. Coupling this information about market share with the figures for their

credit-to-deposit ratios, small banks play a significant intermediation role within the household sector in Hungary. As can be seen from Table 1, small banks tend to be foreign-owned.

On the deposit side, Table 6 indicates that the monopoly position of large banks has also eroded over the decade although not as drastically as it did in the credit market. Medium-sized banks are the large bank's main competitors for household deposits. From a share of 96.8% in 1990, the market share of large banks falls steadily to 82.6% at the end of 1999 and further to 81.5% in the first six months of 2000. Throughout this period, medium-sized banks exhibit significant positive real growth in their household deposit base with the exception of 1996. The significant drop in deposits held by medium-sized banks in 1996 is due to the merger of one bank with K&H, a large bank, and the liquidation of another bank. Starting from a market share of only 2.6% in 1990, these banks currently hold 14.7% of all household deposits up slightly from 14.2% at the end of 1999. Despite real growth in household deposits in all years until 1999, small banks hold only about 4% of all household deposits. The significant drop in deposits held by small banks in 1999 is due to the mergers of Polgári Kereskedelmi Bank (which consists of Pénzintézeti Központ Bank and its affiliation, Polgári Bank) with Postabank and EKB with Citibank and to the liquidation of Reálbank. As a group, small and medium-sized banks currently hold 18.5% of all household deposits in Hungary. Hence, we have again indirect evidence of a strong presence of foreign banks in retail banking.

2.4 Ownership Matters but Careful Interpretation is Required

The advantage of looking at commercial banks by size and inferring evidence about the influence of foreign banks is that changes in categories due to privatization do not interfere with an interpretation of the trends. Beginning in 1994 with the privatization of MKB, the Hungarian foreign trade bank, to a strategic foreign owner, the ownership structure of large banks changed dramatically. CIB remains a foreign majority owned bank throughout the entire period but all six of the other banks change their ownership structure. OTP became a domestic private bank when 34% of its shares were sold on equity markets to domestic and foreign portfolio purchasers in 1995. BB was sold to a strategic foreign owner (GE Capital) at the end of 1995. In December 1996, MHB was privatized when ABN-Amro bought virtually all of the state's shares and later merged MHB with its greenfield operation to create MHB-ABN-Amro. K&H was privatized to a strategic foreign owner in July 1997. An insolvent Postabank was nationalized at the beginning of 1998.

Table 7 presents data for household credit markets organized by ownership type beginning in 1993. The impact of a change in ownership can be seen dramatically by looking at the category "domestic" under private banks in 1995. The privatization of OTP shifted this bank from the "state-owned" category to the private domestic one and led to an increase in market share for the latter category from 0.9% in 1994 to 88% in 1995. Another example of the same phenomenon occurred in 1994 for the category "foreign owner" under private banks when the sale of MKB influenced the market share data. Finally, the nationalization of Postabank caused the state-owned market share to increase from 0.9% in 1997 to 4.0% in 1998. As expected, the market share of the group

of banks classified as "state-owned" declined continually with each subsequent bank privatization, from a near-monopoly position of 98.9% in 1993 until Postabank's nationalization in 1998.

From a market share of 15% at the end of the privatization program, foreign banks of both types have increased their lending to households and now hold almost 40% of the household credit market. Table 7 documents the dramatic growth in credit extended to households by foreign greenfield operations. From a low 0.7% in 1993, foreign greenfield banks have grown their credit market share to 24.3% currently. The most dramatic growth began in 1997 when credit extended to households by these banks more than doubled. From a market share of 4.5% in 1996, foreign greenfield operations attained a share of 22.7% in 1999 for a more than fourfold increase over this four-year period. Adding to this trend, the share of household credits extended by foreign majority owned banks increased from 2% with the privatization of MKB and to 15.3% currently.

By 1998, four of the large former state-owned commercial banks had been privatized to foreign majority owners so that the data in the category "foreigner owner" under private banks refer to a fixed set of banks for the last two years only. Interestingly, Table 7 records a substantial increase in household credits extended by this group of banks from 1998 onwards as their market share triples. In 1999, foreign banks, a category that combines both foreign greenfield banks and those privatized to foreigners, have 34.8% of the household credit market and this figure jumps to 39.6% after the first six months of 2000. In summary, foreign banks as a group have become significant participants in household credit markets.

Regarding the collection of household deposits, Table 8 documents that state-owned banks steadily lost market share from 90.4% in 1993 to 5.5% in 1999 with the big drop occurring in 1995 as expected with the privatization of OTP. Foreign greenfield operations showed strong growth of their household deposit base throughout the period as their share increased from 1.1% in 1993 to 15.9% in 1999. Looking at the two post-privatization years for banks that are controlled by a foreign owner, their share of household deposits increased from 21.7% in 1997 to 25.6% in 1999 and to 27.3% after the first six months of 2000. From a market share of 31.3% at the end of the privatization program, foreign banks of both types now hold 42.3% of all household deposits up slightly from 41.5% at the end of 1999. In summary, foreign banks have taken an active role in household deposit collection in Hungary, both as greenfield operations and as strategic foreign investors in domestic banks.

With respect to intermediation, foreign banks tend to return more of their primary deposits to the household sector. As Table 9 indicates, the credit-to-deposit ratio for foreign greenfield banks was higher than for any other ownership type by the end of the decade as it exceeded by about 50% the ratio for all commercial banks from 1998 onwards. This is not due to these banks having a small deposit base, as in the case of small banks, because the primary deposit base of foreign greenfield banks grows rapidly from 1993 (see Table 8). Although the credit-to-deposit ratio for foreign-owned banks is at most one-half of that ratio for all commercial banks throughout the period, this ratio was increasing rapidly in the two years following the completion of the privatization program for major banks. In summary, their relatively high credit-to-deposit ratios in the last few years indicate that, as they become increasingly more active in retail banking,

foreign banks are returning a significant proportion of their primary deposits to the household sector.

