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PRIVATISATION OF BANKS IN MEXICO AND THE TEQUILA CRISIS

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Abstract

The Mexican programme of bank privatisation in the early 1990s was dictated not just by a desire for distancing government from the running of the economy but also by the need to raise money by selling public assets in favour of a particular fiscal stance. The conflict of objectives entailed in this liberalisation process contributed to the subsequent financial crisis entailing the re-nationalisation of banks after a short period of three years at a cost to the exchequer which was five times greater than the money raised at privatisation.

Keywords: Mexico; Privatisation; Financial Liberalisation; Banking

JEL Classification: G21, G28

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I. Introduction

Martinez (2006) explains that the origins of the collapse of a large number of private sector banks in Ecuador in the late 1990s could be found in the euphoria generated in the markets by the particular nature of the market-friendly stabilisation programme instituted earlier in the decade. Optimism in the market is translated into financial bubble (Minsky, 1976). There is another point highlighted by Martinez (op cit) that privatisation policies as put in practice often contain implicit or explicit guarantee of protection from competition, entailing moral hazard and future instability, to increase the price at which public assets could be sold to the private sector. This is especially so if privatisation is part of a liberalisation policy which also aims at reducing fiscal deficit. Privatisation and fiscal tightening were combined in the Mexican liberalisation programme of the banking sector. This short term focus on price manipulation at the time of bank privatisation in Mexico may have contributed to a symbiotic tolerance of opaque accounting rules and deficient regulatory frameworks. It then became unsafe later to rely on financial ratios to gauge the health of the privatised banks. Collapse occurred suddenly, within three years of privatisation, at a great cost to the exchequer.

Bank privatisation in 1991-92 was carried out in Mexcio in the background of a economic policy that sought fiscal balance. There would be little incentive to improve accounting standards and reporting rules if the reports could be fudged to increase valuation to help the exchequer pace the reduction in expenditure. Regulators did not intervene when some of the banks were purchased by groups which borrowed money from the very banks that they were going to purchase. The government, by offering implicit guarantee against competition, signalled the prospect of monopoly profits. The euphoric credit expansion in the wake of financial liberalisation due to the creation of moral hazard in the process of privatisation is commensurate with Minsky's hypothesis about how financial bubbles are created only to implode some time later (Arestis and Glickman, 2002, Gruben and McComb 1997, Martinez, 2006, Minsky 1976, Weller, 2001). The process of privatisation matters.

The twin objectives of privatising banks and raising large sums of money for the government were satisfied in the short term. Inherent in this process was the potential for generating financial instability in the longer run. Sudden collapse of the banks entailing re-nationalisation three years later was not foreseen in the published accounts. The reporting rules and supervisory framework characterising that period do not inspire confidence. Calculating financial ratios after privatisation, for example return on assets and Z-scores, we cannot find any indication of the perilous state of the banks even at immediate period before the sudden collapse of these privatised banks.[1] Privatisation was blighted at the outset by the process of privatisation.

This paper is organized as follows. Section 2 below outlines the salient features of Mexican banking in the 1980s prior to the start of privatisation at the end of that decade. Section 3 describes various financial ratios. Section 4 outlines the salient features of the financial system during period of economic liberalisation until the

[1] These calculated figures, albeit based on reported accounts, do nonetheless tell the story that there was a large gap in the performance between the top and bottom 10 per cent of the privatised banks. The lowest 10 per cent did substantially worse than the nationalised banks, admittedly in a different time period. Calculations of the Z-scores will be explained presently.

crisis of 1994. Section 5 concludes by summarizing the argument that the privatisation programme was inherently contradictory.

II. Background

2.0 Historical debate

By the middle of the twentieth century, governments in the largest economies of Latin America had created segmented financial structures to stimulate economic development. In Mexico, the Banking Act of 1941 tried to establish a competitive private financial sector to operate alongside a development bank sector. The two groups were differentiated by the maturity of their lending with the former group mostly supplying short-term loans for commercial purposes and the latter providing longer-term finance for industrial purposes. In the 1950s a universal banking model began to emerge following the consolidation of banking, insurance, mortgage and other financial services providers into new financial groups. The groups were headed by the banks rather than a holding company. They were the forerunners to the commercial banks that were legally recognised and completed later in the decade after a spate of mergers from 1976 to 1980 (Turrent 2007).

The view that "… private profitability [of investment] understates its social desirability" (Scitovsky 1954:149) gained currency following the debt crisis of 1982, resulting in the comprehensive nationalisation of the banking sector. This line of thought, that economic growth could be speeded up if certain investment decisions were vested in the state was not new. It characterised banking in Korea in the 1960s when the social rate of discount was set at below the market rate of interest (Amsden and Euh, 1993:380). Likewise, in Germany in the 19th century, the state had performed "an entrepreneurial role with regard to industrial development" (Bhatt, 1993:57). The state involvement in Germany went beyond providing cheap credit.[2]

While banks were being nationalised in Mexico, thinking in development economics was becoming "more agnostic" in the 1980s about the ability of the state to correct market failure through state ownership (Bardhan, 1990:4). The push for the privatisation of hitherto state controlled activities gained momentum. Mexico was not immune to these changes in thought and embarked on the path of economic liberalisation in the late 1980s, culminating in the privatisation of the banks in 1991-1992.

