

Impact of Financial Liberalisation on Macroeconomic Performance and Implications for Development Policy in Mexico

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Introduction

For more than two decades, since the 1982 external debt crisis, Mexico has implemented the policies recommended by the Washington Consensus. This development strategy, based upon neoliberal economic theory, assumes economic activity best proceeds under free competition, so that by means of liberalisation of markets, governments can achieve efficiency in resource allocation and an optimal long-run equilibrium.

The results of adopting this approach have been contrary to the government's stated objectives. In the last twenty five years, the average rate of income growth was half that observed during the previous two decades; the share of domestic savings in national income fell; the propensity to import has trebled; the average real wage rate in manufacturing industry is still below its 1982 level, and one third of jobs have been lost in this sector.

Following financial market deregulation, firstly a private credit boom, which largely financed consumption expenditures, contributed to a second twin exchange rate and banking crisis, in 1994; and as the government bailed out the banking sector, total public domestic debt more than doubled.

Presently, the largest financial groups, formerly owned exclusively by Mexican stockholders, are controlled by foreign investors; bank credit in real terms has shrunk to its 1980 level, though loan rates are three times deposit rates; two thirds of private sector credit demand is met by non-banking sources (mainly by the non-financial corporate sector as trade credit and foreign loans); and financial institutions are actively engaged in government securities trading and financial derivatives operations. These activities exert upward pressure on interest rates and force the monetary authority to sell government bonds in open market operations, thereby inducing public sector over-borrowing notwithstanding the government has achieved fiscal balance.

The mischievous results obtained from the implementation of neoliberal policies clearly indicate that the assumptions about the outcomes that would be delivered by freely competitive markets were unsound. In the 1940s, at the beginning of Mexico's industrialisation process, market imperfections in product and factor markets were widely admitted; and policy makers consciously embarked on an import substitution industrialisation strategy, based on strong government intervention in real and financial markets.

Industrial development was backed by an original and ingenious central bank policy, which overcame the limitations posed by backward financial markets and an average level and distribution of income of the population that limited the ability of the state to mobilise resources through taxation. From 1958 to 1978, the *stabilizing development* strategy, as this policy mix was named, enabled the country to benefit from an average annual rate of real income growth of 6.5 per cent, with an average inflation rate below 3 per cent per annum.

This development strategy, however, was faulty; since it failed to generate the net foreign exchange inflow required to sustain the industrialization process. Policy makers were pessimistic about domestic producers' ability to upgrade and compete in international markets for manufactures, and placed more emphasis on import substitution than on export promotion. In 1982, discredited by the external debt crisis, the stabilizing development model was abandoned; and following the Washington Consensus recommendations, the government reoriented industrial policy towards the export promotion model.

Unfortunately, the drawbacks of the import substitution strategy led to an underestimation of the benefits of the credit and monetary policies implemented during the stabilizing development phase, despite the country having advanced notably in its financial development during that period, while ensuring remarkable price stability.

Hence, the arguments against government intervention and protectionism *vis-a-vis* industry were extended to the central bank's non-market mechanisms for monetary control and credit allocation.

In this paper, we analyse the rationale for the successful central bank financial strategy inbuilt in the stabilizing development model; and we attempt to explain, on the same grounds, the contradictory outcomes from the implementation of the Washington Consensus guidelines in the Mexican financial market. In this way, the paper aims to identify the elements needed for designing effective monetary policies for economic development.

The paper is organized in nine sections. The first one synthesizes the constraints to economic development in Mexico, and how they condition distinct responses to policy measures, as compared to more developed economies. The following two sections describe the institutional framework of industrial, monetary and credit policies during the stabilizing

development period. Sections 4 to 6 present a sequential analysis of liberalising reforms from the mid 1970s to the early 1990s, and its destabilizing effects which accounted for the twin crises the country underwent in 1982 and 1994. In sections 7 and 8, we look into the effects of commercial banking market imperfections and financial innovations on bank credit rationing and private capital market functioning observed in Mexico. We also examine the links between these phenomena and government over-borrowing, as a result of central bank reliance on open market operations. In the final section, we summarise our findings and their relevance for the pursuit of effective development policies.

1. Two particular constraints to Mexico's steady income growth

Like other developing economies, heavily dependent on imports of capital goods and technology, the rate of growth of the Mexican economy is constrained by foreign exchange availability. This weakness is worsened by two related phenomena that have become characteristic of the largest Latin American economies, and which are not observable with similar intensity in other developing countries: *structural inflation* and *structural trade imbalance* (Thirlwall 2003, Prebisch 1949).