Clearly, if the share of foreign banks in retail banking has been increasing rapidly over the last few years in Hungary, the market share of other banks must have declined. Table 10 contains market shares of household loans and deposits for six of the seven large banks during this period, with only CIB missing from the group. The data are compiled from annual reports of the individual banks; the six-bank totals are slightly inconsistent with the aggregates for the seven large banks that were based on NBH data and reported in the previous tables. As the data in Table 10 indicate, OTP held a virtual monopoly position in retail banking with a market share of 98.4% in the credit market and 93.2% of all household deposits in 1990. However, OTP's shares in both markets eroded continually throughout the decade providing the counter experience to the increase in shares of foreign banks. Thus, competition in retail banking came from an unexpected source in Hungary.

2.5 Post-Privatization Behavior of Foreign Owners

Earlier, we argued that some of the effects of the privatization of domestic banks to strategic foreign owners in Hungary are discernible from Tables 5 and 6 by examining the credit and deposit activities of banks in the category "foreigner owner" of private banks from 1998 onwards. Table 10 presents a more detailed picture of the post-privatization period for each of four previously state-owned banks, MKB, BB, MHB, and K&H. The bold numbers indicate data for the period following the year of the bank's privatization to a majority foreign owner. Three of these four banks increased their share

of household deposits significantly in the post-privatization years. Since household deposits grew in real terms during the post-privatization period for each of the banks (see Table 3), these increased shares indicate significant real growth of each bank's primary deposit base. Over a five-year period, MKB raised its share more than threefold. During a four-year period, BB's share almost doubled. MHB-ABN Amro grew its share over three years by more than 50%. Only K&H did not increase its household deposit market share after privatization. The likely explanation for this result is that K&H acquired Ibuszbank, a small retail bank that had been established by the privatized, but previously state-owned, travel agency, at the end of 1995. The purchase is evident from the table as K&H's share of household deposits jumped from 2.5% in 1995 to 8% in 1996. This acquisition made the K&H's branch network the second largest in Hungary to OTP and continued to have a significant impact on K&H's deposit base throughout the latter part of the period swamping any privatization effect in deposit collection.

Leaving aside K&H, the evidence indicates that, once privatized to a majority foreign owner, banks actively seek household deposits. This increase in collecting household deposits is not surprising since foreign banks often purchase existing domestic banks for their "bricks and mortar" branch systems. This strategy allows a foreign bank access to household deposits without making a costly greenfield investment in a new branch system. Hence, once a state-owned bank is privatized, the new foreign owner is likely to expand the primary deposit base to take advantage of this relatively cheap source of funds.

Regarding household credit activity, only BB and MHB-ABN Amro grew market share appreciably after privatization. Over a four-year period, BB's market share

increased over ten-fold while MHB-ABN Amro grew its share by more than four times over a three-year period. As is obvious from Table 10, these increases are from very small base levels. With the fourth largest branch network in Hungary, BB's post-privatization strategy was clearly aimed at developing its consumer credit business. While its share of consumer lending was increasing from 0.4% in 1995 to 3.9% in 1999, its share of corporate lending was decreasing from 9.7% to 7% during the same period (Karvalits, 2000). Furthermore, BB's share of the corporate market sank to only 5.5% in 1997. With the third largest branch network in Hungary consisting of more than 104 branches, ABN-Amro has recently claimed that it is also actively seeking retail banking business (*Business Central Europe*, 2000)

By contrast, MKB actually decreased its share in the household credit market over the entire post-privatization period from 2% in 1994 to 1.1% in 1999, a figure that is more in line with its pre-privatization share of 0.5% in 1993. Immediately after privatization, MKB increased its household lending share but drastically reduced this activity in 1997. Lacking an extensive branch network, MKB's post-privatization strategy has been to expand its high net worth private customer base by issuing plastic cards and selling investment funds and to retain large dynamic corporate clients. MKB's share of corporate lending increased progressively after its privatization from 6.8% in 1995 to a peak of 11.5% in 1998 before falling slightly to 10.7% in 1999 (Karvalits, 2000). Hence, the difference in MKB's behavior in household credit and deposit markets is understandable. By seeking the business of higher income retail clients, MKB increased its deposit share significantly but did not match this with an increase in

household credits. Rather MKB used its augmented deposit base to expand lending to blue-chip corporate clients.

The acquisition of Ibuszbank in 1996 by K&H also had a significant influence on its credit market share in the post-privatization period; however, K&H did increase its share of household lending substantially in 1999. This behavior is significant in light of the fact that 1999 was the first year in which credits to households increased in real terms since 1992 (see Table 2). Returning to BB and MHB-ABN Amro, both of these banks increased their market share of household lending significantly in 1999. Hence, three of the four privatized banks are currently moving aggressively into retail credit now that the market is showing significant real growth. These banks may be attempting to catch up to the foreign greenfield banks that began to increase dramatically lending to households starting in 1997 (Table 7).

2.6 Summary: Foreign Banks Are Now Active in Retail Banking

Foreign banks are currently quite active in providing consumer credit and in collecting household deposits in what are now growing retail markets in Hungary. Furthermore, foreign banks have higher household credit-to-deposit ratios indicating that they participate relatively more than other banks in intermediation within the household sector rather than between households and other borrowers. Foreign greenfield operations moved aggressively into retail banking beginning in 1997. Small banks, many of which were foreign-owned, moved into niche activities, e.g., car financing and lending for investing in mutual funds. Once a state-owned bank was privatized to a foreign majority owner, the new owner expanded significantly the primary deposit base and, with

only one exception, moved aggressively into household lending. In summary, foreign bank entry has played a crucial role in rationalizing retail banking in Hungary by providing needed competition for the monopoly, formerly state-owned, national savings bank, OTP.