Evidence began to emerge that the process of privatisation itself can introduce distortions (Fishlow, 1990:70). Arguing against the current tide towards privatisation, Stein (2010) has highlighted the fact that these policies have resulted in the small and medium enterprises, employing a large segment of the labour force, losing out in the competition for bank lending in Zambia. The policy challenge is not to devise mechanisms for the ideological pursuit of the question of ownership in the banking sector. The challenge is to articulate a view of socially desirable

[2] In Germany " … the states built the canals and the roads which in England was created by private enterprise ..." (Schumpeter, 1939:283). One reason was that the "social stratum that supplied the personnel of public administration was -- excepting the urban republics (Reichstaedte) such as Hamburg or Bremen or Frankfurt -- much superior in intelligence, horizon, training and energy to the personnel of such private industry as there was ..." (Schumpeter, 1939:283).

investment policy.[3] "Appropriate use of monetary operations to ensure plentiful and cheap credit, coupled with subsidies and differentiated tax rates, could make socially desirable opportunities privately desirable as well" (Marglin, 1963:275).

2.1 Nationalisation

Following the Mexican default on its external obligations in August 1982, a programme for the nationalisation of banks operating under private ownership was announced by President Jose Lopez Portillo in the following month. Government claimed that "private banks had generated excessive profits from bank operations, created monopolistic markets through concentration, and facilitated massive capital flight" (Unal and Navarro, 1999:63).[4] Despite the rhetoric against bank management, the government only dismissed the boards of directors; mostly the rest of the incumbent management remained (Gruben et al, 1994).

The government acquired 58 out of 60 banks (as at September 1982) by compensating the former owners with 10-year Indemnification Bonds with interest tied to the rate on certificates of deposit. Of the two banks that were left untouched, one (Citibank) was foreign owned and the other (Banco Obrero) was owned by trade unions. Neither was a significant player.

There were further modifications in the nationalisation rules upon the election of a new president who took office in December 1982 with responsibility to enact legislation to facilitate public takeover of private banks (Montes-Negret and Landa, 2001). A new government led by Miguel de la Madrid softened the harsh rhetoric of President Portillo to enlist the support of the banking and business communities to avoid further disruption to the economy.

Despite modifications in the nationalisation programme to make it palatable to business, the Mexican banking sector in the 1980s was characterised by high reserve requirements. The non-bank financial sector particularly, and the securities sector and the stock market in general, grew rapidly: the assets of non-bank financial institutions-to-total financial system assets increased from 9.1% to 32.1% between 1982 and 1988 (Gruben et al, 1994).

2.2 Privatisation

Credit rationing was eventually abolished in 1988 followed by a rapid programme of liberalisation. Liberalisation measures for the economy, started towards the end of the 1980s, gained momentum with the election of President Carlos Salinas de Gortari in December 1989. The stage was set for the privatisation of state-owned enterprises including the 18 state-owned banks.[5] Apart from distancing the government from

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[3] It is argued by some that social factors such as employment conditions and human rights are not properly accounted for in the conventional accounting framework used to evaluate performance of investment in the private sector, and alternative rules for accounting are recommended (Uddin and Hopper 2003).

[4] There is also a suggestion that this rhetoric might have been a smokescreen to divert attention from the government's own failure to control the fiscal deficit (Haber, 2005).

[5] In 1982, 1,155 public enterprises existed. Between 1982 and March 1989, roughly 30% of 790 public enterprises that the government approved for divestiture were separated through privatisation (Hoshino, 1996).

ownership of enterprises, liberalisation measures also aimed at reducing the fiscal deficit. Privatisation receipts were viewed as instruments to achieve the needed reduction in government expenditure to a more politically manageable pace. The focus was on maximising the price received for the privatised banks (Haber, 2005).[6]

Privatisation is not a unique concept, and it is a "term that begs definition" (Thomas, 1993:169). Different sets of rights and obligations are transferred between agents in different privatisation processes. To pave the way for privatisation, the Salinas government passed two laws in 1990. The Credit Institutions Law allowed the private ownership of banks and established the terms under which government would regulate and supervise the banking sector.[7] The Financial Groups Law facilitated the emergence of universal banking as the main organizational structure of the financial sector.

Bank privatisation started in June 1991, and ended thirteen months later in July 1992. The sale of 18 banks raised US$13.5 billion (Barnes, 1992). It took place over six rounds of bidding, a process which was designed to increase the price at auction and to encourage new entry into the bidding process. Estimates suggest that each additional round of bidding pushed up the bid-to-book ratio by 0.30 (Haber, 2005). The steps towards privatisation are explained in detail elsewhere (see Barnes, 1992; Unal and Navarro, 1999).