Structural inflation denotes a magnified response of the rate of inflation to variations in the exchange rate, which is out of proportion to the share of imports in GDP. In the 1950s, Latin American economists explained this phenomenon as a result of price-inelastic demands for imported manufactured goods during the industrialization process. A high income elasticity of imports due to the backward structure of production in developing economies, and an inelastic supply of exportable primary commodities, accounted for the magnified effect of exchange rate depreciation on domestic prices. The ensuing distribution conflicts gave rise to propagating mechanisms through wage increases, fiscal deficits and monetary expansion (Noyola 1957, Pinto 1975). These theorists supposed the strong exchange rate–pass through inflation would decline as those economies advanced in their industrialisation process, particularly as they surpassed the stage of import substitution of consumer goods. Nevertheless, structural inflation has been pervasive in the largest economies of the region (Brazil, Mexico and Argentina).

In Mexico, the exchange rate elasticity of the consumer price index, from 1980 to 2002 was 1.22, notwithstanding the fact that the country's merchandise imports never

exceeded one third of GDP. Graph 1 illustrates this phenomenon with Mexican data for the last 25 years; Granger causality tests systematically indicate that exchange rate variations precede changes in the rate of inflation, and not the other way round, as purchasing parity theory postulates.

(Insert Graph 1)

Structural trade imbalance, on the other hand, refers to a situation where the trade deficit is not significantly affected by changes in the real exchange rate, because imports and/or exports demands are price inelastic. These conditions prevail in countries where primary products and light manufactures represent the bulk of their exports, while they import capital goods and other manufactured products with higher technological complexity. Mexico is a good example of this type of countries. Graph 2 shows the absence of connection between its real exchange rate and its propensity to import (defined as the import to GDP ratio), from 1978 to 2004.

(Insert Graph 2)

These behavioural patterns have traditionally led Mexican governments to implement economic policies that involve currency overvaluation, and higher dependence on foreign capital flows than otherwise.

Through history, structural trade deficits, and fear to currency devaluation and structural inflation, have set the limits to expansionary economic policies; dependence on foreign capital inflow, as a means to peg the currency and stabilize domestic prices, has exacerbated the effects of international financial markets volatility on income growth.

Structural inflation and structural trade imbalance have been neglected by mainstream macroeconomic theorists, who assume economies behave in the same way at different stages of their development, and free competition predominates in product as well as in factor markets. Half a century ago, Prebisch, Noyola, Pinto and other economists working at the United Nations Economic Commission for Latin America challenged these propositions and developed a theory to explain the relationships between center (developed) countries and peripheral (developing) economies. Their theory has been further developed in balance of payments constrained growth models (Thirlwall 1999), where full equilibrium is crucially dependent upon import and export demand elasticities.

From these approaches two main conclusions follow: firstly, countries with structural inflation and structural trade imbalance are unable to attain full equilibrium by means of relative price adjustments; and secondly, these two constraints to steady income growth can only be removed by changing the product structure in the economy, that is by speeding up industrialization.

Structural inflation in Mexico and other Latin American countries is symmetrically opposite to the incomplete exchange rate pass-through observed in developed economies (Krugman and Baldwin 1987, Arestis and Milberg 1993); and just as the latter has been explained as a result of oligopolistic competition in international markets, the former has also been related to the market power that foreign producers and domestic producers licensing foreign technology possess in developing country markets, on account of their technical superiority (Mántey 2004a).

In peripheral economies, market power associated with technical progress brings about a magnified exchange rate pass-through because:

- currency depreciation increases the value in local currency of imported capital goods, and also its expected return
- it raises unit costs as imported inputs are expressed in local currency
- imported capital goods and intermediates confer competitive advantages to local producers, and enable them to increase their price mark-ups

In addition to the direct cost push effects of currency devaluation on imported inputs, and the indirect outcome through changes in price mark-ups, exchange rate devaluation in developing countries increases financial costs, because monetary authorities usually raise domestic interest rates immediately afterwards, in order to slow down economic activity (Taylor 1992, Palley 2002). Eventually, recession exacerbates the distribution conflict that exists under oligopolistic competition, and further increases price mark-ups (Sylos-Labini 1965, Alberro and Ibarra 1987).