3. OTP: a Domestic Success Story

3.1 The Erosion of OTP's Monopoly Position in Retail Banking

Founded in 1949 as a state-owned savings bank, OTP had a virtual monopoly position in collecting household deposits and providing loans to the household sector prior to 1990. In 1989, old long-term, low-interest housing loans made by the bank were rationalized by offering advantageous buy-back conditions to the holders who would otherwise have the terms of their loans renegotiated and adjusted to then current market conditions. Hence, by the beginning of the decade, the asset side of OTP's balance sheet was commercialized. As Table 10 indicates, OTP held 98.4% of all loans to households and collected 93.2% of all primary deposits in 1990. For retail banking to become more competitive in Hungary, OTP had to vacate this monopoly position.

In the early part of the decade, competition on the deposit side came primarily from Postabank. A private domestic bank at the time, Postabank garnered 7.9% of the deposit market in 1993 and maintained a share of about 7% through the end of 1996. After a mini-run on the bank, Postabank was nationalized in 1998. Later in the decade, four other large banks, MHB, K&H, MKB, and BB, began to compete more aggressively for household deposits, especially after each of these was privatized to a majority foreign owner. Moreover, the combined share of these six large banks in the deposit market

declined continuously over the decade falling from 99.4% in 1990 to 84.6% in 1999. This trend is consistent with the observed increase in the share of household deposits held by medium-sized banks over the decade in Table 6. In summary, OTP's near-monopoly position in collecting household deposits has eroded until the bank now has a market share of only 52.4%, primarily because of the gains made by foreign banks, both greenfield operations and those privatized to foreign owners, in attracting household deposits.

Regarding credits to households, the combined share of these six banks fell dramatically from 99.4% in 1990 to 66.4% in 1999 (see Table 10). Unlike in the deposit market, this decrease was not a continuous decline. In 1994 and again in 1997, the share of these six banks dropped precipitously. As Table 5 indicates, these were years in which the share of small banks in household credits rose dramatically. In 1994, OTP lost significant market share both to these small banks and to the other five large banks, whose combined market share increased from 1.5% in 1993 to 3.4% in 1994. In 1997, the loss of market share to small banks was distributed about equally between OTP and the other five, whose combined market share decreased from 6.4% in 1996 to 4.3% in 1997. However, virtually the entire lost market share in the group can be attributed to MKB. After expanding its share of domestic credit markets from 0.5% in 1993 to 2.7% in 1996, MKB reduced dramatically its household lending activity as its share of the market dropped to 0.7% in 1997. OTP's share in the household credit market continued to decline so that it had fallen to 55.7% by 1999. Hence, over the entire period, OTP lost a total market share of 43.7%. By the end of the decade, OTP held a dominant share,

around 50%, but no longer a monopoly position in both aspects of retail banking in Hungary. Currently, its major competition in both activities comes from foreign banks.

3.2 The New Era of Retail Banking: Plastic Prevails

The last half of the past decade has witnessed a dramatic growth in bank cards in Hungary. With very few checking accounts introduced to retail customers before 1995, Hungary has leapfrogged this medium of payment and moved directly to plastic money. Bank cards linked to individual current accounts, of which there were 6.6 million in 1999, are now used regularly by the majority of the Hungarian populace. Compared with the other transition economies in the region, Hungary had the second (to Slovenia) largest number of Visa and Europay cards per 1,000 inhabitants at 358 in 1999, while the figures for Czech Republic and Poland were 208 and 181, respectively (NBH, 2000). Of all domestically issued bank cards, 96% were debit cards in 1999. In that same year, European-based cards dominated the market as 33% of all bank cards were Visa cards and 62% were Europay cards (NBH, 2000). Hence, Hungary has become a bank-card-based society with the two major European companies issuing virtually all (95%) of the mainly debit (96%) domestic bank cards.

The main use of domestically issued bank cards is cash withdrawal, an activity that accounts for 85% of the number and 94% of the value of all bank card transactions (HNB, 2000). On average, Hungarians used their debit cards about twice a month for transactions, with an average value per transaction of 19,425 HUF or about 82 USD in 1999 (Table 11). Although 91% of domestically issued bank cards may be used internationally, only 2% of the value of transactions was activity abroad. Of this amount,

63% was for purchases and 37% for cash withdrawals, a significant difference from domestic usage. For this small percentage (2% in value) of transactions abroad, Hungarians are much more likely to use their cards for purchases than for cash withdrawals. In summary, Hungarians use their bank cards almost exclusively at home and then almost entirely to withdraw cash from their current accounts.

Emerging from these data is a picture of a primarily cash society in which bank cards are used by the majority of the populace for convenient access to cash. As Table 11 indicates, the number of bank cards issued domestically has grown by a factor of five since 1995 and the number of transactions were five and one-half times as large in 1999 as in 1995. The average value of a bank card transaction rose from 8,320 HUF in 1995 to 19,425 HUF in 1999 or almost two and a half times over the five-year period. In U.S. dollar terms, the increase was from $66.20 in 1995 to $81.85 in 1999 or a 23.5% over the half-decade. During this same period, the number of ATMs has increased by three and a half times, although about one-third of all ATMs are in Budapest. As Table 11 indicates, point of service (POS) outlets in merchandise establishments expanded by about five and a half times over the half decade. In addition, there were 3,518 POS cash withdrawal outlets in bank branches and 4,246 such terminals in post offices for a total of 7,764 in 1999. Starting from a base of only 1,706 in 1997, the total number of these POS terminals increased dramatically in 1998 to 6,794 when post offices branches began installing them. While this dramatic growth in ATMs and POS outlets was taking place, the number of bank branches in Hungary actually decreased from 1276 in 1995 to 1199 in 1999 (Table 11). Hence, any bank that can combine bank card related activities with

easy access to service points and terminals through an extensive branch system will have a comparative advantage in retail banking in Hungary in the future.