In the main, there were four stages. A register of parties interested in acquiring the government's stakes in the 18 banks was created and categorised into sections, eg separating financial companies and individuals. Registration did not confer an automatic right to enter the auctions and an approval process for bidders began. Bidders had to demonstrate management capacity and probity submitting detailed business plans and disclosing information about shareholdings. In all, 144 registrations were made from 35 interested parties to acquire the 18 banks. Foreign investors were excluded. Some of the shares were sold in small parcels to individuals to achieve a diversified ownership of bank shares, and over 130,000 private investors participated.[8] Bidders made simultaneous sealed bids. Winning bids needed to exceed both the price offered by competing bids and the bank valuation obtained by the Divestiture Committee set up by government. In the final stage, a bank would be sold when the government transferred its shares to the winning group once the group had paid the total value offered. The process appeared to follow good practice involving the scrutiny of accounts in due diligence exercises, but cracks began to emerge in the rules as the privatisation process began and government was keen to sell.

The original payment plan, requiring a 30 per cent deposit with the remainder due in thirty days after successful bid, was relaxed at the behest of the prospective bank owners who wanted more time to finance their

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[6] A comprehensive description of the government's objectives for the bank privatisation programme is in Barnes (1992), Gruben et al (1994), and Unal and Navarro (1999).

[7] Under Article II of the Credit Institutions Law, bank capital stock may comprise three types of shares. Series A shares may only be owned by Mexicans (individuals, government, development banks) and must equal at least 51% of bank capital. Series B shares can be owned by Mexican financial firms and corporations in addition to the former definition of Mexicans; the capital stock represented by Series B shares can vary from 19% to 49%. Series C shares, if issued, may amount to 30% of bank capital; whilst ownership is not limited by nationality foreign governments and international organisations were excluded (Barnes, 1992; Unal and Navarro, 1999).

[8].Even if shareholding is highly diversified, management control can be exercised by a dominant group with the support of groups holding small parcels.

acquisitions with outside money. A revised plan saw a 20 per cent down-payment, a second payment of 20 per cent up to thirty days after the auction, and the remaining amount to be paid four months later. A successful bidder would use this grace period to source funds from various investors, and sometimes the acquired bank itself. In one case, 75 per cent of the cost of acquiring a privatised bank came from a loan from that bank, for which the collateral was the shares being acquired (Haber, 2005).[9]

Since the rationale for privatisation and the desire for raising money for the exchequer were not kept separate, [10] the offer was made attractive by signalling to prospective buyers that they could "expect only very limited competition between banks" (Gruben and McComb, 1997:23). "At the time the last of the banks was privatised, the three largest accounted for about three-fifths of all Mexican bank assets" (*op cit*).

The government took advantage of the opaque rules of accounting masking a considerable amount of non-performing loans that would have lowered the bank valuations. The new owners could also hide behind accounting loopholes thus carrying over bad practices from the nationalised regime.[11] Large capital investment was needed to modernise the sector (Unal and Navarro, 1999), but the new owners did not have the incentive to bother as they had bought into an oligopoly.[12] Leveraged purchase against shares of banks to be privatised saddled some of the banks with an unstable feedback loop: their debt burden would worsen if their share prices declined. To pay for the investment in this type of purchase, the investor relies on returns that are dependent on the behaviour of others to meet implicit or explicit contractual commitments. This crosses the border between speculation and Ponzi finance (Minsky 1991:161).

Notwithstanding the ground reality, there was a sense of euphoria that economic liberalisation would ensure increasing prosperity. There is a positive feedback loop that characterises the way that markets react to information. When times are thought to be good, this positive feedback translates confidence into exuberance in lending, creating bubbles. When times turn bad, pessimism is compounded by markets, leading to a spiral of decline which causes the bubbles to implode (Minsky 1976).

[9] An average weighted bid-to-book ratio of 3.04, larger than the typical ratio of 2.5 for European bank privatisations, was reported to have been paid (Haber, 2005). Using another metric, the prices paid for the banks at auction carried a premium of 45 per cent over the value of the equity as priced by the national stock market (Unal and Navarro, 1999). Since some of the money was borrowed from the banks that were being acquired, the comparison with Europe of the bid-to-book ratio has to be qualified.

[10] This is not a peculiarly Mexican problem and similar complaints are heard about the privatisation programme initiated in the early phase of the Thatcher administration in the 1980s in the UK, although the political compulsions were different in Mexico. "The incoming Thatcher government in 1979 was frustrated in its desire to cut current public expenditure by the need to pay out more social security benefits because of rising unemployment. Indeed, rather than falling, public expenditure rose (mostly because of rising unemployment), from 40.5 per cent in 1978/9 to 43.5 per cent in 1982/3" (Foster, 1993:113). One of the ways of reducing the reported public sector borrowing requirement would be quickly to transform nationalised industries into equity traded Companies Act companies, thereby taking off their borrowing from the reported figures for public sector borrowing.

[11] A new set of accounting rules was introduced in 1996 and in 1997 accounting items were redefined in the light of the previous changes in rules. The new rules largely affected financial reporting, disclosure of information, and capitalisation rules. The implementation of significant changes in accounting rules renders difficult comparisons between pre and post-1995 bank level data. See Del Angel et al (2008) for more detailed discussion of the changes in accounting standards in Mexico following the Tequila crisis.

[12] In 1991, the four-firm assets concentration ratio was around 70%; foreign banks' held only 1% of assets. Martinez (2006) suggests that a similar problem of moral hazard through lack of competition was introduced at privatisation in Ecuador.

