U.S. Banks, Competition, and the Mexican Banking System: How much will NAFTA Matter?

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*The views expressed in this article are solely those of the authors and should not be attributed to the Federal Reserve Bank of Dallas or to the Federal Reserve System.

U.S. BANKS, COMPETITION, AND THE MEXICAN BANKING SYSTEM:

HOW MUCH WILL NAFTA MATTER?

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Abstract: Mexico has followed a long and difficult road to financial liberalization since the end of the second World War. The trend toward freer financial markets was only temporarily deterred by the nationalization of the banks in 1982. Despite the fact that the banking system was in government hands, competition and innovation from other parts of the financial system forced the government to continue to deregulate. This evolution culminated in the elimination of interest rate controls in 1988, the privatization of the banks in 1991 and 1992, and the opening of the financial system to foreign competition under the auspices of the North American Free Trade Agreement (NAFTA). If ratified, the financial portion of the NAFTA will further Mexico's goal of increasing competition and efficiency in the provision of financial services. While obstacles exist to impede the penetration of Mexico's growing retail banking market by U.S. financial institutions, the NAFTA should enhance considerably opportunities in other areas of financial services, particularly brokerage. Under the NAFTA, the preservation of the current dominant role of banks in Mexico will depend on their ability to compete with foreign institutions specializing in particular areas of technology-intensive financial services.

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The financial services component of the North American Free Trade Agreement (NAFTA) represents a new stage in the financial liberalization that has been occurring to various degrees in Canada, Mexico, and the United States. All three countries have eliminated interest rate controls, reduced reserve requirements, and lowered barriers to entry for new domestic and international banks. Mexico's financial opening, however, has been much more drastic than Canada's or the United States'.

Ten years ago, few would have expected that Mexico would move to integrate its financial system with those of the United States and Canada. Following the financial turmoil of the early 1980s, many Mexicans concluded that isolating their financial markets would help avoid financial trauma and that international capital controls and bank nationalization were useful policy tools. On the contrary, such policies accentuated financial instability. Global and domestic financial market participants had acquired the power to override such controls. Recognizing this phenomenon, Mexico has moved to create one of the more modern and open financial systems in this hemisphere.

The road to liberalization for Mexico has not been an easy one. It was interrupted by a reversal of financial opening when the government nationalized the banks in the early 1980s. But the main lesson of Mexico's modern financial history is quite clear: the Mexican government could only temporarily halt financial opening, growth, and innovation. The recent liberalization effort, including most recently work to establish the NAFTA, reflects to a large extent the huge growth in the nonbank sectors of the Mexican financial system and the lowering of trade barriers on trade in goods.

Not only do the details of the financial services portion of the NAFTA represent a radical departure for Mexico, but the general framework and implications of the agreement also are important. One of the most important functions of a free trade agreement is that it advertises the persistence of a legal or policy framework more credibly than a government could impose unilaterally. This means that the details of the agreement are not simply details in and of themselves. By increasing the credibility of policy permanency, the NAFTA will reduce the time of response to a policy change. If potential investors are concerned that a new policy may be reversed, they are more likely to behave as if it did not exist and that the old policy is the effective long-run policy. They may take a long time to accept the new policy as permanent.[1]

In the context of changes in policy towards foreign banking and financial institutions that may wish to operate in Mexico, the NAFTA can result in more rapid responses from Canadian and U.S. financial institutions than would occur as a result of a unilateral change in Mexican policy. An important reason for a NAFTA, as Gould clarifies, is that "unlike most legal contracts, enforcement of these agreements is entirely voluntary, and their credibility does not depend on the objectives and interests of only two parties, but on the relative power of competing interests within two or more subscribing countries" [Gould 1992: 20].

This is to say that the agreement represents a palpable reduction in the payoff to protectionist lobbying, and an increase in the long-term maintainability of the reform. Also, by making prospective protection more visible, a free trade agreement raises the

[1]Not only may incredible policy changes have neutral effects, as discussed above, but they may have absolutely perverse results. In the early 1980s, Peru attempted a trade liberalization that was incredible. Suspecting that tariffs would rise again, investors imported large quantities of foreign goods and reduced domestic investment [Gould 1992].

costs of lobbying for protection. Where the goal of Mexico is to broaden and deepen its capital markets, and to increase competition and efficiency in them, the goal will be reached more quickly insofar as the NAFTA reduces the payoff to protectionist pressures.

A second context in which the details of the agreement are not simply details in and of themselves involves the format of the financial portion of the NAFTA. An important difference between financial portions of the NAFTA and the Canada-U.S. Free Trade Agreement (FTA) is that the NAFTA is principles-based, whereas the FTA offers an a-la-carte approach. That is, the financial sector portion of the NAFTA commences with an explication of general rules or principles and subsequently focuses upon the expression of these principles through the industry-by-industry details of the agreement. The NAFTA reflects an attempt to apply trade policy concepts to the financial services sector, an innovation stemming from prior efforts to develop a General Agreement on Trade in Services. Sauvé and González-Hermosillo (1993) note that this approach derives from the recognition that the joint pursuit of "business globalization and trade liberalization requires agreement among countries on a guiding set of rules and disciplines relating to matters of establishment, market access, standard of treatment, transparency of regulations and dispute settlement." [Sauvé and González-Hermosillo 1993: 4]

This essay analyzes the financial portion of the NAFTA in the context of Mexico's modern financial history. The general framework of the NAFTA, combined with the important financial liberalization that it sets forth, indicate that the agreement will further Mexico's goal of increasing competition and efficiency in the provision of financial services. Differences in the agreement's treatment of various financial services, together with certain characteristics of financial markets in Mexico, suggest that the majority of entry under the NAFTA likely will occur in nonbank areas, especially brokerage. As competition in the provision of nonbank financial services continues to grow, and as an increasing number of banks, both foreign and domestic, commence operations in the Mexican market, Mexico's banks will be required to realize strong gains in efficiency.

The Financing of Import Substituting Industrialization: 1940-1974

Until the 1970s, the Mexican financial system was highly regulated, at least by North American standards. The old regime included quantitative restrictions on interest rates, an array of forced lending programs,[2] large barriers to entry, and high required reserve ratios. The financial system reflected import substituting industrialization, the trade and growth strategy that Mexico and other Latin American countries pursued at the time.[3]

Countries following import substituting industrialization (ISI) tried to diversify their productive bases by protecting domestic producers of formerly imported goods. Protection involved tariffs, quotas, and direct subsidies. The imports had typically

[2]Banks were required to lend a certain portion of their deposits to firms in priority sectors.

[3]A succinct analysis of import substituting industrialization can be found in Baer (1992). For a detailed analysis of the Mexican banking system during this period, see Brothers and Solis M. (1966). For a similar analysis of another country, Brazil, which also pursued import substitution, see Welch (1993a).

comprised consumer goods including durables - such as automobiles - and nondurable luxuries - such as clothing and scotch. ISI motivated local financial systems to specialize in underwriting the purchase of the domestic products that replaced these imports. Because such financing was inherently short-term, and lenders faced significant inflation and exchange rate risk, the financial system's lending horizons were much shorter than those found in the United States, Canada, and Europe.

The private financial sector did not supply long-term financing of industrial activity. The trade protection given industry bolstered retained earnings. Accordingly, most fixed investment was internally financed. For industries that required investments too large to base on retained earnings, and for exporting industries weakened by protectionism (such as agriculture), the government provided long term funding through a menu of trust funds and state-controlled credit institutions, the most notable being Nacional Financiera. These institutions not only channeled private and public resources into "priority sectors" but also intermediated (as they still do) resources from foreign lenders and investors.

Banks represented the major private sector institutions in the Mexican financial system, but their behavior was tightly regulated. Most importantly, interest rates on loans and deposits were controlled by the Bank of Mexico. Additionally, the Bank of Mexico controlled the money supply through the use of flexible marginal reserve requirements. If the Bank of Mexico wanted to tighten money, it increased the reserve requirement on new deposits.

Reserve requirement adjustments were a particularly important source of policy flexibility because the Bank of Mexico could not undertake open market operations. Open market operations require a well-developed market for government debt, and that did not exist. But the policy that was flexible for the Bank of Mexico was cumbersome and costly for the commercial banks [Brothers and Solis 1966:59-64]. The Bank's frequently changing and complex requirements resulted in costly efforts on the part of commercial banks to maintain adequate reserves. Further, to the extent that these reserves did not earn interest, increases in reserve requirements increased the spread between borrowing and lending rates.[4] Cash reserve requirements against demand and savings deposits ranged for 50% to 100% between the 1940s and the 1960s.

Cash reserves were not the only assets held in required reserves. Banks were forced to maintain a certain percentage of deposits in the form of government securities, creating a captive market for government debt. Banks sometimes had to hold government securities in proportions which ranged from 0% to 75% between the 1940s

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[4]In a perfectly competitive banking system where profits are zero, the relationship between lending rates, i_L, and deposit rates, i_D, is

$$i_L = \left[\frac{1}{1-k}\right] i_D \tag{1}$$

where k is equal to the required reserve ratio.

The spread or the difference between i_L and i_D is therefore

$$i_L - i_D = \left[\frac{k}{1-k}\right] i_D \tag{2}$$

If k increases, the spread increases. Notice also that if interest rates rise, so does the spread. For further details of this relationship see McKinnon and Mathieson (1981).

and the 1960s. Also, regulations required commercial banks to hold a certain percentage of deposits in the form of credits to the private sector and of private sector securities. These directed credits were channeled to what the government deemed priority sectors.

This level of regulation left commercial banks at an increasing disadvantage relative to nonbank intermediaries,[5] especially the financieras.[6] Financieras became the principle vehicles for financial innovation during this period; they offered high-yielding liquid paper with few of the restrictions that were imposed on commercial banks. Using resources obtained from promissory notes issued to corporations and individuals, financieras funded the acquisition of fixed-term obligations, financed working capital and equipment loans, and extended consumer loans.

Financieras were not the only successful financial institutions. Mortgage banks[7] played a significant but unchanging role in financial markets during this period. These banks issued special mortgage bonds (*cédulas hipotecarias*) to fund their mortgage

[5]The term nonbank intermediary simply refers to a financial entity that (a) is not a bank but still (b) accumulates funds (by taking issuing bonds, notes, bills, or acceptances) from some sources and then lends or otherwise distributes them to another.

[6]Financieras were financial institutions that resembled banks, but with a narrower scope of operation. A financiera could be seen as a sort of development bank, which is to say that it focused on making long-term loans to industry. To secure funds, financieras accepted time deposits whose minimum duration was one year. Financieras also issued their own ten-year (or longer) certificates of obligation called financial bonds (bonos financieros). It was not unusual for a private financiera to be part of a collection of financial institutions held by a holding company. As such, they were often recipients of large amounts of funds that were able to be employed in the purchase of claims on industrial and consumer borrowers not suitable for direct holding by the financial intermediaries - other types of institutions within the holding company, for example - that made the funds available.

[7]Mortgage banks specialized in home-mortgage based lending and collected funds through the issuance of special mortgage bonds, as noted above.

lending. Other private financial institutions, such as savings and loan associations and capitalization banks,[8] lost ground because they could not effectively compete for funds [Brothers and Solis M. 1966: 26-39].

With the growth of nonbank financial intermediation, securities markets became increasingly important, but government regulations impeded the development of markets for long-term debt. Although the Mexican government implicitly maintained the liquidity of all fixed income securities through most of this period, it required them to trade at par. The value was maintained through the loan windows at the Bank of Mexico and Nacional Financiera. Because the government proscribed discounting, expected inflation could not be reflected in discount rates, a problem that inhibited the development of a long-term securities market.