Hence, technical dependence on industrialized (central) countries prevents peripheral economies from achieving internal and external equilibrium through relative price adjustments.

A magnified exchange rate pass through is most likely to appear in late industrializing countries that lack effective technology adaptation strategies, as is the case

in Mexico, where local firms tend to associate with foreign firms as a means to upgrade technology (Cordero et al. 1983).

Technical dependence also accounts for the high income elasticity of developing countries' imports; whereas weak market power in the markets for primary commodities and light manufactures accounts for the low price and income elasticities of these countries' exports. These two imperfections give rise to unequal trade relations.

From this it follows that oligopolistic barriers to technology transmission bring about significantly different responses to policy measures among economies at different stages of development; and more specifically, that under certain circumstances, exchange rate adjustments might lead to inflation and unemployment, without an improvement in the trade balance. The so-called *structuralist* economists of the United Nations Economic Commission for Latin America arrived at similar conclusions in the 1950's.

Such results indicate that for some developing countries, policies that lead to currency overvaluation may be rational, at least in a short run horizon, particularly if they are accompanied by protectionist measures, that prevent trade account deterioration; or if they are undertaken when international financial markets are relaxed, so that trade imbalances are easily sustainable. In such a scenario, pegging the nominal exchange rate drives inflation down, and thereby induces a fall in nominal interest rates.

It should be noticed that in countries like Mexico, subject to structural inflation, it is unlikely that the parity of interest ever holds. This is so, because inflation declines as the currency overvalues. If the central bank attempted to set its nominal interest rate at the parity level, after achieving a low rate of inflation, the real rate of interest might be so high that economic activity would collapse. In Graph 3, it can be seen that the Mexican central bank actually *lowers* the nominal interest rate as the real exchange rate appreciates, and inflation declines.

(Insert Graph 3)

Even though this monetary policy appears to be too risky for an open economy like Mexico, it produces a chain of beneficial events in the short run that ameliorate its negative trade offs in the medium term. When the monetary authority establishes a credible exchange rate peg, and succeeds in lowering the rate of inflation as well as market interest rates, corporate investment flourishes, income and employment grow, and total factor

productivity increases. The investment boom usually comes to an end rather abruptly, when international financial markets tighten and the trade imbalance becomes untenable. Then stringent fiscal and monetary policies operate to depress aggregate demand, and to restore the country's authorities credibility before foreign investors. Only when this stabilization strategy fails, and capital outflows exhaust the country's reserve of international assets, the government willingly admits the exchange rate adjustment.

This behaviour is understandable, since currency devaluation causes a direct and strong impact on the inflation rate; and also because it is ineffective either to divert domestic expenditure away from imported goods, or to induce a compensatory increase in exports. Moreover, since these outcomes give rise to perverse expectations of further devaluations, they stimulate speculation in foreign exchange, which discourages productive investment and deepens recession.

2. The import substitution development strategy

Influenced by the structuralist theory of development, the Mexican government implemented a successful import substitution strategy for industrialization from the late 1950's to mid 1970s. The policy model was initially conceived as a short term scheme, in which the exchange rate would remain fixed, in order to keep inflation at the lowest level; while direct controls on imports would protect domestic industries from foreign competition at the early stages of the import substitution process. By means of these two devices, structural inflation and unbalanced trade were temporarily dealt with.

Favourable conditions in international financial markets, during the 1960s, enabled the government to sustain the exchange rate peg. The growing balance of payments deficit of the US eased international credit markets, and Mexico benefited from multilateral long term credit, at concessional rates (Cardero 1984); therefore, domestic monetary and fiscal policies focused on filling the savings-investment gap, leaving the current account of the balance of payments to be financed by foreign direct investment and the necessary increase in government external indebtedness (Villarreal 1976).

Monetary policy aimed at fostering financial development, in order to raise domestic savings and to allocate them efficiently, according to national priorities. Fiscal policy centred on building infrastructure, and providing stimuli to industrial development

by means of tax exemptions, subsidies, and direct state participation in strategic activities like the petrochemical industry, electricity, fertilizers, communications, iron and steel industries, warehouses, and many others. Product prices of public enterprises were kept artificially low, in order to preserve profitability in primary activities, without generating wage inflation in industry and services activities.