Who were Mexico's new bankers? Hoshino (1996) identifies two groups of entrepreneurs that were important. In the first group were the pre-nationalisation owners of the banks who had used their compensation packages to acquire the divested non-bank financial assets including securities companies, when that was allowed in 1985. This group of entrepreneurs had benefited from the boom in the securities market during the latter half of the 1980s. The second group comprised newly emerging entrepreneurs as the economy was being liberalised in the late 1980s. They used the bank privatisation process to rise to prominence, sometimes by mounting joint bids with the above first group for bank shares. In addition, many business houses used privatisation as a means of restructuring their operations and diversifying their interests into new business areas of finance and banking. In our sample of banks, six of the banks privatised in 1991-92 were acquired by bidder groups containing experienced bankers. A further nine banks were acquired by financial groups with no experienced bankers belonging to the group. Lastly, three banks were acquired by bidder groups that lacked any financial sector experience.

III. Financial ratios

The success or failure of privatisation programmes is generally examined by reference to financial ratios that indicate profitability and solvency. If the numbers are reliable, the state of health of individual banks could be gauged from these ratios. We examine some of the financial ratios that can be calculated from publicly available accounts. Even by the narrow criteria of success measured by these ratios, the privatisation programme did not register an unambiguous improvement. What is worse, imminent collapse of banks was not predicted by the ratios that are used to predict solvency.

Using data on bank profitability, size and leverage, we construct three ratios. Return on assets (RoA) is the ratio of profit before tax-to-total assets and is a widely accepted measure of bank performance. Return on equity (RoE) is the ratio of profit before tax-to-book equity; it measures the return to the owners of bank capital. Z scores are used in the literature as predictors of solvency (Altman, 1968). In banking, insolvency is expected to occur when bank capital is exhausted. Formal proof of the Z score as an indicator of bank insolvency is given in Hannan and Hanweck (1988) and De Nicoló (2000). In line with common practice, Z is defined as the ratio of profitability (RoA) plus leverage (equity-to-assets) adjusted for risk, which is measured as the standard deviation of bank profit:

$$Z = \{RoA + Equity/Assets\} / \sigma_{RoA}$$

Where σ = rolling (three year) standard deviation on RoA.

The Z score is measured in units of standard deviations of RoA and it shows how far accounting earnings may decline until a bank has negative equity. In other words, it illustrates the extent of the capital cushion a bank has with which to absorb accounting losses. A lower Z score implies a higher probability of insolvency and vice-versa. The Z score is commonly used in the banking literature on competition and stability, for instance, to measure bank-level risk (Nash and Sinkey, 1997) and soundness at firm and sector levels (Schaeck and Cihák, 2013).

We deflate the bank financial data by the GDP deflator for Mexico (sourced from World Economic Outlook) and the data are expressed in real US dollars at 2000 prices. In addition to the three ratios described above, the tables also show bank capitalisation measured as the ratio of equity-to-assets, the average bank size in US dollars, and an indicator of bank asset quality that is the ratio of non-performing loans-to-gross loans. The data are weighted averages where the weight is the bank share of total assets in each year.

In Tables 2 - 3, we tabulate the RoE, RoA, and the Z-scores for various subsets of the banks. Table 1 considers all the banks. Table 2 restricts the sample to the eighteen banks that were eventually privatised in 1991-92 plus the sole foreign-owned bank that was not nationalised in 1982. There are missing data for some banks in some years. Table 3 reports the financial ratios for that subset of 5 banks for which data are available for all years.

[Tables 1-3 here]

All the above tables suggest that none of the three financial ratios up to the year 1993 indicate the imminent demise that followed. The loan loss reserve began to increase from 1989, presumably to improve liquidity and solvency. These reserves jumped up in 1991 as privatisation began, but the published data on loan loss reserves may not reflect the reality of the extent of bad loans on the books of banks. As noted earlier, when the banks collapsed in 1995, and had to be rescued by government, non-performing loans were found to be more than three times the amount recorded immediately prior to collapse. The declared loan loss reserves were either based on massaged data on the quality of loans or on a mis-understanding of the signals which are harbingers of potential non-performance of loan contracts. In either case, it can be argued that the banking system, whether in a privatised or nationalised regime, operated in an inadequate reporting and supervisory environment. The reported performance indicators are at variance with the reality of the financial health of the banks. Ineffective regulation and supervision may have allowed bankers to behave imprudently (Haber, 2005).

A cursory glance at the figures reported in the tables above indicate that changes in financial ratios may be detected between the pre-liberalisation (pre-1988) and post-liberalisation (post-1988) periods, when there was a greater attempt to build up loan loss reserves. However, the averages may conceal differences between banks. The interesting question is what happened during the post-liberalisation period between banks that were in private hands and those that were in public ownership.[13] Setting aside doubts about the quality of data, we estimate a dispersion index, the Gini coefficient, of the RoA scores amongst banks between 1988 and 1994. Banks are classified into two groups, A and B. Group A comprise observations on banks that are under public ownership, and Group B comprise

[13] Except for the foreign-owned Citibank which had never been nationalised, banks under private ownership are mostly after the year 1991.

observations on banks under private ownership. All observations are from 1988-1994, post-liberalisation period before the financial crisis entailing re-nationalisation of a number of privatised banks in 1995.[14]

At first sight it appears that the rate of return on assets is lower for the privatised banks than it is for their nationalised counterparts. However, the averages (see Table 4) conceal differences between banks within the same group. Although the average is lower for the privatised banks, the distance between the best 10 per cent and the worst 10 per cent of the observations is greater for the privatised banks. The lowest 10 per cent pull down the average RoA for the privatised banks below that of the public sector banks. Thus, a comparison of the mean values of the RoA for the two groups has to be supplemented by an examination of the intra-group differences, and that is done in Table 5.