While the Mexican financial system - including the nonbank portion - did develop significantly from the 1940s through the 1960s, markets remained very thin by developed country standards. The trading of fixed-interest instruments on the stock and securities exchange was limited because market makers were banks, financieras, mortgage banks, capitalization banks and, ultimately the Banco de Mexico and the Nacional Financiera. Moreover, for the regulatory reasons noted in the previous paragraph, the market for long-term obligations was particularly thin. Market thinness and market-inhibiting financial regulations had resulted in costly intermediation during the 1940s, 1950s, and 1960s. These high credit costs and the scarcity of long-term credit, in turn, inhibited the development of Mexican industry.

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[8]Capitalization banks focused on long-term lending for capital goods.

Problems for the financial system worsened in the 1970s with the acceleration of inflation during the presidential administration of Luis Echeverria (1970-76). For the banks, the principle problem during this period was disintermediation.[9] Although disintermediation had occurred throughout the postwar period, during the Echeverria administration the acceleration of inflation exacerbated the adverse effects of interest rate controls and high reserve requirements upon the banks. The relatively low level of regulatory constraints placed upon the financieras' permitted them to adjust to the resurgence of inflation by paying more to attract deposits, of which many were diverted from the increasingly uncompetitive banking system. In response, new reforms were instituted in 1974 and 1975. The structure of Mexico's current financial system has its origins in these reforms.

The 1974 and 1975 Reforms

The new Mexican policies of the 1970s supported the consolidation of existing banks and gave them market opportunities formerly restricted to nonbank financial intermediaries. The objective was to allow banks to exploit economies of scale and of scope. The means

[9] Disintermediation is when funds shift out of one type of financial intermediary (in the case under discussion, banks) and either into another type (here, financieras) or out of the financial system altogether. In the United States before the financial deregulations of the late 1970s and early 1980s, restrictions on bank and savings and loan deposit rates would cause deposits to flow out of these institutions and into less-regulated assets when rates went up.

to this objective included a regulatory turn away from a U.S.-style system of strict division between types of financial institutions, and toward a Germanic system, where "supermarket banks" or multiple banks could offer a wide variety of services.

To this end, financial groups or conglomerates were constructed of different types of financial institutions - banks, brokerage houses, insurance companies, etc.- connected through a holding company. In 1974, the new Law of Credit Institutions, in part the result of Finance Minister José Lopez Portillo's efforts, went one step further; it created multiple banks through the merger of these different types of institutions [Banco de Mexico 1992:81]. Reflecting their origins, the new multiple banks could not only perform traditional banking functions, but could also provide insurance, brokerage services, and custodial and trust services. Banks were also allowed to take stock positions in industrial companies, a privilege that would become controversial [Tello 1984].

The immediate results of the 1974 Law on Credit Institutions included an increasingly concentrated banking system. As Chart 1 shows, the number of banks in Mexico decreased from 139 in 1975 to only 60 by the bank nationalization in 1982. This consolidation would continue even after nationalization.

With the inflation of the 1970s, disintermediation made bank adherence to mandated interest rate ceilings and directed credit programs impracticable. In the mid-1970s, the government reacted by dramatically increasing legal deposit rates, but it did not free them to reach their market levels. The absence of full liberalization gave added impetus to the nonbank sectors of the financial markets, an impetus that was accelerated by the Securities Market Law of 1975.

The Securities Market Law of 1975 created brokerage houses and reorganized securities exchanges under the oversight of the newly revamped National Securities Commission (Comisión Nacional de Valores or CNV) which was originally created in 1946. Not only did these reforms improve oversight and dissemination of information on traded securities, but they also created incentives for individual brokers and financial conglomerates to create brokerage houses. This sector began to grow rapidly, and expansion accelerated when the government created new financial instruments that could be traded in it [Heyman 1989:13-17].

Perhaps the most important development in the Mexican securities markets of the 1970s and 80s was the introduction of government treasury notes or CETES in 1978. Until then, Petrobonds (created in 1977) had been the major innovation in these markets. Petrobonds represented a share in a trust at Nacional Financiera with rights to certain quantities of government-owned oil, and bond values were accordingly linked to the price of oil [Heyman 1989 and Mansell Carstens 1993]. Other innovations of the period included authorization of commercial paper in 1980 and of bankers acceptances in 1981.

Devaluations and the Debt Crisis: 1976-1982

Mexican banks had a long tradition of offering dollar-denominated deposits and of extending dollar-denominated loans [Ortiz 1983]. Dollarization had decreased during the

1960s and remained low until the mid-1970s. But a burst of inflation during the Echeverria administration provoked fears of an imminent devaluation, and a flight back to dollars. The devaluation came in 1976, when the Mexican government elevated the peso price of the U.S. dollar from 12.5 pesos to around 21 pesos. Capital flight and increased dollarization soon followed. The devaluation also precipitated a substantial increase in financial activity, as well as certain financial reforms.

But instead of liberalizing trade to avert future balance of payments problems, the incoming Lopez Portillo administration resolved to uphold the increasingly threadbare import substitution/industrialization policies of the prior two decades. New oil deposits had been discovered, and this administration projected that it could finance further import substitution schemes with rising oil export revenues. The rush to develop these exports touched off large fiscal deficits and an unsustainable increase in foreign debt. Many of the resources that flowed to Mexico during this period were ultimately wasted [Gavin 1991]. A surge in world interest rates in 1979 and a plunge in oil prices in 1980 and 1981 pressed on Mexico's debt-servicing ability from both directions. In August 1982, Mexico confessed that it could not service its foreign debt. Accompanying this collapse were massive capital flight, a severe peso devaluation, the imposition of exchange controls and the nationalization of the commercial banks.[10]

[10]Two commercial banks escaped nationalization, Banco Obrero which was owned by the unions and Citibank Mexico.

The Bank Nationalization and its Aftermath: 1982-1989

In 1982, Mexico went through two major devaluation episodes - one in February and March, the other in August and September. Many inside and outside government contended that more drastic measures were in order [Maxfield 1992 and Tello 1984]. Candidates included foreign exchange controls, the effective elimination of Mexdollar accounts, and the nationalization of the banking system.[11]

All were implemented by the Lopez Portillo administration in late August and early September 1982. On August 18, the government suspended the transfer of Mexdollar accounts abroad and converted these dollar-denominated accounts to pesos at an exchange rate of 70 to the dollar. Since market rates were around 100 pesos per dollar, this act would - for years to come - create suspicions about what else the government might impose upon the Mexican banking system. On September 1, the government ordained a full array of exchange controls and also nationalized the banking system.[12] To mitigate the damage that devaluation had inflicted upon borrowers, they were allowed a special and highly favorable exchange rate to be applied to their dollar-denominated loans - forty pesos per dollar.

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[11]See Moore (1993) for additional analysis of the pervasive effects of Mexico's high government deficit on the Mexican financial system.

[12]Fifty-eight of the existing sixty banks were nationalized. As noted above, only Banco Obrero, a bank owned by the unions, and Citibank Mexico were spared. When nationalization was implemented, articles 28 and 123 were amended to exclude the private sector from holding a controlling interest in a bank [Bazdresch Parada 1985 and Tello 1984].

Although most of the Lopez Portillo administration's tactics were conceived to stanch capital flight, they aggravated it. Mexicans forsook Mexdollar deposits for cash dollars and foreign accounts. Banks suffered severe losses in liquidity, and contractions in earnings on dollar-denominated loans.

The government's administration of the nationalized banks reflected its concerns over the stability and solvency of the financial system. Mexico implemented bank recapitalization policies and promoted further consolidation. By 1990, of the fifty-eight banks originally nationalized, eighteen remained [Banco de Mexico 1992:84].

But the nationalization did not signify wholesale changes in management. Only the bank directors were removed. The de la Madrid administration, which replaced that of Lopez Portillo only a few months after the nationalization, was less sanguine than its predecessor about the virtues of government ownership. Banks were largely left on their own.

Nevertheless, the nationalization did reverse some past trends. Chief among these was the re-erection of firewalls between the bank and nonbank sectors of the financial system. For example, the de la Madrid administration reprivatized the nonbank assets of multiple banks, but retained control of the banks themselves. In many cases, these nonbank assets were purchased by the prior owners through brokerage houses, using "indemnification bonds" as payment.[13]

[13]The prior bank owners were indemnified with these bonds which had a maturity of 10 years and an interest rate tied to the CD rate [Heyman 1989:138].

The growth in the nonbank financial sector in the 1980s, especially in the money market, was enormous and helps to explain why financial innovation was not stymied by the bank nationalization. Between 1982 and 1988, nonbank financial institutions' assets rose from 9.1% of total financial system assets to 32.1%.

Recall that the government had begun to issue treasury bonds (CETES) in 1978. During the de la Madrid administration, the trading of CETES in the securities market (Bolsa de Valores) permitted the government an alternative to forced securities sales, expressed as noncash reserve requirements, to the banks. The growth of this alternative outlet for government finance was a particularly important salve for fiscal imbalances at this time. Restrictive rules and regulations were continuing to inhibit the expansion of the banking sector, so that even forced bank financing threatened to be an insufficient source of funds.

Although much of the initial growth in the securities market can be explained by the increased issues of CETES, these were followed in 1985 by Bank Development Bonds, in 1986 by Mexican (U.S.) dollar-denominated bonds (Pagafes) and fixed-interest Urban Development Bonds (BORES), and in 1987 by fixed-interest Development Bonds (Bondes). The bond market and especially the money market became increasingly liquid throughout the 1980s [Heyman 1989:49-102, 123-160].

But with the new surge of the nonbank sector, the banking system again required innovation and deregulation to improve its competitiveness in attracting funds. The government responded in 1989 by removing its restrictions on interest rates, and permitted a turn back to universal banking via the Financial Groups Law of 1990. In

1991, the Salinas de Gortari administration began to sell the banks back to the private sector.

At the same time that these moves toward deregulation were occurring, new financial instruments were also being developed, so that the banks could compete effectively for funds. Money market accounts (Cuentas Maestras) appeared in 1986. In 1987, as part of the effort to recapitalize the banks, the government developed Certificates of Claim on Net Worth (CAPS).[14] In what was effectively a first step toward privatization of the banks, the government used these CAPS as a vehicle by which it traded 34% of its bank holdings to the private sector. Banks did not pay dividends on these issues but the retained earnings represented a capitalized addition to the net worth (capital) of the banks. The CAPs were issued during a general stock market boom and sold at significant premia.

Between 1982 and 1987, a combination of high inflation, interest rate controls, and high reserve (liquidity) requirements induced the growth of a black market for credit.[15] Much of the liberalization that followed could not have taken place in the absence of a large fiscal effort by the Mexican authorities. Public sector borrowing requirements dropped from around 17% of GDP in 1982 to around -1% in 1992, a financial surplus (Chart 2). Accordingly, the government began to refrain from exacting

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[14]These were issued in the form of "B" shares which can only be held by Mexicans and consortia cannot form a controlling interest.

[15]The term "liquidity coefficient" refers to required reserves that can be held in liquid interest bearing assets such as CETES. This is different from required reserve coefficient which typically refers to the percentage of liabilities which must be held in cash reserves or noninterest (or low interest) bearing deposits at the central bank.

forced loans from the banks, especially after 1987. Lowering the liquidity ratio (a broader term for required reserve ratio) and liberalizing interest rates improved the banking system's ability to compete for funds.

The first step toward full liberalization and lower reserve requirements was the liberalization in 1988 of the issue of bankers acceptances. Under the new rules, interest rates on these instruments were no longer controlled. Moreover, bankers acceptances were now subject to a relatively low 30% liquidity requirement.[16] These conditions gave bankers acceptances an advantage over deposits and CDs in attracting funds. Deposits and CDs were still subject to regulated interest rates; they were subject to liquidity coefficients of close to 60%.