3.3 OTP: Keeping Ahead of the Times And Remaining Hungarian

At the time of its privatization in May 1995, OTP was the dominant force in retail banking in Hungary with an 82% share of the retail credit market, 67% of all household deposits, and 382 branches. The privatization of OTP was designed to insure that it remain a domestic Hungarian bank. In a public offering, 34% of OTP's shares was sold leaving only 25% of its shares held by the state at the time. In the sale, 20% of the bank's shares was purchased by foreign portfolio investors (mainly institutions) and the remaining 14% was purchased by domestic investors and bank employees. No single foreign investor was allowed to take a stake in excess of 5%. As a result of this initial offering and subsequent sales of shares, OTP's current ownership structure is 35% foreign and 65% domestic of which only 0.2% is held by the state. The chairman and CEO of OTP, Sandor Csanyi, has held that position since 1992. Hence, OTP's privatization was significantly different from that of other large state-owned Hungarian banks. The bank's management remained intact after privatization and ownership is dispersed, mainly to domestic owners, with foreign holdings by portfolio investors only.

In the post-privatization period, OTP's share of the retail credit market declined from 82% in 1995 to 70.9% in 1997 and then to 55.7% in 1999. During this same period, the bank's share of corporate lending started at 10.4% in 1995, peaked at 12.3% in 1997 and then decreased to 10.9% in 1999. Although OTP currently has the highest share of the corporate lending market, diversification can not explain its loss of retail credit

market share after privatization. Rather OTP's market position in corporate lending is explained by the fact that it is the largest bank by far in Hungary holding just over 25.1% of the total assets in the banking sector in 1999, compared to 9.6% for the next largest bank, MKB (Table 1). Nonetheless, OTP's share of corporate lending is only slightly larger than that of MKB, which was 10.7% in 1999. Hence, despite its declining household credit market share, OTP is still primarily a retail bank.

During the post-privatization period, OTP's share of household deposits fell less rapidly than its share of household lending. From 67% in 1995, the deposit share declined to 59.7% in 1997 and then to 52.4% in 1999. Moreover, OTP retained its dominant position as the preferred bank of municipal governments, holding 82% of their deposits and 72% of their loans in 1999. The wages of all government employees have been paid by transfers to a bank account from 1999. With its stronghold as the banker of municipalities, OTP is well positioned to garner a significant share of these deposits. Although competition from other banks, mainly foreign banks, for primary deposits has become fierce during the last half of the decade, OTP remains the major collector of household deposits in Hungary.

More importantly, no bank in Hungary is better equipped than OTP to service the new bank card business. OTP has the largest branch network by far of any bank in the country with more than three times the number of branches than its nearest competitor, K&H. To maintain its dominant position in retail banking, OTP's post-privatization strategy focused on increasing the profitability and productivity of its retail business by investing heavily in information technology. In 1995, the bank launched the introduction of an integrated account management system to link all of its branches. Since March

1996, all current accounts and bank card services at every branch use this system. Since May 1997, OTP bank card holders have been able to transfer amounts in accounts by telephone. The new technology makes OTP's extensive branch network a significant advantage in attracting bank card business given that the vast majority of the transactions using cards is cash withdrawal in Hungary.

The dramatic growth in bank card related activity documented in Table 11 was matched by OTP's participation in this new business. Data in this paragraph are taken from various issues of OTP's annual reports. In 1995, OTP accounted for 30% of all bank branches, 44% of all ATMs, and 54% of all bank cards issued in Hungary. By 1996, OTP's share of the bank cards had risen to 60% and it remained around this level through 1998. In 1998, OTP accounted for 67% of the value of all bank card transactions and had 42% of the ATMs in Hungary. At the end of 1999, OTP had 420 branches, which was about 35% of all bank branches in Hungary. In 1999, OTP's owned 43% of all the ATMs and the value of its bank card transactions was 71% of the total volume of such business. Over the last half decade, OTP has maintained a share of over 40% of all domestically issued bank cards, seen its share of bank branches actually increase somewhat to 35%, and currently is responsible for more than 70% of the value of all bank card transactions in Hungary. This private domestic bank is the market leader in the new world of bank card business in Hungary, thanks to an extensive branch network and its early investment in information technology.

4. Conclusion: Retail Banking with a Hungarian Flavor

After a decade in which all major Hungarian banks, with the exception of OTP, were privatized to majority foreign owners and foreign greenfield operations moved aggressively into retail banking, household deposit and credit markets have been rationalized by competition. From its virtual monopoly position in retail banking at the beginning of the decade, OTP share in both markets has fallen significantly. Nonetheless, as the largest bank in Hungary with about 25% of all banking assets, OTP continues be a dominant force in retail banking holding more than 50% of all household deposits and making more than 50% of all loans to households. Furthermore, OTP has more than kept pace with new and growing areas of retail business. The competition from foreign banks has led to improved services and the introduction of new products, e.g. ATMs and bank cards, in retail banking. With its extensive branch network and state-of-the-arts information technology, OTP has acquired over 70% of the bank card market in Hungary. Hence, in the newest area of retail banking, OTP's share is higher than in old activities demonstrating the bank's ability to stay ahead of the field in retail banking.