[Tables 4 and 5 here]

The dispersion in the rate of return on assets within each group is almost the same as the dispersion within the groups taken together because there is considerable overlap in scores between the two groups.[15] There are some very high ratios in each group just as there are some very low rates of return for both sets of banks, those under public ownership and those under private ownership. For reasons explained earlier, not too much should be read into these findings because the underlying accounting numbers may be unreliable. The point is that, even if these numbers were reliable, the outcome of privatisation would appear ambiguous.

IV. Financial crisis in the liberalised environment

If economic liberalisation as practiced in Mexico contributed to the goal of macroeconomic stability by arresting the even greater rise in the fiscal deficit that might otherwise have occurred, success came at a high social cost. In any event, the fiscal deficit started to rise again (Figure 1). The story was not much different from elsewhere

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[14] To understand the idea of inter-group and intra-group dispersion, consider two sets of income data one each for males and females. Suppose that there is a gender difference in earnings, but there is also a dispersion of earnings within each gender. Further, it may be that some of the highest paid amongst the gender group for which average income is lower earn no less than some of those who belong to the gender whose average income is higher. The Gini index of income inequality can be decomposed in the inequality between the males and females, within the genders themselves, and an overlap component (Pyatt, 1976; Yao and Liu, 1996). Whilst the illustration concerns only two groups, male and female, the decomposition algebra can be extended to any number of groups, and the methodology of decomposing income inequality is applicable to the investigations of dispersion of other variables as well.

[15] We measure the dispersion of RoA, as a Gini coefficient. Banks under state ownership (1988-1991) and when they were privatised and before the collapse of 1995are separated into two groups. The first set of observations is mostly from 1988 to 1991 and the second set of observations is mostly from 1992-1994, although there are some observations from 1991. The dispersion in the financial ratio RoA is measured as a Gini coefficient. We then decompose contribution to the total coefficient from intra-group, inter-group and overlap terms. The total Gini coefficient, G, can be written as a sum of three components (Pyatt 1976).

i) inter-group contribution to the total index,
ii) intra-group variation to the total index, and
iii) contribution to the index of the overlap in scores between the groups. The overlap component gives us an idea of the reliability of the mean as a decision parameter, to conclude whether Group A or Group B is more inefficient. It is non-positive. It reduces the total value of G if it is negative, i.e. there is overlap.

Thus, $G = G_{between} + G_{within} + G_{overlap}$

A tractable method of implementing the decomposition method suggested by Pyatt (1976) can be found in Yao and Liu (1996).

in Latin America (Dornbusch, 1987). The social cost was high. For example, real wages had fallen dramatically during the early years of re-structuring the economy. Citing data on real wages, Cheng (1985) highlighted some remarkable distributional impacts of the contractionary policies in the early 1980s. The real wages had fallen by 37 per cent by the end of the decade. Between 1984 and 1992, the share of total income of only the top quintile group increased. It went up from 51.7 per cent to 59.2 per cent for the richest 20 per cent of the population. The poorest 20 per cent suffered a decline in their share from 4.7 per cent to 3.2 per cent. Given that per capita GDP also declined in that period, the income of the poor went down faster. They suffered especially badly.[16] The privatisation agenda was driven by the need to raise revenue, if only temporarily reducing the fiscal deficit. Whilst the fiscal deficit was reined in and kept at a low level by the end of the 1980s, there was again a worsening of trends in the early 1990s. However, the markets had reacted with euphoria about the economic outlook and, encouraged by implicit guarantee from government about bank solvency, embarked on a lending spree.

Immediately following interest rate deregulation in 1989, there was a jump in the ratio of M4 to GDP. The ratio averaged less than 27 per cent in the period 1980-88, but it rose to 30 per cent in 1989 and, by 1994, it had gone up to 45 per cent, prior to the collapse. In the background of liberalisation bank credit to the private sector grew 8 times faster than the growth in GDP until the system imploded in the Tequila crisis. Commercial bank credit to the private sector averaged less than 15 per cent over the period 1980-89, rising to 29 per cent in 1992, and jumping over 40 per cent by 1994. Implicit guarantee of support from government and the need to generate high rates of return in order to amortize the debts that they had accrued led to lending even to SMEs without adequate analysis of risk. The share of overdue loans-to-total loans increased from 5.5 per cent in 1992 to 9 per cent in 1994. Yet, these percentages understate the true picture because they were compiled under Mexico's former accounting standards that let banks classify as undue only the unpaid portion of the loan, rather than the whole loan (Montes-Negret and Landa, 2001).