Additional liberalizations occurred in early 1989. The government removed interest rate ceilings on all deposits and securities, and dropped the liquidity coefficient to thirty percent on bank liabilities. Finally, in June 1989, interest payments on checking accounts were allowed [Banco de Mexico 1992:90-91].

The Privatization of the Banks: 1990-1992

These liberalizations set the stage for a complete privatization of Mexico's eighteen remaining commercial banks, an act that was initiated by legislation in 1990. In June, the Mexican Congress amended the Constitution to allow private-sector control of

[16]Bankers acceptances in Mexico are short-term (maturity not exceeding 180 days) promissory notes issued on a discount basis by banks. Unlike their counterpart in the United States, bankers acceptances in Mexico are not linked to goods traded internationally [Heyman 1989:138,144-146].

commercial banks. In July, Congress approved the Credit Institutions Law, which restored the multiple bank system [Mansell Carstens 1993:18].

The return to universal banking did not completely dismantle the segmentation imposed with nationalization. The new legislation allowed the formation of three types of financial groups: a) a bank with leasing, factoring,[17] foreign exchange, mutual fund management and origination, and warehousing activities (Chart 3), b) a brokerage firm with leasing, factoring, foreign exchange, mutual fund management and origination, and warehousing activities (Chart 4), and c) a holding company (Chart 5). The holding company must have at least three of the following institutions with no more than one of each type: a) a bank, b) an insurance company, c) a brokerage house, d) a leasing company, e) a factoring company, f) a bonding company, g) mutual funds management company, h) currency exchange broker, and i) a warehousing company [Natella, et al, 1991:23-25 and Mansell Carstens 1993:18-19]. Moreover, while banks could now take equity positions in nonbank enterprises, holdings were limited to 5% of a firm's paid-in capital.[18] Loans to principle bank shareholders, managers, or directors - or to firms they

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[17]A factoring company buys a firm's accounts receivable for less than their face value, does its best to collect the payments on the accounts at face value, and profits on the difference.

[18]There is one relaxation of this provision. A bank can hold up to a maximum of 15% of a firm's paid-in capital, as long as possession does not continue for more than three years. Moreover, even three years' possession is permissible only after approval by two-thirds of the bank's board members and authorization by Mexico's Ministry of Finance [Banco de Mexico, 1992: 97].

own - were limited to 20% of a bank's loan portfolio.[19] And the extension of any such loans now legally required the express approval of the bank's board of directors.

The Credit Institutions Law defined the terms of the subsequent privatization. Ownership structure was (and remains) apportioned according to three types of shares.[20] "A" shares are common stock held by the controlling interest and can represent up to 51% of total shares outstanding of any one bank. These may only be held by Mexican individuals excluding institutional and corporate investors. "B" shares may be held by Mexican individuals, firms, and institutional investors and may represent at least 19% and up to 49% of the total shares outstanding. Finally, "C" shares may be held by all Mexicans and foreigners and may represent no more than 30% of the shares outstanding [Natella, et al, 1991:22-23, Banco de Mexico 1992:96-97, and Mansell Carstens: 18-19]. The Mexican government also restricted the share of total bank capital possessed by any individual. Without special approval from the Ministry of Finance, no one may own more than 5% of outstanding shares. With approval, an individual may derive title to up to 10%.

The eighteen banks sold in fourteen months (June 1991 - July 1992), at an extraordinarily high average price-to-book ratio of 3.49, [Trigueros 1992 and Carstens 1993]. Meanwhile, the government continued to initiate regulatory reforms. Mexico eliminated its remaining liquidity coefficient of 30% in September 1991, and abolished

[19]These loans must be approved by two-thirds of the directors [Natella et al, 1991: 45].

[20]"CAPS" issued in 1987 were subsequently turned into shares.

exchange controls in December 1991 [Carstens 1993]. The authorities also imposed new capital standards which turned out to be stricter than those contained in the Basle agreement.

What has the recent liberalization accomplished? The most striking benefit of the liberalization and the inflation stabilization has been an increase in financial stability, a dramatic fall in interest rates, and robust growth in financial assets. Also, a recovery in lending to the private sector for investment is underway. Growth in the broad money aggregate M_4 recovered to high and sustainable rates starting in 1988 (Chart 6). Continued liberalization with the implementation of the NAFTA should increase further the efficiency of the banking system and help lower the cost of financial intermediation in Mexico.

Financial Services Portion of the NAFTA

One way to facilitate the process of business globalization and trade liberalization, and of accelerating the speed of adjustment to a policy change, is to assure that the new policy is easily understood.[21] Accordingly, the two most important doctrines in the financial services portion of the NAFTA are relatively simple: (1) each country allows

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[21]The NAFTA also represents much effort to ensure procedural transparency and, in fact, transparency is one of the general principles on which this principles-based agreement is based. In processing applications for entry into its financial services markets, each NAFTA country has committed itself to clarify its requirements for completing applications, to provide information on the status of an application on request, to make an administrative determination on a completed application within 120 days, to publish measures of general application no later than their effective date and to allow interested persons the opportunity to comment on proposed measures, and to establish inquiry points to answer questions about its financial services measures.

its residents to buy financial services in other NAFTA countries[22] and (2) foreign subsidiary institutions receive national treatment. The first clause implies a promise that Mexico's capital flight restrictions of late 1982, which inhibited foreign financial services' availability to Mexicans, will not reappear. In the second clause, national treatment means that foreign financial institutions[23] are subject to the comparable[24] laws, rules, and

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[22]NAFTA countries generally have agreed not to increase such impediments to cross-border trade as currently exist. However, the United States has declined to make such a commitment with regard to cross-border trade in securities with Canada, even though such an agreement does exist between the United States and Mexico. Likewise, Canada has not committed to such a "standstill" agreement with the United States. While NAFTA countries generally have agreed to permit their residents to purchase financial services provided from the territory of another party to the agreement, the transaction must originate at the request of the purchaser. Active solicitation of business from a seller in one NAFTA country to a purchaser in another is not part of the agreement.

[23]The focus of the financial services chapter of the NAFTA is upon institutions more than on products - a departure, for example, from the General Agreement on Trade in Services. That is, the NAFTA treats financial services as institution-specific, so that the rules for one type of lending or deposit-accepting institution are different from those of another. In the NAFTA, the same category of service may face different regulations or restrictions in accordance with the category of institution providing the services.

[24]The term "comparable" is important. Sauvé and Gonzalez-Hermosillo (1993) note that the NAFTA borrows from the General Agreement on Trade in Services in defining national treatment in a *de facto* rather than *de jure* sense. A *de jure* national treatment means that the very same laws apply to foreign firms as domestic. A *de facto* standard takes account of the potential inequality of effects that regulatory requirements might have if they were applied identically to domestic and foreign institutions. Accordingly, *de facto* treatment may allow somewhat different laws and regulations to apply to foreigners than apply to locals, "so long as their effect is equivalent and does not place the former at a competitive disadvantage in the host country market" [Sauvé and Gonzalez-Hermosillo: 13]. Of course not all parties will agree in every future case on what equal effects are. There is a dispute settlement mechanism to address these potential differences.

regulations as domestic institutions in a given host[25] country. The country for which this doctrine signifies the biggest change is Mexico, in which the NAFTA allows U.S. and Canadian financial services firms to set up wholly-owned subsidiaries for the first time in fifty years.

Although the principal tenets of the NAFTA's clauses on financial institutions, such as those mentioned above, are relatively simple, they do offer some complications. These complications are grounded not only in the past histories of each country's individual financial service industries, such as banking or securities, but in the connections that different countries permit between such industries. Unlike the United States, Mexico permits the same holding company to own banks, insurance companies, stock brokerage houses, funds management firms, bonding institutions, factoring operations, exchange houses, leasing firms, and warehousing firms. As will be seen, these variations in what NAFTA members permit turn out to invest it with some peculiar clauses. Moreover, under the NAFTA, the structure of Mexican financial services firms owned by U.S. or Canadian firms is important. The Mexican firms must be subsidiaries, rather than branches of their foreign owners. This means that a Mexican bank will have its own board of directors, even if it is owned by a U.S. or Canadian firm.

The NAFTA agreement phases in its liberalizations in stages. Mexico will allow U.S. and Canadian commercial banks, insurance companies, brokerage firms, and finance companies free access only after a six-year transition period (the first of the six years is

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[25]The host country provision contrasts with that of the European Economic Community, which allows Country A's subsidiary financial institutions operating in Country B to behave in accordance with Country A's regulations instead of Country B's.

1994), during which the market will be limited. For example, the capital of foreign insurance affiliates may not exceed 6 percent of the aggregate capital of all insurance companies in Mexico during the first year of the transition period, but that share goes to 12 percent on January 1, 1999 and to 100 percent a year later.[26] Similarly, during 1994, bank capital under control of foreign investors in Mexico may not exceed 8 percent of the value of all bank capital in the country. In the last year of the six-year transition period, this limit goes to 15 percent.

But even after the phase-in period comes to term, the NAFTA's characterization of national treatment is limited. Mexico will still be able to treat potential U.S. and Canadian-owned subsidiaries somewhat differently than it treats domestic firms. As an example, consider Mexico's banking system. Each of Mexico's two largest banking institutions, Banamex and Bancomer, accounts for more than 25 percent of total bank capital in the country. Together, they account for about 56 percent of the nation's capitalization of banks. But even after NAFTA's phase-in period for banks is completed, neither Canadian nor U.S. groups may acquire an institution that accounts for more than a four-percent share of the aggregate capital of all commercial banks in Mexico. In addition, once the six-year transition period is over, the Mexican government has the one-time option to freeze *temporarily* the level of capital of all foreign banks from

[26]The NAFTA also allows foreign insurance providers to enter Mexico through a partial equity interest in a new or existing Mexican insurance company. Under this alternative entry mechanism, the share of a Mexican insurance company's voting common stock owned by foreign insurance providers is subject to limits that are relaxed during the transition period.

Canada and the U.S. if that capital reaches twenty-five percent of total bank capital in Mexico.[27]

The U.S. likewise explicitly imposes restrictions on what foreign financial institutions of NAFTA signatory countries may do, and some of these restrictions reflect differences between Mexican and U.S. financial institutions. The United States will permit a Mexican financial group that had, before the NAFTA, acquired both a Mexican bank with U.S. operations and a Mexican securities firm with U.S. operations, to operate both for five years after their acquisition. The U.S. securities affiliate, however, will not be permitted to expand through acquisition. Moreover, the U.S. requires that the majority of directors of a foreign subsidiary bank be U.S. citizens.

With regard to commencing operations in Mexico, one of the attractions of the NAFTA for Canadian and U.S. firms is the opportunity to carry out operations denominated in pesos rather than dollars, and of accumulating peso liabilities to offset these peso denominated assets.[28] And the breadth of opportunities offered by the

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[27]The freeze is permitted to last only three years. The NAFTA provides a similar option for Mexico with regard to securities firms, but here the aggregate capital percentage that triggers the option is 30 percent, although the same three-year maximum freeze period holds. Note that Canada exempts Mexican firms and individuals from its prohibition against non-residents' collective acquisition of more than 25 percent of the shares of a federally-regulated Canadian financial institution. Canada had already extended this exemption to the United States as part of the Canada-U.S. FTA. Mexican banks are also exempted from the combined 12 percent asset ceiling that applies to non-NAFTA banks, and also need not seek the approval of the Minister of Finance as a condition of opening multiple branches in Canada. Financial services commitments of Canada and the United States under the Canada-U.S. FTA will be incorporated into the NAFTA.