OTP's situation at the beginning of this new decade may be surprising to the critics of the method of its privatization. The gradual divestiture of the state's shares, first to domestic institutional holders and then in several market offerings to domestic and foreign portfolio investors, left the bank with a dispersed ownership structure and no foreign strategic investor. Currently, 65% of the bank's shares are held by Hungarian owners and 35% by foreign owners. The Hungarian CEO has retained his position for the last eight years through the entire privatization process; with the exception of changes made by him and not by new owners, the former management of the bank remained in

place. Critics argued that OTP's privatization was not a real transfer of governance and would not lead to improved performance of the bank. Our evidence indicates that these concerns were not justifiable, as OTP is currently the market leader in providing improved services and new products to its retail customers in Hungary.

Foreign entry, both by setting up *de novo* greenfield operations and by taking majority stakes in privatized domestic banks, has played a crucial role in the development of retail banking in Hungary. By introducing meaningful competition in the second half of the last decade, foreign banks have provided a needed impetus to prod the largest domestic bank, OTP, into providing new and better financial products and more and improved services to its retail customers. The performance of this widely held domestic bank with a Hungarian management that has been in place throughout much of the decade indicates that domestic control may be useful in identifying local market opportunities and taking advantage of local relationships. Levered by strong competition from foreign banks, Hungary's largest and still domestically owned bank has taken the lead in promoting strong, innovative growth in retail banking and, in the process, increased the welfare of Hungarian households. Hungary has managed to avoid being cut by either blade of the two-edged sword of foreign bank entry; moreover it provides evidence that domestically controlled banks with local expertise may have a significant role to play in retail banking in small, open transition (or emerging) economies.

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Table 1: Hungarian Banks by Size with 1999 Market Shares

Large banks (7): 1998 share > 4% of total assets	Assets (HUF b)	Share
1. **National Savings and Commercial Bank (OTP)**	**1,767.5**	**25.1**
2. Hungarian Foreign Trade Bank (MKB)	677.8	9.6
3. Central-European International Bank (CIB)	566.4	8.0
4. Kereskedelmi és Hitelbank (K&H)	545.0	7.7
5. ABN Amro (merger of MHB and ABN Amro)	407.0	5.8
6. **Postabank**	**329.8**	**4.7**
7. Budapest Bank	292.1	4.1
Medium-sized banks (12): 1%< 1998 share < 4%	Assets (HUF b)	Share
8. Bank Austria – Creditanstalt Hungary	290.6	4.1
9. Raiffeisen Bank	260.0	3.7
10. General Banking Trust	244.3	3.5
11. Citibank	213.8	3.0
12. ING Bank	169.1	2.4
13. Erste Bank Hungary	163.9	2.3
14. HypoVereinsbank	163.3	2.3
15. Inter-Europa Bank	142.9	2.0
16. Commerzbank	128.3	1.8
17. Bank of Hungarian Savings Cooperatives	117.6	1.7
18. BNP-Dresdner Bank	89.4	1.3
19. Westdeutsche Landesbank	71.7	1.1
Small banks (16): 1998 share <1%	Assets (HUF b)	Share
20. **Konzumbank (MFB)**	**58.9**	**0.8**
21. Volksbank	58.7	0.8
22. Deutsche Bank	48.8	0.7
23. **Merkantil Bank (OTP)**	**43.5**	**0.6**
24. Credit Lyonnais Hungary	42.9	0.6
25. Daewoo	35.9	0.5
26. Rabobank	27.9	0.4
27. Porsche Bank	23.2	0.3
28. **Civic Commercial Bank (Postabank)**	**19.8**	0.3
29. Opelbank	19.3	0.3
30. Société General	11.3	0.2
31. Hanwha Bank	8.9	0.1
32. International Commercial Bank	4.0	0.1
33. Rákóczi Bank (MFB)*	n.a.	
34. Kvantumbank (K&H)*	n.a.	
35. Reálbank*	n.a.	

Source: Hungarian Banking Association, 2000 and NBH

Notes: Banks in bold are domestically owned banks; for small banks, the Hungarian owner is identified. MFB is the Hungarian Development Bank.
* indicates banks that are in liquidatation; Kvantumbank merged with K&H.

Table 2: Credits to Households by Financial Institution

Year		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) Commercial Banks	Credits	85.1	174.4	178.1	198.8	230.8	216.2	198.4	200.3	218.5	295.1	341.2
	Nom Growth	NA	104.9%	2.1%	11.6%	16.1%	-6.3%	-8.2%	0.9%	9.1%	35.0%	15.6%*
	Real Growth	NA	69.9%	-20.9%	-10.9%	-2.8%	-34.7%	-32.0%	-17.6%	-5.2%	25.0%	NA
	Composition	77.2%	87.2%	85.3%	83.2%	84.3%	85.1%	84.9%	83.4%	81.8%	81.6%	80.0%
(II) Cooperative Credit Institutions	Credits	25.2	25.6	30.6	40.1	42.9	37.9	35.3	39.9	48.5	65.9	84.0
	Nom Growth	NA	1.7%	19.3%	30.9%	7.0%	-11.5%	-6.8%	12.9%	21.6%	35.9%	27.4%*
	Real Growth	NA	-33.3%	-3.7%	8.4%	-11.9%	-39.9%	-30.6%	-5.6%	7.3%	25.9%	NA
	Composition	22.8%	12.8%	14.7%	16.8%	15.7%	14.9%	15.1%	16.6%	18.2%	18.2%	19.7%
Financial sector total	Credits	110.3	200.1	208.7	238.8	273.7	254.1	233.7	240.2	267.1	361.5	426.5
	Nom Growth	NA	81.3%	4.3%	14.4%	14.6%	-7.1%	-8.0%	2.8%	11.2%	35.4%	18.0%*
	Real Growth	NA	46.3%	-18.7%	-8.1%	-4.3%	-35.5%	-31.8%	-15.7%	-3.1%	25.4%	NA
	% GDP	5.3%	8.0%	7.1%	6.7%	6.3%	4.5%	3.4%	2.8%	2.6%	3.1%	NA