Liberalisation was also to see a greater integration of the domestic financial sector with the international markets. The percentage of domestic financial assets (M2) held by non-residents almost doubled from 14 per cent to over 29 per cent between 1989 and 1994 (Table 6). What is more noticeable is that the share of domestic assets held by non-residents in foreign currency went up from 48 per cent to almost 99 per cent during this period (Table 7).

[Tables 6 and 7 here]

The index of fiscal deficit began to rise. What was more telling was that the liberalisation of the economy since the late 1980s brought about a rush of imports as tariffs were reduced. The deficit in current accounts "ballooned from $6 billion in 1989 to $15 billion in 1991 and to more than $20 billion in 1992 and 1993" (Whitt, Jr 1996:2) (see Figure 1 below).

[Figure 1 here]

[16] Source: World Development Indicators, World Bank.

That increase in deficit was initially matched by a corresponding increase in foreign capital flow, but markets became jittery following a series of shocks. It is in the nature of privatisation programmes that they present "significant opportunities for redistribution of income and wealth" (Vickers and Yarrow, 1991:119). The distributive conflict entailed in the nature of the austerity measures government attempted to pursue did not inspire investor confidence. There was an armed uprising in the province of Chiapas "seven months before a presidential election" followed by the assassination of the "ruling party's presidential candidate", and this set in motion developments that led to the fear of political instability culminating in the currency crisis in 1994 (Whitt, Jr 1996:2). Henry C. Wallich (1985), erstwhile governor of the Federal Reserve Bank in the United States, noted that creditworthiness is a matter of belief in the financial markets that governments are in control of events: "a stable debt/GNP relation is sustained only if the creditors regard the country as creditworthy and are satisfied to roll over the debt".

The exchange rate crisis, known as the Tequila crisis, witnessed in December 1994 was followed by a banking crisis in 1995. However, it would be wrong to blame the exchange rate crisis as being the sole cause of the banking crisis. The banking sector was already fragile prior to the shock (Gonzalez-Hermosillo et al, 1997). The privatisation process ignored the need to reform the accounting rules and strengthen the system of regulation in the rush to raise money for the exchequer by selling nationalised assets. This contributed to the sharply spiralling decline in the fortunes of the banking system in 1995 (Haber, 2005).

The process of bank privatisation allowed the new bankers quickly to amortize the debts associated with acquiring the privatised banks at premium prices, but at a cost of paying insufficient attention to credit risk management (Montes-Negret and Landa, 2001). In some cases the collateral on the loans received by the entrepreneurs to buy the banks was the share capital itself, adding to the risk of contagion once a bank went into trouble. Moral hazard was compounded by regulatory forbearance, especially as the government explicitly guaranteed deposit insurance across all deposits including interbank. One year before the Tequila crisis, the volume of non-performing loans-to-banking sector loans was reported as 16 per cent, but the ratio was reported to be almost 53 per cent in December 1996 when several banks had again been taken over by the state (Hernandez-Murillo, 2007). An ill-designed privatisation process which raised $13.5 billion in 1991-92 (Barnes 1992) cost the exchequer to the tune of an estimated $65 billion to rescue (Haber, 2005).

Even those banks acquired in 1991-92 by experienced bankers did not survive the crisis in their original form. Experienced Mexican bankers had acquired six banks in the privatisation process. All of these banks participated in some form of government-backed stabilisation programme during the crisis episode. Nine banks had been acquired by groups with financial but not banking sector experience. After the crisis, the government consolidated six of these banks into one of three domestic-owned banks, intervened in other banks using capital injections and loan purchase support from government, and sold three others to foreign banks. Prior experience in bank management or in the financial sector amongst directors appeared not to be a guarantor for success. "Out of 18 privatised institutions in 1991-92, only 5 remain under control of their original shareholders. Five banks are still under intervention" (Graf 1999:173).

V. Conclusions

In the immediate aftermath of the international debt crisis in the early 1980s, there was increasing intervention by the state all over Latin America, especially in the financial sector, to deal with the consequence of virtual bankruptcy across sectors. For example, in Argentina, the state had to take over the foreign liability of the domestic private sector to be able to have continuing access to international capital markets.[17] At the beginning of the debt crisis in 1982, borrowing by the private sector "represented 47 per cent of the foreign currency loans" in Argentina (Ferrer, 1985:14). The state had to assume liability as condition for further borrowing because accounting rules for bank solvency allowed greater leeway in carrying poor quality assets that were classified as sovereign debt. In Mexico, all private banks with two exceptions noted earlier were nationalised in 1982.

Notwithstanding the greater participation by the state in the banking sector following the debt crisis of the time, economic thinking in the 1980s was moving towards distancing the state from the economy. There was growing support for the view that attempts to correct market failure through nationalisation could also lead to government failure that might be worse (Dutta-Chaudhuri, 1990). However, the financial sector poses special problem for those that seek answers to governance problems through liberalisation and privatisation. Liberalisation of the financial sector has often been followed by financial crises (Weller, 2001; Arestis and Glickman, 2002). Problems can be worsened by the demands of economic liberalisation for swift reductions in fiscal deficit.