[28]In general, to gain peso exposure, U.S. and Canadian financial institutions must locate operations in Mexico, as offshore peso trading is strictly prohibited. However,

NAFTA is important. For example, the NAFTA signifies that finance companies may ultimately establish subsidiaries to provide consumer lending, commercial lending, mortgage lending, or credit card services. During the transition period, such operations are subject to the restriction that they may not collectively exceed three percent of the sum of the aggregate assets of all banks in Mexico plus the aggregate of all types of limited-scope financial institutions in Mexico - a phrase which refers to the types of companies mentioned in the previous sentence. After the transition period, such firms receive purely national treatment, which is to say they will not be subject to the caps that banks will face after the phase-in. Even during the transition period, some types of auto-related financing are not subject to the caps that other financial operations will face during the phase-in; it should accordingly not be surprising to note that at least one U.S. nonbank firm is already reported to be planning the introduction of auto financing and leasing operations. Meanwhile, U.S. brokerage firms have already begun to report plans for cross-border mergers and acquisition activity, as well as to bring swaps and options to the Mexican market.

Attractiveness of Mexico for Entry by U.S. Financial Institutions

Are U.S.-based financial institutions likely to be interested in establishing operations in Mexico under the NAFTA? A look at the Mexican banking system, as an example, offers an idea of what may make the NAFTA attractive to U.S. financial institutions.

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certain operations between U.S. and Mexican markets also provide vehicles for peso exposure.

Mexico's banking system is highly profitable, highly concentrated and not very competitive, fairly inefficient, and somewhat less aggressively oriented toward marketing than some developed country systems.

Mexican banks are more profitable than U.S. banks and most European banks. In 1992, the net return on assets for Mexican banks was approximately 1.45 percent versus 0.91 for U.S. banks (Chart 7). The return on average assets in 1991 was 1.09% in Mexico, compared to 0.53% for the United States, 0.41% for all of Western Europe, 0.19% for Japan, and 1.11% for Spain (Chart 7). When the Mexican government began to privatize the formerly state-owned banking system in 1991, some U.S. observers were surprised to see the selling prices of these banks range from 2.6 times book value to 5.4 times book (Chart 8). Expectations of future profitability helps to explain these prices. Moreover, it had been suspected that the privatization of Mexican banks would make them compete more intensely with one another, paying higher rates on deposits and charging lower interest rates. But instead of narrowing, spreads between interest rates on loans and bank deposits have widened. During the second half of 1990, interest rate spreads averaged about 5 percentage points. During 1992, when inflation rates had declined considerably compared with 1990's, spreads fluctuated between 7.57 percent and 10.69 percent (Chart 9).[29]

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[29]In a discussion of this point, Mansell Carstens (1993) notes that spreads have remained high and are likely to continue to remain high over the next 2 years not only because of the oligopoly power in the provision of commercial bank services, but because "commercial banks have been moving into high yield consumer lending" [Mansell Carstens: 29]. She notes that consumers had not had access to credit since the early 1980s, that banks have enjoyed a seller's market in satisfying the backlog, that banks will probably expand their credit card and consumer durable and mortgage lending programs

The Mexican banking system is currently highly concentrated, especially when compared to the U.S. banking system (Chart 10). As of mid-1992, the three largest commercial banks in Mexico -- there are twenty altogether (counting First National City Bank or Citibank and the union-owned institution, Banco Obrero) -- held about three-fifths of all Mexican commercial bank assets. In contrast, as of year-end 1992, the three largest U.S. banking organizations held roughly one-seventh of total U.S. bank assets.[30] The level of competition that such concentration implies in the absence of deep nonbank financial markets for private debt, as is the case in Mexico, may suggest why large interest rate spreads persist.[31]

In addition, some indicators suggest that Mexican banks may not have begun to operate very efficiently, at least by commonly-applied standards. In 1991, the ratio of noninterest operating costs to assets in Mexican banks was 5.9 percent versus 3.7 percent

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to middle and lower-income groups, and that such operations typically involve large spreads.

[30]The bank assets of individual U.S. banking organizations are approximated by the sum of the assets of their bank affiliates. U.S. concentration measures based on deposits are similar to the asset concentration figures reported here. Note that the national concentration measures used here do not necessarily reflect the degree of concentration that exists in local market areas, in either Mexico or the U.S.

[31]Concentration, in and of itself, need not preclude competitive provision of banking services. Shaffer (1992) finds that the Canadian banking system, which is comparable to Mexico's in terms of market concentration, still behaves competitively. The historical difference has been the contestability of Canadian markets for the types of financial services that Canadian banks offer. That is, market entry has traditionally been more viable in Canada, and securities markets for private debt are broader and deeper than those in Mexico. In subsequent sections of this discussion, we more fully address problems of Mexico's nonbank private debt markets in providing competition for the banks.

for U.S. banks.[32] It should be noted that Mexico's 5.9 percent in 1991 represents a decline from 6.3 percent in 1990 and that, for reasons discussed below, this ratio will probably continue to fall.

There is also some evidence that less attention may be applied among Mexican banks to marketing than is common in the United States and in Europe. In 1991, Mexico had one bank branch for about every 18 thousand people. In the United States, the number was about one branch per 4 thousand inhabitants and, in Europe, about one for every 2 thousand.[33] Nevertheless, as in the case of other bank characteristics, time may not have permitted recent bank behavior to reflect fully the impact of privatization.

Although these factors suggest that Mexico under the NAFTA may attract U.S. banks, it is important to emphasize that the Mexican financial system is anything but static. The circumstances implied by the preceding financial statistics and ratios will probably not persist.

Recall that the first reprivatization of a Mexican bank did not occur until June 1991 and the last, that of Banco del Centro, took place in July 1992. There is much reason to suspect that insufficient time has elapsed for any bank to complete its

[32]International comparisons of financial ratios probably offer a general picture of differences between the Mexican banking system and its counterparts in other countries, but care must be exercised and tenths of a percentage point ought not to be taken seriously. For a more extensive clarification of international comparisons of financial ratios in the context of NAFTA countries, see Gavito Mohar, Sánchez Garcia and Trigueros Legarreta (1992). Despite their cautions, those authors still draw conclusions about the essential differences between Mexican and U.S. financial performance, and the conclusions are very similar to those we draw.

[33]See Mansell Carstens (1993) for further discussion of this issue.

transition from a public entity to a private one. In a study of bank acquisitions by holding companies in the United States, Johnson and Meinster (1973) show that an acquired bank's income and balance sheet ratios do not begin to display statistically significant differences from those of prior management until two years of new ownership. Moreover, the full impact of a change in management appears not to be felt until four years after the acquisition [Johnson and Meinster 1975]. As of this writing, less than two years have passed since any Mexican banks were privatized.

Tenure of ownership is not the only factor to suggest a state of flux in Mexican banking. As of June 1993, applications have been made for the establishment of at least six new (rather than acquired) banks and four have been approved. Whether or not competition has intensified from the bank privatization period up to now, the opportunities for intensification are clearly increasing. The six-year period of transition between the entry into effect of the NAFTA and the point at which Canadian and U.S. banks receive their full opportunities for establishment in the Mexican market is likely to offer profound changes in the Mexican financial system, even in the absence of any foreign entrants.

In addition to the rapidly changing nature of financial institutions and markets, other factors in Mexico also raise questions about the intensity and rapidity at which Canadian and U.S. banks financial institutions may choose to enter the Mexican market. While Mexico may be underbranched, and while "rising incomes ... are expected to increase the demand for banking services by Mexicans, most of whom live outside the major cities and currently have no banking relationship at all" [Laderman and Moreno

1992: 3], Mexican banks nevertheless have well-established positions in the retail market, which U.S.- owned institutions may have difficulty in achieving.[34]

With regard to wholesale banking, Mansell Carstens (1993) notes that Mexican banks have faced competition from foreign firms in this sector for years. While foreign banks have not been permitted to establish themselves as banks per se in Mexico, they have had representative offices. Moreover, Mexican banks, private and public corporations, and the government have relied for decades upon these institutions. Mansell Carstens remarks that, "for the wholesale banking sector, NAFTA may be a nonevent" [Mansell Carstens 1993: 37].

A related detail may offer a useful perspective on the extent of competition that Canadian and U.S. financial institutions potentially could face from Mexican entities. Although the Mexican bank nationalization that occurred in 1982 formally removed only bank directors, and left other employees at their desks, many of these employees departed for the securities firms that took on a rising share of financial activity. Later, Mexican securities firms turned out to be the major purchasers of privatized Mexican banks. Since many securities industry executives were bankers prior to the nationalization, the recent financial deregulation has meant a reunification of financial products and personnel. Does this mean that Mexican banks have an information advantage that would make a U.S. bank's entry into the Mexican market a highly competitive event? It seems to suggest that, because of personnel movement out of

[34]In a discussion of this point Mansell Carstens (1993) notes that the smallest of Mexico's three largest banking institutions (Banca Serfin) has 596 branches and that both Banamex and Bancomer have more.

banking and into the securities business and then back, human capital appropriate to the joint provision of securities services and traditional banking products may be particularly abundant in the Mexican financial system.[35]

Perhaps the main barriers to entry by U.S. banks are the minimum capital requirements and the global and individual maximum market share restrictions on U.S. bank holdings. The initial minimum capital requirement for a new entrant into the banking system is currently 0.5% of total paid-up capital plus reserves in the banking system while the maximum allowed is 1.5% of the sum of total paid-up capital, reserves, and current gross profits.[36] As of December 1992, this converts to around \$20 million for the minimum and around \$90 million for the maximum. Given recent trends in capital growth, by year-end 1993 these limits easily could rise to \$26 million for the minimum and \$126 million for the maximum. The minimum capital requirements exclude a number of would-be entrants into the Mexican market (see Box for an analysis of U.S. border banks). But the maximum capital requirements are small compared to the rest of the banks in the banking system. If a U.S. firm wanted to buy a Mexican bank, only two

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[35]The stock of financial experience in Mexico's banks contrasts sharply with that of many U.S. financial institutions in the 1980s. The partial erosion of barriers to competition at that time in the U.S. led many U.S. thrifts to enter into areas where they had little or no previous experience. Similarly, the financial deregulation of the 1980s broadened the types of financial controls that U.S. banks and thrifts were required to maintain on their own, leading to substantial financial difficulties at some institutions.

[36]Note that the measure of capital used in determining the maximum is different than that used in determining the minimum. This results from the fact that the minimum capital requirement was determined by the Credit Institutions Act of 1990, whereas the maximum is specified by the NAFTA. Also, the Mexican authorities have much discretion in determining minimum capital requirements.

of the twenty could be purchased because the remainder have capital larger than the maximum allowed.

The maximum capital allowed for any individual entrant grows to 4% by the year 2000. If 4% were the maximum allowed today, all but the largest five banks could be bought by an interested U.S. bank. But these five banks command a huge proportion of the banking system. Hence, the strategy in NAFTA allows U.S. banks to enter in the phase-in period only in a very limited part of the market, mainly in regional retail operations. U.S. banks will essentially have to "grow their own" Mexican subsidiaries as the restrictions on banks that grow a large market share are considerably less stringent.

Current Issues in Mexican Banking

A broader issue involving the development of the Mexican financial system is the connection of this process to other components of Mexico's liberalization programs. Mexico's liberalization programs have motivated large influxes of foreign capital into the country. While very little of these international flows have taken place in the form of loans from foreign banks, their implications for banking have been important.