Source: NBH * denotes nominal growth for first six months of 2000

Table 3: Household Deposits by Type of Financial Institution, in billions of HUF

Year		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) Commercial Banks	Deposits	302.7	412.9	566.3	671.8	837.2	1,050.3	1,291.0	1,571.3	1,779.2	2,079.7	2,421.5
	Nom Growth	NA	36.4%	37.2%	18.6%	24.6%	25.4%	22.9%	21.7%	13.2%	16.9%	16.4%*
	Real Growth	NA	1.4%	14.2%	-3.9%	5.7%	-3.0%	-0.9%	3.2%	-1.1%	6.9%	NA
	Composition	84.0%	86.0%	86.1%	86.7%	88.5%	90.2%	89.7%	88.6%	90.5%	89.9%	85.7%
(II) Cooperative Credit Institutions	Deposits	57.5	67.2	91.1	103.3	108.7	114.3	147.7	199.6	168.2	194.1	354.4
	Nom Growth	NA	16.8%	35.6%	13.4%	5.2%	5.1%	29.3%	35.1%	-15.7%	15.4%	82.6%*
	Real Growth	NA	-18.2%	12.6%	-9.1%	-13.7%	-23.3%	5.5%	16.6%	-30.0%	5.4%	NA
	Composition	16.0%	14.0%	13.9%	13.3%	11.5%	9.8%	10.3%	11.3%	8.6%	8.4%	12.5%
(III) Housing Saving Institutions	Deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	18.4	40.0	51.0
	Nom Growth	NA	NA	NA	NA	NA	NA	NA	NA	564.4%	116.9%	27.5%*
	Real Growth	NA	NA	NA	NA	NA	NA	NA	NA	550.1%	106.9%	NA
	Composition	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.9%	1.7%	1.8%
Financial sector total	Deposits	360.3	480.1	657.4	775.1	945.9	1,164.5	1,438.7	1,773.6	1,965.9	2,313.7	2,827.0
	Nom Growth	NA	33.3%	36.9%	17.9%	22.0%	23.1%	23.5%	23.3%	10.8%	17.7%	22.2%*
	Real Growth	NA	-1.7%	13.9%	-4.6%	3.1%	-5.3%	-0.3%	4.8%	-3.5%	7.7%	NA
	% GDP	17.2%	19.2%	22.3%	21.8%	21.7%	20.7%	20.9%	20.8%	19.5%	20.1%	NA

Source: NBH * denotes nominal growth for first six months of 2000

Table 4: Household Credit to Deposit Ratio

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) Commercial Banks	28.1%	42.2%	31.4%	29.6%	27.6%	20.6%	15.4%	12.7%	12.3%	14.2%	14.1%
(a) Large banks	28.6%	44.3%	32.8%	31.1%	27.2%	20.7%	15.1%	11.1%	10.3%	11.5%	11.3%
(b) Medium-sized banks	13.2%	1.0%	2.9%	11.1%	16.9%	8.5%	5.5%	7.7%	10.4%	13.4%	14.1%
(c) Small banks	12.4%	7.5%	11.9%	11.9%	107.7%	79.8%	41.4%	58.7%	53.1%	82.5%	69.8%
(II) Cooperative Credit Institutions	43.8%	38.2%	33.6%	38.8%	39.4%	33.2%	23.9%	20.0%	28.8%	34.0%	23.7%
(III) Housing Saving Institutions	NA	NA	NA	NA	NA	NA	NA	0.4%	0.1%	1.2%	2.6%
Financial sector total	**30.6%**	**41.7%**	**31.7%**	**30.8%**	**28.9%**	**21.8%**	**16.2%**	**13.5%**	**13.6%**	**15.6%**	**15.1%**

Table 5: Credits to Households by Bank Size

Year		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) Large banks	Credits	83.9	174.0	176.8	192.9	201.2	186.9	173.7	151.8	155.1	198.2	222.2
	Real Growth	NA	72.4%	-21.4%	-13.4%	-14.6%	-35.5%	-30.9%	-31.1%	-12.2%	17.8%	12.1%*
	Composition	98.5%	99.7%	99.3%	97.1%	87.1%	86.5%	87.5%	75.8%	71.0%	67.2%	65.1%
(II) Medium-sized banks	Credits	1.0	0.2	0.6	4.5	13.9	10.5	5.1	10.5	20.5	39.7	49.9
	Real Growth	NA	-119.6%	265.7%	607.1%	189.1%	-52.5%	-75.5%	88.7%	79.8%	83.9%	25.6%*
	Composition	1.2%	0.1%	0.3%	2.3%	6.0%	4.9%	2.6%	5.3%	9.4%	13.5%	14.6%
(III) Small banks	Credits	0.2	0.3	0.7	1.3	15.8	18.7	19.6	37.7	40.1	54.8	64.4
	Real Growth	NA	-6.5%	101.2%	82.7%	1051.7%	-9.7%	-19.0%	73.6%	-8.0%	26.7%	17.5%*
	Composition	0.3%	0.2%	0.4%	0.7%	6.8%	8.7%	9.9%	18.8%	18.3%	18.6%	18.9%
(IV) Specialized institutions	Credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.9	2.4	4.7
	Real Growth	NA	NA	NA	NA	NA	NA	NA	NA	1081.2%	-28.2%	96.6%*
	Composition	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.3%	0.8%	1.4%
Commercial Banks	Credits	85.1	174.4	178.1	198.8	230.8	216.2	198.4	200.3	218.5	295.1	341.2
	Real Growth	NA	69.9%	-20.9%	-10.9%	-2.8%	-34.7%	-32.0%	-17.6%	-5.2%	25.0%	15.6%*