Even a privatised banking system depends on the credibility of the regulatory environment for survival. There are large externalities between financial institutions and between the financial and real sectors of the economy. They are mediated through explicit and implicit regulations and guarantees by the state. The valuation of bank equity in stock markets depends on the nature of the privileges granted by the state. When the purpose of privatisation is dominated by the need to raise revenue to pursue a particular fiscal stance characterising economic liberalisation, policy becomes contradictory. Promise of state support raises the valuation at which banks are privatised at the cost of introducing potentially uncontrollable risks in the long term, especially since the promise of support introduces moral hazard in risk taking behaviour. The experience of Mexican banking reform in the late 1980s followed by privatisation in 1991-92 fits this pattern. The reason for failure of the privatisation process partly lies in the process of that privatisation exercise.

The privatisation process was blighted from the outset. Both experienced and inexperienced bankers took advantage of the lax system of regulation and opaque rules for accounting. Some of the methods of financing purchases had the characteristics of Ponzi finance, as that type of instruments for raising money are explained in Minsky (1991). Since the focus of government was to raise money quickly through the sale of assets, the goal of obtaining a high valuation for these assets took priority. Purchasers believed that they had acquired secure

[17] Due to a quaint practice in accounting, lending banks could continue to regard loans to governments as performing assets even if service payments were funded only with further loans. Similarly distressed loans to the private sector had to be written down as non-performing. Thus the banks gained more time to adjust their capital ratios if government took over formal liability of the failing private sector.

oligopolies and underestimated the potential long term risk of euphoric lending. When the markets turned and risks looked unsustainable, the management had no planned response. Credit risk management was rendered difficult by poor internal procedures which were not addressed at the time of privatisation. Some of the purchasers had acquired banks with outside money, engaged in insider lending, and the loans they granted to themselves were at low interest with higher rates of default. The details are difficult to disentangle from publicly available data, but the above conjectures appear plausible on available information (Haber, 2005).

What we find is that privatisation of banks in Mexico in 1991-1992 followed a process that did not necessarily correct government failure entailed in the running of nationalised entities. It created a larger failure in the economy. What is telling is that the purchasers of banks undertook great risk in the way they financed their purchase and in the way they conducted themselves in a lending euphoria in the immediate aftermath of privatisation. They had no planned response to shocks which emerged.

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Table 1: RoA, RoE, and Z-score; weighted means; full sample

Year	*RoA, %*	*RoE, %*	*Z score*	*Equity/ Assets, %*	*Avg assets, US$ m*	*NPL / Loans, %*
1985	1.59	46.37	16.68	3.28	16,965	2.77
1986	1.96	51.89	18.81	3.66	21,279	1.77
1987	1.99	48.77	20.29	4.49	17,789	1.16
1988	2.76	40.84	21.41	6.87	10,641	1.43
1989	1.71	25.90	13.24	6.45	5,839	1.74
1990	1.53	24.20	10.38	6.14	7,501	2.27
1991	1.32	20.91	18.65	5.33	9,250	2.93
1992	1.89	29.23	25.53	6.15	9,599	3.13
1993	1.85	29.90	24.38	6.26	10,269	3.77
1994	0.59	11.39	6.80	5.11	10,609	4.08
1995	0.29	-1.66	6.18	6.49	5,745	5.50
Avg 1985-87	1.85	49.01	18.59	3.81	18,678	1.90
Avg 1988-91	1.83	27.96	15.92	6.20	8,308	2.10
Avg 1992-94	1.44	23.51	18.90	5.84	10,159	3.66

Table 2: RoA, RoE, and Z-score; weighted means; sub-sample (19 banks)

Year	*RoA, %*	*RoE, %*	*Z score*	*Equity/ Assets, %*	*Avg assets, US$ m*	*NPL / Loans, %*
1989	1.71	25.90	13.24	6.45	5,839	1.74
1990	1.53	24.20	10.38	6.14	7,501	2.27
1991	1.32	20.91	18.65	5.33	9,250	2.93
1992	1.89	29.23	25.53	6.15	9,599	3.13
1993	1.82	29.35	24.12	6.10	11,119	3.71
1994*	0.53	10.66	6.32	4.64	14,941	3.97
1995*	0.10	-2.17	5.40	5.42	16,262	5.14
Avg 1989-91	1.52	23.67	14.09	5.97	7,530	2.32
Avg 1992-94	1.41	23.08	18.66	5.63	11,887	3.60

Note: The number of banks in 1994 and 1995 is 17 and 12, respectively.

Table 3: RoA, RoE, and Z-score; weighted means; sub-sample (5 banks)

Year	*RoA, %*	*RoE, %*	*Z score*	*Equity / Assets, %*	*Avg assets, US$ m*	*NPL / Loans, %*
1985	1.59	46.37	16.68	3.28	16,965	2.77
1986	1.96	51.89	18.81	3.66	21,279	1.77
1987	1.76	38.27	19.44	4.27	22,613	1.10
1988	2.49	36.68	20.02	6.13	15,037	1.32
1989	1.12	17.91	10.16	4.94	17,416	1.27
1990	1.18	18.72	7.58	4.62	20,643	1.52
1991	1.16	20.66	16.26	3.99	25,347	2.27
1992	1.51	23.06	19.60	4.23	24,901	2.26
1993	1.20	17.11	13.79	4.05	25,088	2.15
1994*	0.28	5.32	3.27	3.01	38,708	2.37
1995*	0.30	4.10	4.18	3.74	39,128	2.95
Avg 1985-87	1.77	45.51	18.31	3.74	20,286	1.88
Avg 1988-91	1.49	23.49	13.51	4.92	19,611	1.60
Avg 1992-94	1.00	15.16	12.22	3.76	29,565	2.26

Note: The number of banks is 4 and 5 in 1994 and 1995, respectively.