These inflows of foreign capital, and their translation into pesos, has meant that both the demand for the peso and its rate of exchange against other currencies has strengthened. Partly as a result of the strong peso (or the weak dollar), and partly because Mexico has dramatically lowered its barriers to foreign trade in recent years, the U.S. has become a low-cost supplier for Mexican buyers to an increasing extent. In fact, U.S. producers have begun to out-compete Mexican producers in so many Mexican markets that Mexico's imports from the United States have quadrupled since 1987. As a result of rising U.S. and other foreign competition, Mexican tradeable goods producers have begun to default on their debt to Mexican banks at a more rapid rate than in past years (Chart 11). Also, loans with a moderate or higher risk of default have risen from 5 percent of total loan volume in September 1991 to 9 percent in September 1992.

Does this mean that increased U.S. sales to Mexico under the NAFTA will mean more defaults? In fact, it is hard to separate the various factors that have caused increases in the ratio of past-due loans to overall loans. While foreign competition plays a role, other issues are important as well. A significant portion of the recent rise in troubled assets may be linked to loans booked under the directed credit programs maintained by the Mexican authorities prior to privatization. The Mexican government created a compensation mechanism, within the privatization program, to reimburse the purchasers of the banks for any initially unreported problem loans. The problem loans associated with these past programs would, in any case, not be expected to reflect accurately any new trends in financial performance generated by the restructured financial system. Nor should they call to question the solvency or profitability of these banks.

While the rise in problem loans also partly reflects greater risk-taking by Mexican banks, some [Garber and Weisbrod 1991] have argued that the important role of banks in Mexico's financial system imparts a substantial franchise value to Mexican banks, particularly those with high market shares and strong reputations. The incentive to protect this franchise value from loss due to failure is seen to help offset propensities of the banks to extend large volumes of high risk loans.

A comparison with recent events in the U.S. financial system may illustrate the incentive Mexican banks have to maintain a low-risk asset portfolio. During the 1970s and 1980s advances in information technology, together with the regulatory restrictions imposed on banks and thrifts, meant savings were more remunerative and borrowing cheaper in other sorts of institutions [Kaufman 1991]. The partial financial deregulation that occurred during the 1980s materialized largely in reaction to these forces. In response to the lower charter values brought on by increased competition , U.S. financial institutions took on riskier portfolios [Keeley 1990].

In contrast, despite qualitatively similar problems of disintermediation to those in the United States, Mexico's financial reforms occurred in an atmosphere less hostile to banks. The relatively illiquid nature of Mexico's financial markets continued to offer banks there a central role in supplying liquidity and monitoring the financial condition of borrowers. Moreover, as Mexico's financial markets continue to broaden and deepen, Mexico's relatively unrestrictive regulations pertaining to financial structure offer broader avenues for avoiding the erosion of market share than those afforded U.S. banks in the 1980s.[37]

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[37]See Gunther and Moore (1992) for a discussion of the relatively unrestrictive product and geographic expansion laws that distinguish Mexico's banking system from that of the United States.

Other Mexican Financial Markets

The last statement of the previous section has important implications for nonbank financial intermediaries in Mexico. We have suggested that bank concentration need not always inhibit competitive provision of banking services but that, up to now, it seems to have done so in Mexico. One reason why Mexico's banking system shows evidence of a shortage of competition up to now appears to involve a lack of contestable markets. That is, the viability of entry by new banking firms or the existence of deep and broad markets for nonbank funding of private enterprise seems not to have been sufficient to discipline banks toward competitive behavior. While stock and securities markets exist in Mexico, and while factoring and leasing operations, and other nonbank sources of de facto finance for private borrowers have also existed for years, many of these institutions have had problems of their own that have impaired their competitive strength.

Consider the stock market in Mexico. In general, stock markets transfer capital from savers to investors (the primary market), provide liquidity to owners of fixed capital (the secondary market), and improve the efficiency and performance of firms through the market for corporate control (the secondary market). However, the performance of the stock market depends not only upon market access, but upon the market's ability to discipline its corporate participants.

The Mexican stock market is small compared with those of developed countries. An important reason involves contestable markets, but of a somewhat different sort than those stressed in our previous discussions. Here, the contest involves the threat of takeover when a company's managers behave in their own interests rather than the stockholders'. There is evidence [McConnell and Servaes 1990] to suggest that self-serving managerial behavior increases with the percentage of insider ownership, and that increases in insider ownership accordingly lowers the value of stock. High insider ownership rates are common in Mexico, and the result has been an illiquid market. Under the current Mexican regime of comparatively loose regulation of company performance reportage, in a milieu of heavy insider stock holdings, the Mexican market is suspicious of managers and discounts stock values accordingly. Moreover, the market suspicions that have been inspired by Mexico's longtime corporate issuers naturally contaminate efforts of new firm entrants to fund themselves efficiently in the equity market. Accordingly, Mexico's stock market is less liquid than that of developed countries, and offers even less competition with the banking system than developed country stock markets do.[38]

Other forms of private-firm securities likewise play a smaller role in Mexico than in developed countries. As an example, consider commercial paper, an open market substitute for bank loans. The ratio of commercial paper holdings to bank lending is less than one-fourth as high as in the United States. And the banks themselves behave as if they are money market mutual funds. They place their own funds and those of the trusts they operate into commercial paper that they themselves market. [Garber and Weisbrod 1991]

More generally, up to now the overwhelming share of securities traded in the Mexican Bolsa de Valores have been of government issue. Because of the thinness of

[38]For further development of these issues, see Welch (1993b).

nonbank financial markets for nongovernmental borrowers, firms that could go abroad for funding did. It has been common for Mexico's great conglomerates to issue fixed-income securities in U.S. or European markets and it is not unusual for the government to do the same.

With time, however, government issues have comprised a decreasing share of the Mexican securities market and will probably continue to. Recent innovations, and those expected (such as the development of an options market), as well as broadening and deepening of existing markets, suggest a diminishing role for traditional lending services in Mexican financial markets - much as has been the case in the developed world. The world technological revolution in information processing that has increased the abilities of nonbank financial institutions to tailor securitized debt to the special needs of particular borrowers will likely continue to affect Mexican domestic financial markets [Walter 1992]. That is, Mexican firms may be increasingly able to offer services at a level of particularity that up to now has been restricted to bank lending. However, the same is true for potential Canadian and U.S. brokerage firms that can enter Mexican markets under the NAFTA. Moreover, these firms already have experience and technology of the types that Mexican institutions are only just gaining. It is accordingly this area of the Mexican financial market that may see the greatest foreign penetration. The rise of such activity by both Mexican and foreign institutions may mean that Garber and Weibrod's (1991) expected fall in the liquidity of the Mexican financial system, as a result of reductions in the number of Mexican treasury instruments outstanding, may not be realized. Private issues may offset those of the government.

An additional factor reinforcing the view that the majority of entry under the NAFTA will occur in securities brokerage is the agreement's relatively favorable treatment of this industry. As mentioned earlier, during the agreement's transition period, the maximum level of start-up capital for a new entrant into Mexico's banking system is 1.5% of the sum of system-wide paid-up capital, reserves, and current gross profits. And that limit increases to 4% by the year 2000.[39] The comparable restricted maximum for securities firms is more liberal, starting at 4% during the transition period before being removed entirely in the year 2000. Similarly, restrictions on the aggregate capital under the control of foreign investors in Mexico also treat securities brokerage relatively favorably. For bank capital, the aggregate restriction increases from 8% in 1994 to 15% in 1999, as mentioned earlier. In contrast, the comparable restriction for securities firms is 10% in the first year of the six-year transition period and 20% in the last. The relatively quick opening of brokerage services should facilitate early foreign penetration into that area.

Another role that has been contemplated for the Mexican financial system, with respect to foreign financial firms, is that of an offshore banking center. In July of 1990, for example, the Law of Credit Institutions changed to allow Mexican banks to create dollar-denominated deposits for nonresident depositors. Currently, however, several factors remain to discourage foreign institutions from establishing offshore operations in Mexico. First, the Mexican income tax for such institutions is 35 percent, a relatively high level compared with those obtaining in traditional offshore banking centers. In

[39]Moreover, this four-percent limit applies only to acquisitions and not to new banks.

addition, Mexican labor laws require any company in Mexico to share 10 percent of its profits with its workers. Inasmuch as financial institutions in general, and offshore banks in particular, realize relatively high profits per employee, these laws may also dissuade potential offshore bankers from establishing operations in Mexico [Mansell Carstens: 1992].

Conclusion

Despite much discussion of Canadian and U.S. banks entering the Mexican market, and despite the likelihood that some will, there is reason to suspect that the Mexican banking market may constitute one of the NAFTA's least inviting financial market apertures. The Mexicans have taken special care to protect their banks from foreign competition during the long phase-in period. Because of the capital ceilings, the areas open to U.S. banks are the smaller regional banks which mainly deal in retail banking and consumer financing. Although these areas are extremely profitable, most U.S. banks are not familiar enough with the Mexican market to compete effectively in the retail area. On the other hand, the more liberal treatment given to brokerage, bonding, leasing, factoring, insurance, and warehousing suggests that equity and bond markets will almost surely prove more attractive.

The complexion of the Mexican banking system in the next ten years indicates that the majority of entry will be in these non-bank areas, especially brokerage. Mexico already imports a large amount of brokerage services from the NYSE through the floatation of American Depository Receipts (ADRs) and from world bond markets through the large flotations from PEMEX, some large banks, and also some smaller firms. Hence, brokerage operations with strong links to U.S. investment banks will enjoy a strong position to not only arbitrage between the Mexican and New York markets but also tailor asset and liability products to the needs of firms which conduct business internationally.

Certainly, increasing competition in the nonbank sectors from foreign participation in combination with a number of new Mexican banks will put pressure on banks to improve their efficiency. As we have described, this process is already well under way. The Mexican financial system, although not competitive at present, shows signs that very soon the institutions and markets will offer better financial services at significantly lower cost.

But a number of questions remain unresolved. One concerns the role that banks will play relative to securities markets. The remaining statutory barriers to entry in Mexican banking and the problems with the Mexican market for corporate control indicate that banks will maintain a privileged position in the Mexican financial system for many years to come. But the decline of banking in the United States and Europe cannot be explained solely by overregulation, implying that perhaps the importance of Mexican banks may also erode over time. Technological advance in information processing and financial instruments has given securities markets an edge as witnessed by the major increase in securitization [Kaufman 1991]. If U.S. and Mexican specialist institutions can offer nonbank services more efficiently than banks, then one would expect the importance of banks to wane. The favorable treatment of securities brokerage by the

NAFTA would be expected to promote such a competitive process. These considerations make projections of the future structure of the Mexican banking system extremely difficult. But no matter what the ultimate outcome, the evolution of the Mexican banking system should prove a fertile experiment in financial market liberalization.

Implications of the NAFTA for U.S. Border Banks

As argued in the body of this article, the greatest opportunities presented to U.S. firms by the financial provisions of NAFTA are, at least initially, outside of traditional retail banking. One of the factors leading to this conclusion is the information advantage Mexican financial institutions have over most U.S. banks in assessing risks and opportunities among Mexico's bank customers. However, because of their proximity to Mexico and familiarity with its markets, U.S. banks along the Mexican border may face a relatively low information hurdle in competing with Mexican financial institutions. It is regulatory barriers, not information costs, that will limit the capacity of most border banks to enter Mexico under the NAFTA.

The specific knowledge and skills possessed by border banks favor their penetration into Mexican retail markets. U.S. banks located near the Mexican border generally are familiar with retail banking opportunities in Mexico. Their proximity to Mexico enables them to provide deposit services to Mexican citizens. And they also extend credit to Mexican businesses. Moreover, the local banking markets on the U.S. side of the border are, in many respects, similar to the banking environment in Mexico. The familiarity of border banks with Mexican markets should help them assess the credit quality of small and mid-size businesses in Mexico. As a result, any information advantage that established business relationships impart to Mexican banks should be reduced. In this regard, the border banks are particularly well suited for entry into Mexico's growing retail banking market.