Source: NBH * denotes nominal growth for first six months of 2000

Table 6: Household Deposits by Bank Size

Year		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) Large banks	Deposits	293.1	392.4	539.3	619.8	740.4	902.7	1,150.6	1,369.9	1,507.1	1,717.0	1,974.5
	Real Growth	NA	-1.1%	14.4%	-7.6%	0.6%	-6.5%	3.7%	0.6%	-4.3%	3.9%	15.0%*
	Composition	96.8%	95.0%	95.2%	92.2%	88.4%	85.9%	89.1%	87.2%	84.7%	82.6%	81.5%
(II) Medium-sized banks	Deposits	7.8	16.7	21.5	40.8	82.2	124.1	92.9	137.2	196.7	296.3	354.8
	Real Growth	NA	77.8%	6.4%	66.8%	82.6%	22.6%	-48.9%	29.1%	29.1%	40.7%	19.8%*
	Composition	2.6%	4.0%	3.8%	6.1%	9.8%	11.8%	7.2%	8.7%	11.1%	14.2%	14.7%
(III) Small banks	Deposits	1.8	3.9	5.5	11.3	14.7	23.5	47.4	64.3	75.5	66.5	92.2
	Real Growth	NA	76.7%	18.8%	82.6%	10.9%	31.7%	78.2%	17.0%	3.2%	-22.0%	38.7%*
	Composition	0.6%	0.9%	1.0%	1.7%	1.8%	2.2%	3.7%	4.1%	4.2%	3.2%	3.8%
Commercial Banks (Total)	Deposits	302.7	412.9	566.3	671.8	837.2	1,050.3	1,291.0	1,571.3	1,779.2	2,079.7	2,421.5
	Real Growth	NA	1.4%	14.2%	-3.9%	5.7%	-3.0%	-0.9%	3.2%	-1.1%	6.9%	16.4%*

Source: NBH * denotes nominal growth for first six months of 2000

Table 7: Credits to Households by Ownership Type

Year		1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) State Owned	Credits	196.6	215.9	12.2	17.2	1.8	8.8	10.6	14.2
	Nom Growth	11.6%	9.8%	-94.3%	40.8%	-89.7%	395.3%	20.7%	33.6%*
	Composition	98.9%	93.5%	5.7%	8.7%	0.9%	4.0%	3.6%	4.2%
(II) Private	Credits	2.1	15.0	204.0	181.2	198.5	209.7	285.4	327.0
	Nom Growth	11.6%	603.0%	1262.7%	-11.2%	9.6%	5.6%	36.1%	14.6%*
	Composition	1.1%	6.5%	94.3%	91.3%	99.1%	96.0%	96.7%	95.8%
(a) Foreign	Credits	1.3	12.9	13.7	15.3	30.1	54.3	102.6	135.1
	Nom Growth	175.4%	861.7%	5.7%	12.2%	96.3%	80.5%	88.8%	31.7%*
	Composition	0.7%	5.6%	6.3%	7.7%	15.0%	24.9%	34.8%	39.6%
(1) Foreign Greenfield	Credits	1.3	8.4	7.6	8.9	19.9	37.2	66.9	82.8
	Nom Growth	172.3%	531.1%	-9.8%	17.7%	123.8%	86.7%	79.7%	23.8%*
	Composition	0.7%	3.6%	3.5%	4.5%	10.0%	17.0%	22.7%	24.3%
(2) Foreign Owner	Credits	0.0	4.5	6.1	6.4	10.2	17.1	35.7	52.3
	Nom Growth	NA	30153.3%	34.4%	5.4%	58.1%	68.2%	108.7%	46.6%*
	Composition	0.0%	2.0%	2.8%	3.2%	5.1%	7.8%	12.1%	15.3%
(b) Domestic	Credits	0.8	2.0	190.3	165.8	168.4	155.4	182.8	191.9
	Nom Growth	-44.7%	160.1%	9218.9%	-12.9%	1.6%	-7.7%	17.6%	5.0%*
	Composition	0.4%	0.9%	88.0%	83.6%	84.1%	71.1%	62.0%	56.2%

Source: NBH * denotes nominal growth for first six months of 2000

Table 8: Deposits by Ownership Type

Year		1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) State Owned	Deposits	607.3	731.1	164.2	158.7	118.0	109.5	115.4	193.2
	Nom Growth	22.6%	20.4%	-77.5%	-3.3%	-25.6%	-7.2%	5.3%	67.4%*
	Composition	90.4%	87.3%	15.6%	12.3%	7.5%	6.2%	5.5%	8.0%
(II) Private	Deposits	64.6	106.2	886.1	1,132.3	1,453.3	1,669.7	1,964.5	2,228.4
	Nom Growth	-9.2%	64.4%	734.6%	27.8%	28.3%	14.9%	17.7%	13.4%*
	Composition	9.6%	12.7%	84.4%	87.7%	92.5%	93.8%	94.5%	92.0%
(a) Foreign	Deposits	7.5	37.4	101.0	214.1	492.2	661.3	863.0	1,025.5
	Nom Growth	96.4%	400.1%	169.9%	111.9%	129.9%	34.4%	30.5%	18.8%*
	Composition	1.1%	4.5%	9.6%	16.6%	31.3%	37.2%	41.5%	42.3%
(1) Foreign Greenfield	Deposits	7.5	18.3	43.9	90.0	151.1	218.6	330.4	364.5
	Nom Growth	96.1%	144.5%	140.2%	105.0%	67.8%	44.7%	51.2%	10.3%*
	Composition	1.1%	2.2%	4.2%	7.0%	9.6%	12.3%	15.9%	15.1%
(2) Foreign Owner	Deposits	0.0	19.1	57.1	124.0	341.2	442.7	532.6	661.0
	Nom Growth	NA	239225.0%	198.3%	117.2%	175.0%	29.8%	20.3%	24.1%*
	Composition	0.0%	2.3%	5.4%	9.6%	21.7%	24.9%	25.6%	27.3%
(b) Domestic	Deposits	57.1	68.7	785.1	918.2	961.1	1,008.4	1,101.5	1,202.9
	Nom Growth	-15.2%	20.4%	1042.1%	17.0%	4.7%	4.9%	9.2%	9.2%*
	Composition	8.5%	8.2%	74.7%	71.1%	61.2%	56.7%	53.0%	49.7%