Table 4: Dispersion of RoA scores

Bank type	*Observations*	*Average*		
		All banks in group	*Top 10%*	*Bottom 10%*
A	59	0.1220	0.0608	-0.0369
B	71	0.0082	0.0816	-0.0682
A+B	130	0.0100		

Table 5: Decomposition of the Gini index of dispersion in RoA

	Gini	*% in magnitude of total index*
A and B together	0.0524	
Group A	0.0410	
Group B	0.0613	
Inter-group	0.0.0085	Less than 1/6th
Intra-group	0.0520	Almost the same magnitude
Overlap	-0.0081	Less than 1/6th

Table 6: Domestic financial assets (M2) held by residents and non-residents (%)

Date	*Residents*	*Non-residents*
December 1985	77.57	22.43
April 1989	85.92	14.08
June 1991	81.82	18.18
December 1994	70.47	29.53

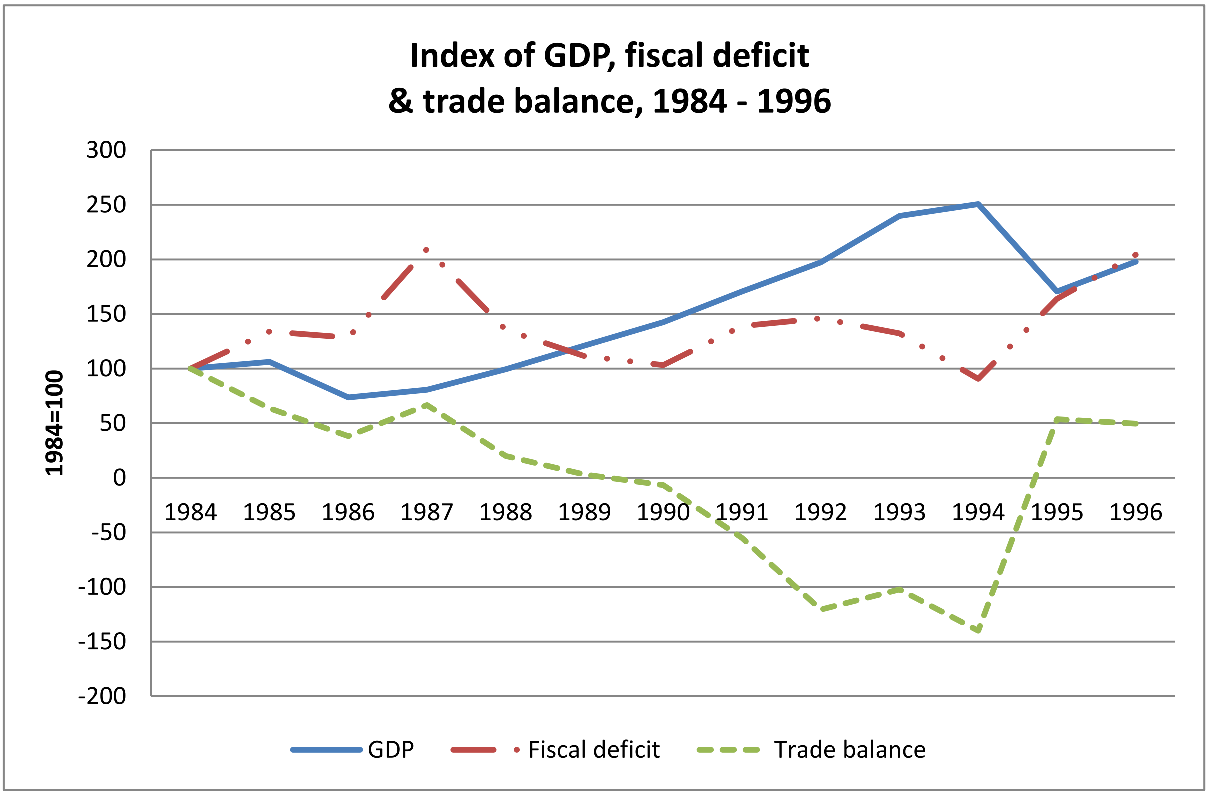
Source: Banco de México Statistical database

Table 7: Domestic financial assets (M3) held by non-residents in local and foreign currencies

Date	*Domestic currency (%)*	*Foreign Currency (%)*
December 1985	51.99	48.01
April 1989	24.57	75.43
June 1991	18.02	81.98
December 1994	0.03	99.97

Source: Banco de México Statistical database

Figure 1: Indices of GDP, Fiscal Deficit and Trade Balance



Source: adapted from World Economic Outlook; IMF *International Financial Statistics*