Although the proximity of border banks to Mexico enhances their position as potential entrants, additional factors suggest that the entry of border banks into Mexico under the NAFTA will be limited. Mexican financial companies provide commercial banking, brokerage, and insurance services jointly through an extensive network of branch offices. The established retail market position of Mexican banks increases the difficulty entering U.S. banks will face in attracting a broad base of retail customers. And this barrier to entry may be particularly formidable for border banks, most of which are relatively small.

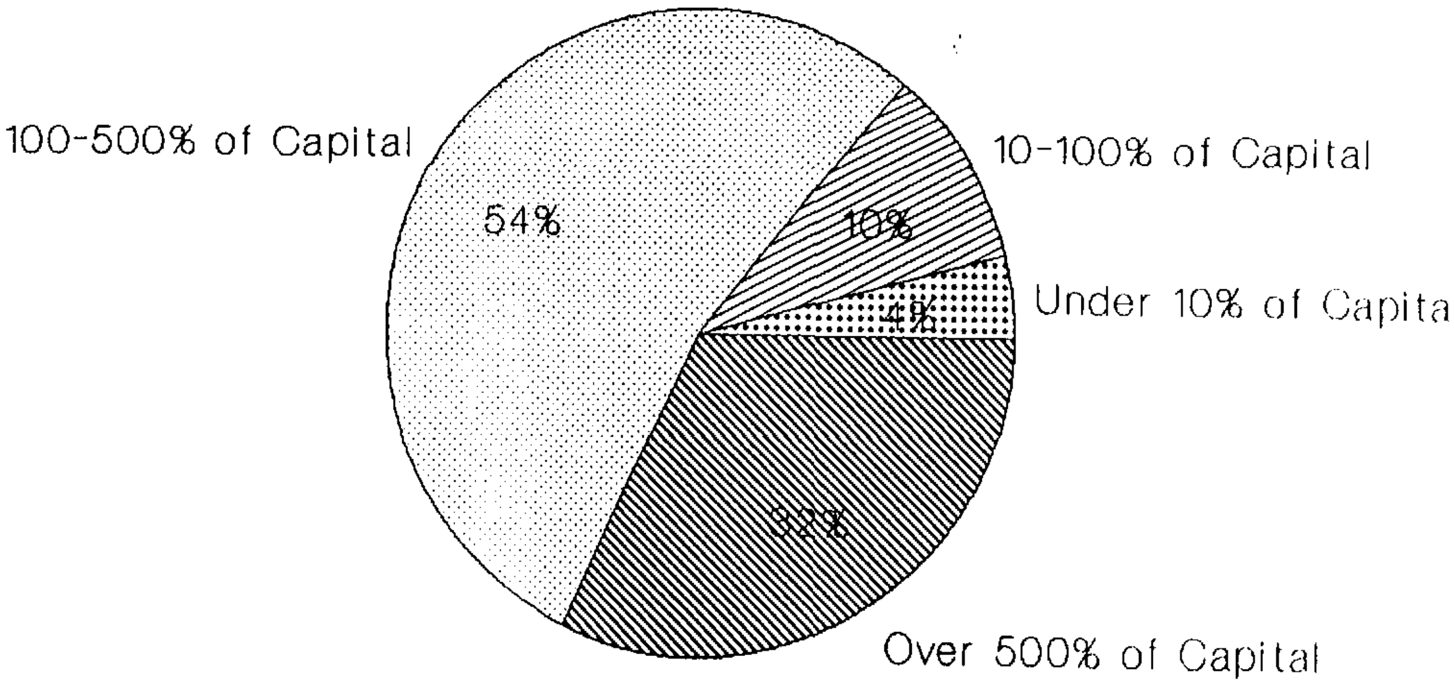
But perhaps the greatest obstacle constraining the ability of border banks to take advantage of the NAFTA's entry provisions is the minimum capital requirement established by the Mexican authorities for new banks. The required minimum level of capital that would apply to new banks established by U.S. financial services providers under the NAFTA is, as of this writing, approximately $20 million. Moreover, each of the new Mexican banks recently approved by the Mexican authorities have been established with close to $30 million in capital, suggesting that investments well above the $20 million minimum are encouraged. While this level of capital would not be expected to pose a serious barrier to entry by large U.S. banking organizations, it could represent a problem for smaller institutions along the border that otherwise would be interested in establishing a bank in Mexico.

An examination of the capital levels of banking organizations located along the Mexican border in Texas illustrates the potential for the minimum capital requirement to constrain the entry of smaller U.S. banks into Mexico. As of year-end 1992, 48 banking organizations operated at least one bank in Texas counties along the Mexican border. As shown in the accompanying chart, the minimum capital requirement of $20 million was over five times greater than existing bank capital at 32 percent of these banking firms.[1] And the minimum capital requirement exceeded 100 percent of bank capital at 86 percent of the firms. To meet the minimum capital requirement for establishing a bank in Mexico, while maintaining an adequate level of capitalization among their domestic banks, these banking organizations would need to raise large amounts of external capital. And it generally is difficult for small banks to raise equity externally. Similar adjustments would be required of all but the largest U.S. banking organizations that currently operate a bank along the Mexican border.

The regulatory constraint posed by Mexico's minimum capital requirement, coupled with the extensive market resources of Mexican banks, suggests that most U.S. border banks will be unlikely to exploit their familiarity with Mexican markets by establishing banks in Mexico. Rather, the factors considered here indicate that the NAFTA represents the greatest opportunity for relatively large U.S. banking organizations. The primary benefit of the NAFTA for most of the border banks will be an indirect one resulting from an increase in trade and economic activity in the border region.

[1]Total bank capital is approximated by the sum of the year-end 1992 capital levels of an organization's individual banks.

Minimum Required Capital Relative to Capital of Texas Border Banks



Requirement as a Percentage of Existing Bank Capital

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Chart 1

Mexico: Total Number of Banks 1975-1990

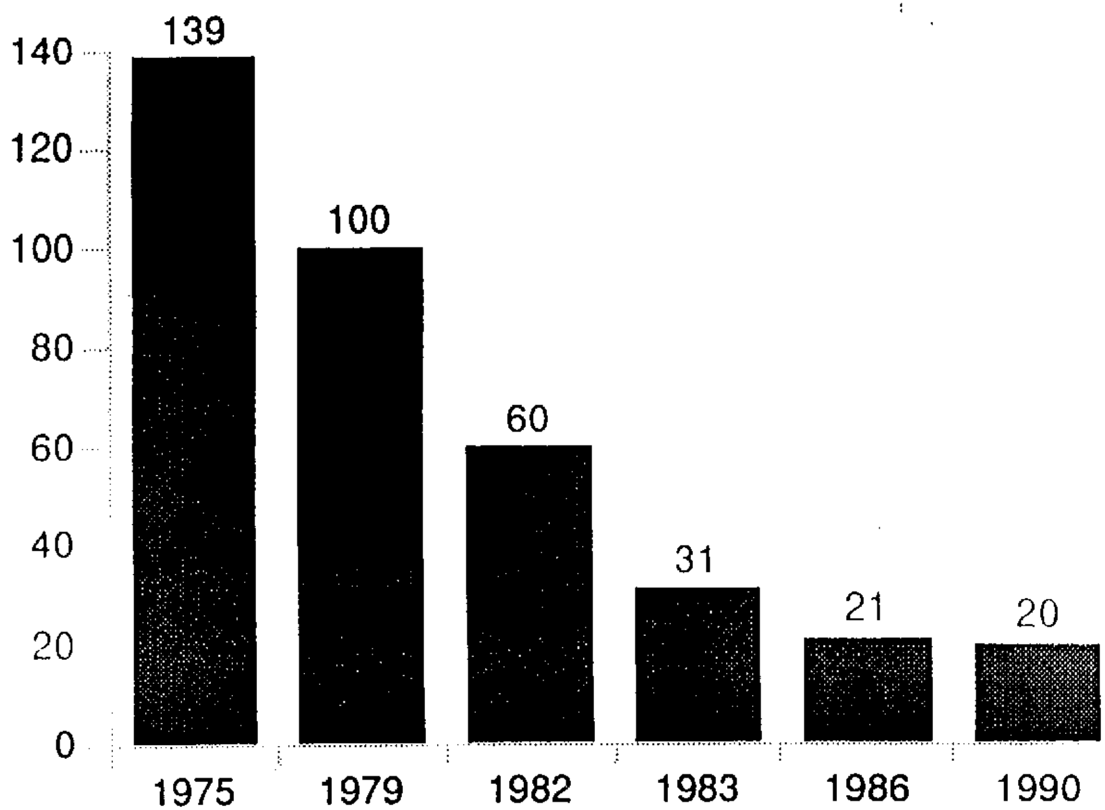
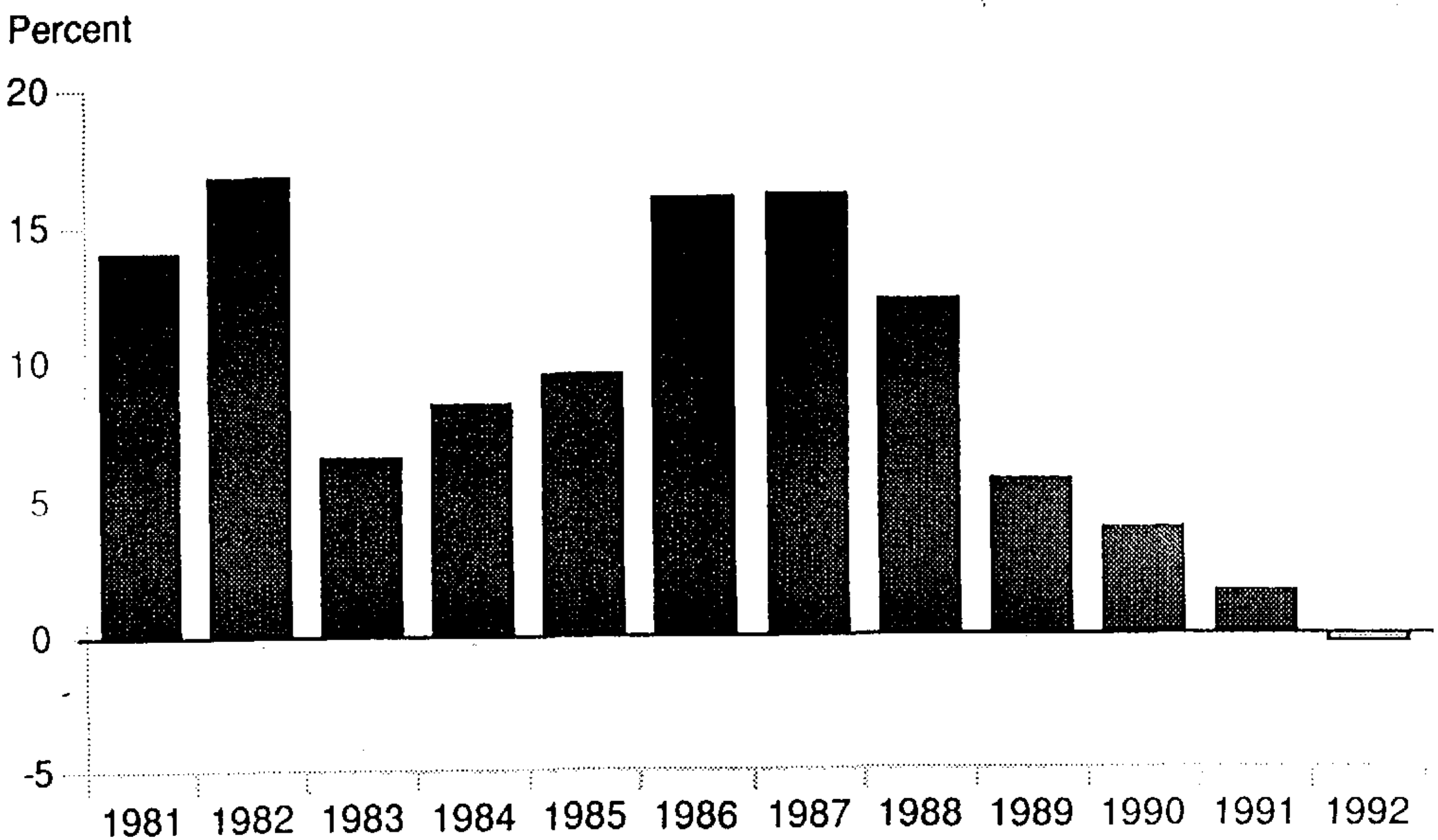