Source: NBH   * denotes nominal growth for first six months of 2000

Table 9: Credit to Deposit Ratio - Commercial Banks by Ownership Type

Year	1993	1994	1995	1996	1997	1998	1999	Jun 2000
(I) State Owned	32.4%	29.5%	7.5%	10.9%	1.5%	8.0%	9.2%	7.4%
(a) Nationalized	9.3%	8.9%	7.1%	4.3%	1.4%	5.8%	7.0%	5.0%
(II) Private	3.3%	14.1%	23.0%	16.0%	13.7%	12.6%	14.5%	14.7%
(a) Foreign	18.0%	34.5%	13.5%	7.2%	6.1%	8.2%	11.9%	13.2%
(1) Foreign Greenfield	17.8%	45.9%	17.2%	9.9%	13.2%	17.0%	20.2%	22.7%
(2) Foreign Owner	187.5%	23.7%	10.7%	5.2%	3.0%	3.9%	6.7%	7.9%
(b) Domestic	1.4%	3.0%	24.2%	18.1%	17.5%	15.4%	16.6%	16.0%
Commercial Banks Total	**29.6%**	**27.6%**	**20.6%**	**15.4%**	**12.7%**	**12.3%**	**14.2%**	**14.1%**

Table 10: Market Shares of Individual Banks as % of Banking Sector Total

Loans to the households	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MHB-ABN Amro	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.2%	**0.2%**	**0.6%**	**0.9%**
K&H	0.2%	0.1%	0.1%	0.3%	0.2%	0.2%	2.1%	1.9%	**1.8%**	**2.9%**
MKB	0.0%	0.0%	0.2%	0.5%	2.0%	**2.4%**	**2.7%**	**0.7%**	**1.0%**	**1.1%**
B B	0.0%	0.0%	0.0%	0.2%	0.3%	0.4%	**0.3%**	**0.9%**	**2.1%**	**3.9%**
Postabank	0.8%	0.5%	0.4%	0.3%	0.7%	1.0%	1.0%	0.7%	1.3%	1.8%
OTP	98.4%	99.1%	98.5%	95.5%	83.4%	82.0%	80.8%	70.9%	63.6%	55.7%
Total	99.4%	99.7%	99.3%	97.0%	86.8%	86.2%	87.2%	75.2%	70.4%	66.4%

Households deposits	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MHB-ABN Amro	1.6%	2.9%	2.8%	2.8%	2.8%	3.0%	3.5%	**4.4%**	**5.2%**	**5.4%**
K&H	1.0%	1.6%	1.5%	1.8%	2.1%	2.5%	8.0%	7.5%	**8.0%**	**7.1%**
MKB	0.9%	1.6%	2.0%	2.6%	3.2%	**4.2%**	**5.2%**	**6.4%**	**8.3%**	**10.2%**
B B	0.1%	0.6%	1.4%	1.2%	2.4%	2.6%	**2.8%**	**4.1%**	**4.6%**	**5.1%**
Postabank	2.5%	5.9%	7.8%	7.9%	7.0%	7.1%	7.2%	6.1%	3.9%	4.3%
OTP	93.2%	82.7%	80.1%	76.4%	71.6%	67.0%	63.5%	59.7%	56.3%	52.4%
Total	99.4%	95.3%	95.6%	92.7%	89.1%	86.5%	90.1%	88.1%	86.3%	84.6%

Note: Bold numbers indicate data after privatization to a foreign majority owner
Cooperative Credit Instititutions are not included in total

Source: Annual Reports of Banks and authors' calculations

Table 11: Bank Card Business in Hungary

	1995	1996	1997	1998	1999
Number of Bank Cards (1,000)	753.5	1,348.6	2,052.5	2,935.3	3,843.0
Growth of Bank Cards	98.6%	79.0%	52.2%	43.0%	30.9%
Number of Transactions (Millions)	15.9	26.4	49.1	67.4	87.0
Growth of Transactions per year	115.6%	65.7%	86.2%	37.4%	29.0%
Turnover of Transactions (HUF Billions)	132.4	266.2	629.4	1,047.5	1,690.0
Growth of Turnover Rates	83.8%	101.1%	136.4%	66.4%	61.3%
Average Value of Transaction (HUF)	8,320	10,098	12,820	15,533	19,425
Average Value of Transaction (USD)	66.20	66.18	68.65	72.43	81.85
ATMs	687	1106	1598	2101	2397
Growth of ATMs	NA	61.0%	44.4%	31.5%	14.1%
POS at Merchandise Outlets	3731	6537	14280	18207	20678
Growth of POS	NA	75.2%	118.4%	27.5%	13.6%
Bank Branches	1276	1207	1198	1200	1199

Source: NBH (2000)

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