Chart 2

Mexico: Public Sector Borrowing Requirements as Percentage of GDP 1981-92



Mexican Financial Institutions

- Banks:
  - Leasing
  - Factoring
  - Foreign Exchange
  - Mutual Fund Management and Origination
  - Warehousing

Mexican Financial Institutions

- Brokerage Firms:
  - Leasing
  - Factoring
  - Foreign Exchange
  - Mutual Fund Management and Origination
  - Warehousing

Mexican Financial Institutions

- Holding Companies (At Least Three Institutions)
  - Bank
    - Securities Firm
      - Leasing Company
      - Factoring Company
      - Bonding Company
      - Mutual Funds Management Company
      - Currency Exchange Broker
      - Warehousing Company

Chart 6

Growth in Real Financial Assets (M4) 1980-1992

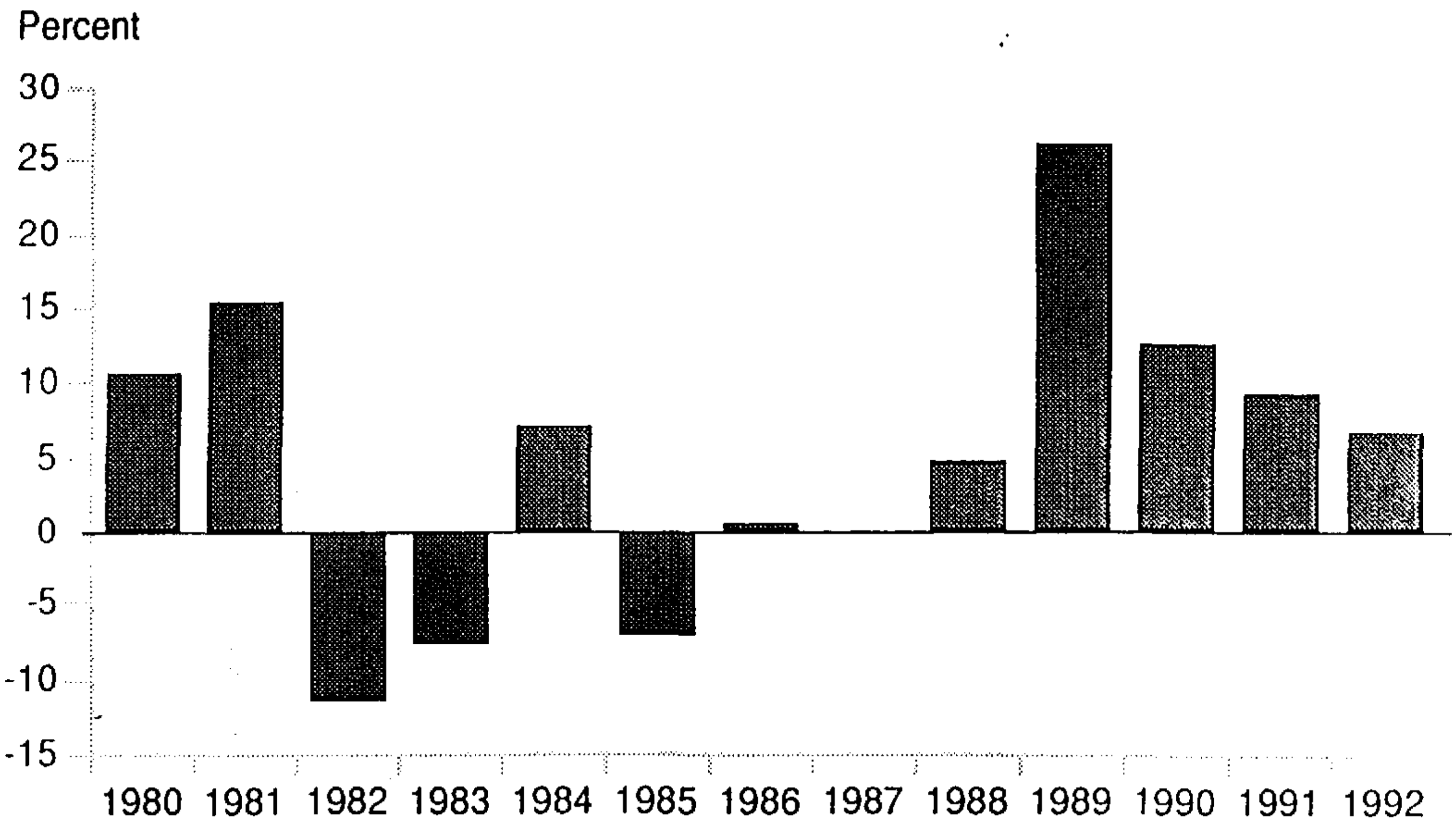


Chart 7

Bank Return on Assets 1991

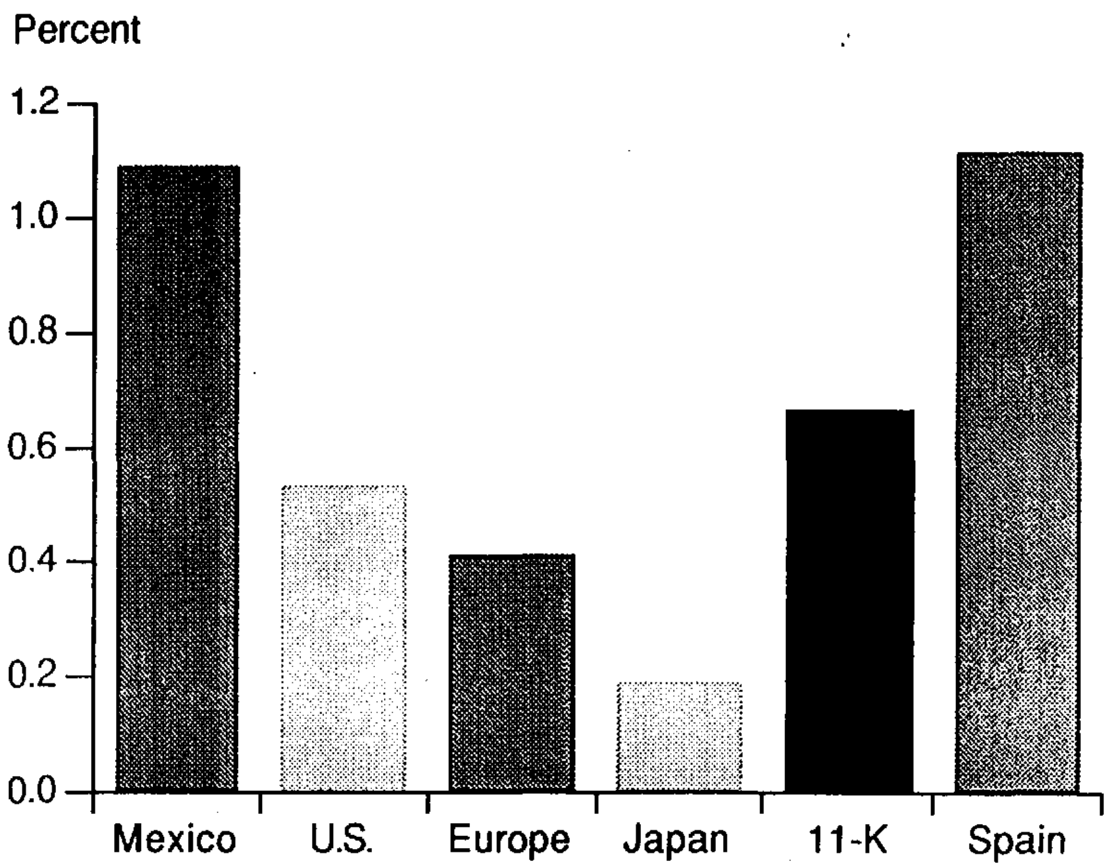


Chart 8

Mexico: Commercial Bank Privatizations

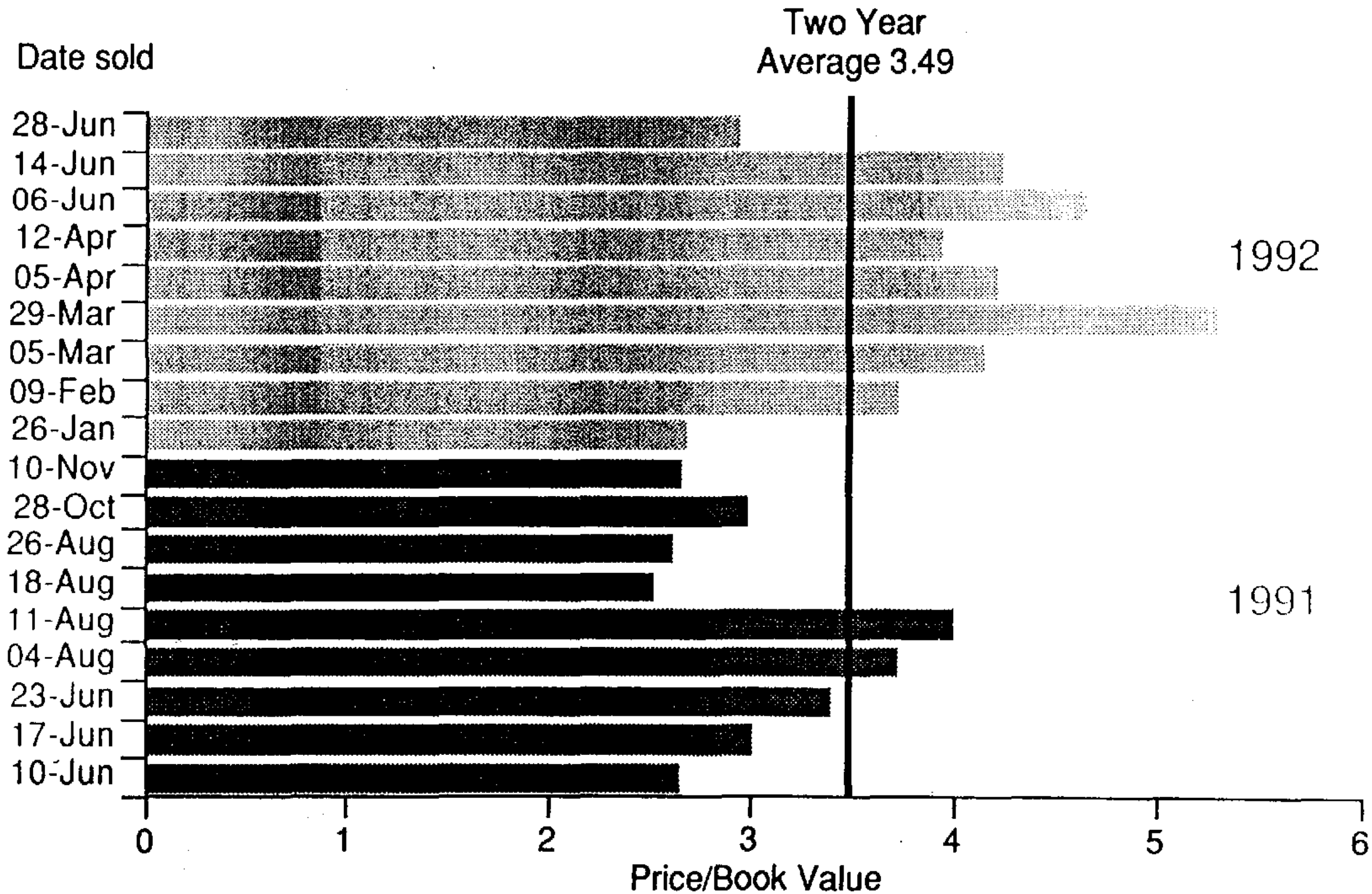


Chart 9

Mexico: Net Interest Margin 1990-1992

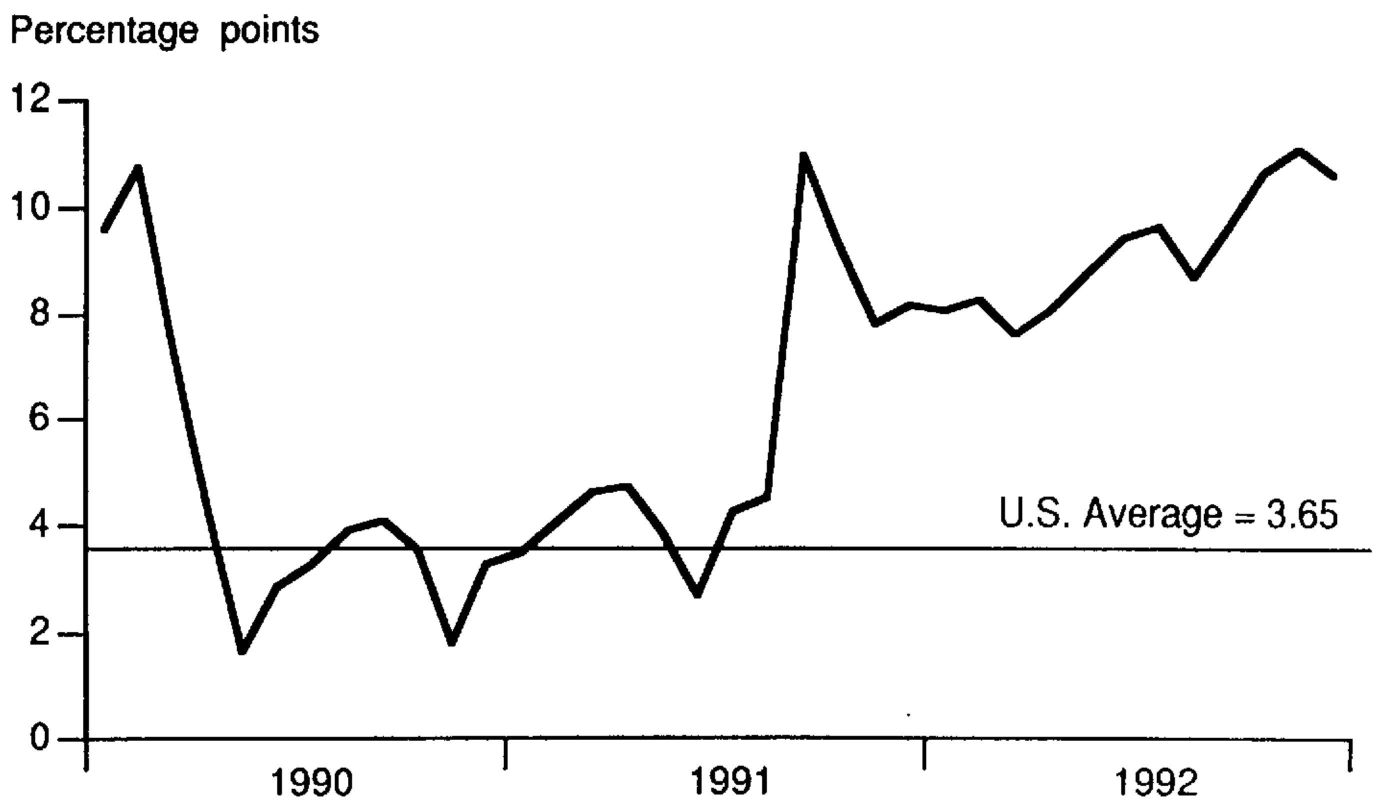


Chart 10

Asset Concentration in Top 5 Banks

(Share of Total Assets)

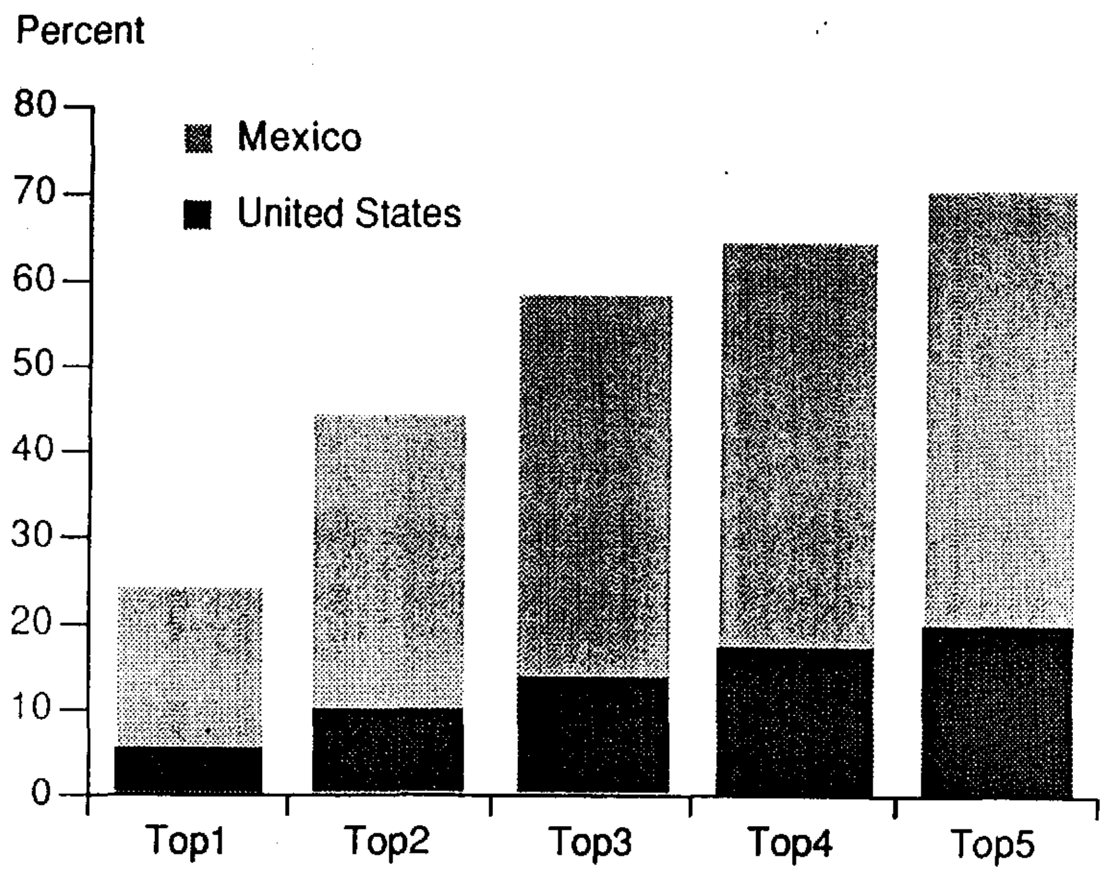
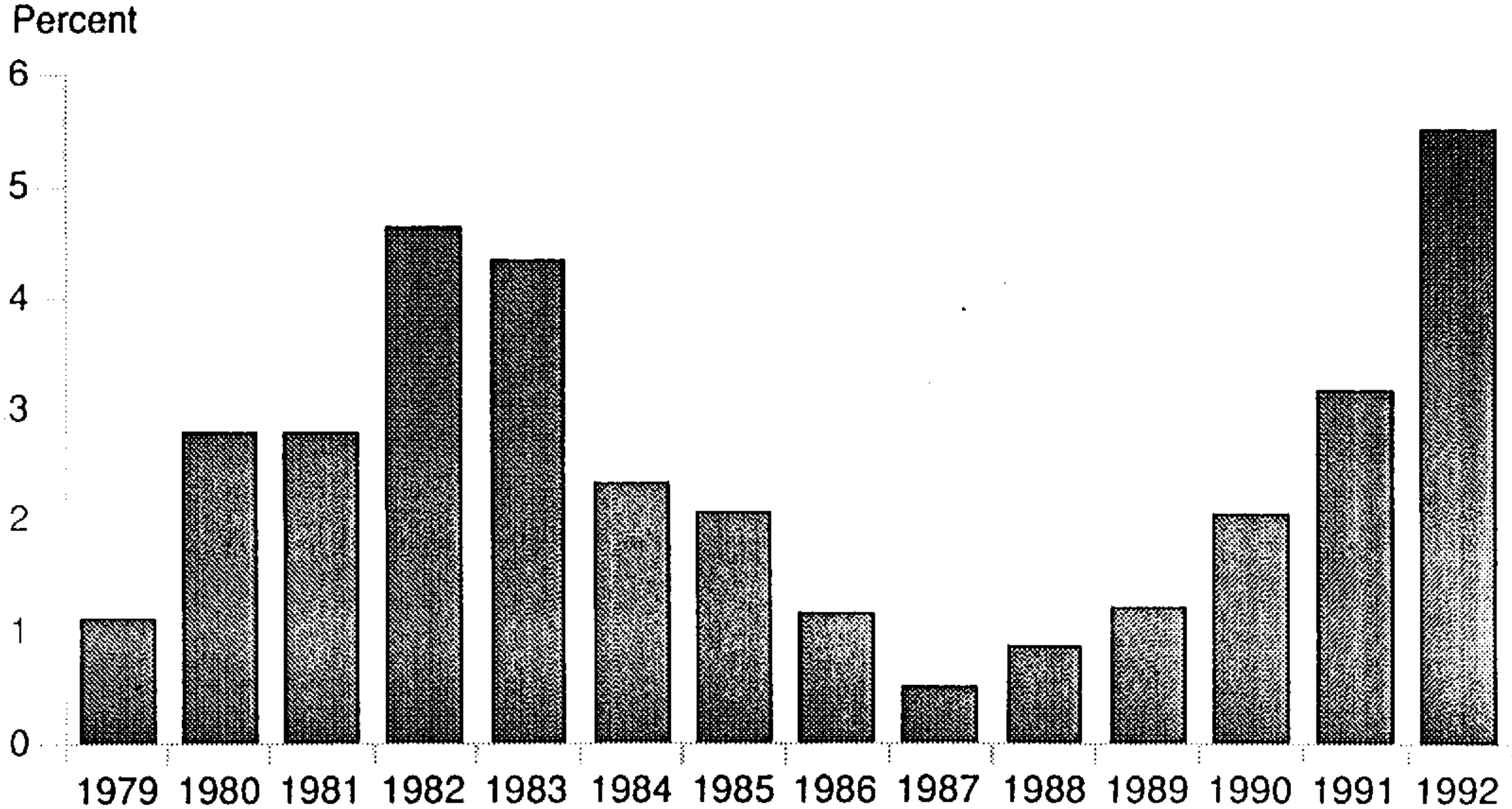


Chart 11

Mexico: Ratio of Past-Due Loans to Total Loans 1979-1992



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