Tax incentives and low priced public goods constrained government revenues, and led to growing fiscal deficits, which up to 1958 were largely financed by money creation. From that year onwards, however, the government ceased to depend on direct credits from the central bank; instead, the monetary authority placed government long term debt securities in the private banking sector, which was compelled to hold them as a reserve requirement in direct proportion to banking liabilities.

This source of finance became so substantial, that the government agreed with the private sector on giving up increasing taxes to support its dynamic fiscal policy; and capital gains and reinvested profits were exempted from income taxes.

Financial deepening policies coupled with low inflation and vigorous effective demand, provided government with the necessary long term funds to carry out its investment projects. Public investment came to represent 45 per cent of total gross domestic fixed investment; two thirds of it being carried out by public enterprises.

The *stabilizing development* strategy succeeded for nearly two decades. During this period, the annual rate of income growth averaged more than 7 per cent, while the average rate of inflation was below 3 per cent.

An ingenious interlocking of industrial and monetary policies in this scheme accounted for such achievements.

3. Monetary and credit policies in the Stabilizing Development strategy

Industrial policy in the *stabilizing development strategy* followed the import substitution model. Its main concern was to strengthen the internal market; export promotion was regarded as a secondary objective. Eventually, it became untenable, as government indebtedness in foreign currency accumulated, and the growing trade deficit gave rise to investors' misgivings about the country's capacity to honour its debt. After a series of speculative attacks on the currency, in the mid 1970s, the government was forced to

devalue the peso, and under the surveillance of the IMF a change in the development strategy took place.

Unfortunately, the weaknesses of the import substitution industrialization model led to the underestimation of the benefits of the credit and monetary policies implemented during the stabilizing development phase, notwithstanding the fact that the country advanced notably in its financial development and exhibited remarkable price stability.

Furthermore, the financial infrastructure created during that period proved to be functionally suited to domestic capital accumulation and income growth. Financial intermediaries, under the control of Mexican capitalists, were subject to strict regulations and supervision by the central bank, and developed along solvent, efficient and profitable lines.

Nevertheless, when the development strategy was revised in the second half of the 1970s, the merits of that institutional framework were overlooked; and the arguments against protectionism and government intervention in foreign trade were extended to the central bank non-market mechanisms to regulate the financial sector.

Successive financial reforms obliterated that institutional framework; they facilitated private speculative investments and consumption, and eventually led to moral hazard and adverse selection problems that brought about financial fragility.

Central bank policy during the stabilizing development period was innovative, and it allowed for a flexible and quick adaptation of financial markets to domestic and foreign shocks.

Monetary and credit policies were conducted by means of six types of tools:

- Legal reserve requirements
- Development trust funds
- Direct controls on strategic financial variables
- Rediscount facilities
- Development banks
- Persuasion, negotiation and coordination

The most important instrument of central bank policy was the legal reserve requirement (*encaje legal*), which was a set of complex regulations on the balance sheet structure of the private banking sector.

The monetary authority overcame the limitations posed by the narrowness and shallowness of the domestic financial market, by using this and other monetary policy tools in different ways from those employed in more developed countries (Sanchez-Lugo 1976). Accordingly, legal reserve regulations not only were designed to influence commercial bank credit volume, but also its allocation to strategic sectors or for specific purposes. In addition, this complex policy tool enabled the central bank to shape the time structure of bank deposits; and to induce the geographical location of commercial banks, according to regional development objectives (Baqueiro and Ghigliazza 1983).

Legal reserve regulations not only set up the proportion of banking liabilities that should be deposited at the central bank; but also the shares of specific types of credit in banks' portfolios. In 1975, private commercial banks were only allowed to freely decide on the allocation of 25 per cent of their liabilities.

Selective credit policies aimed at channelling financial resources to the following activities (Petricioli 1976):

- Public investment in infrastructure
- Exports and tourism
- Employment generating activities
- Activities that raise productivity in wage-goods industries
- Housing programs for the poor
- Small and medium size firms
- Human capital formation
- Stock market development

Selective credit policy implementation largely hinged on development trust funds created for specific purposes. These institutions played a strategic role, during the stabilizing development period, because they provided not only the financial resources for the realization of the projects, but also the required technical assistance. In each development trust, an interdisciplinary team of specialists were in charge of evaluating the projects, selecting the appropriate technology, defining the most suitable credit term conditions, and providing training and guidance to the final credit users (Fernández-Hurtado 1976).

Development trusts operated as second floor banking institutions, by offering guarantees and rediscount facilities to other intermediates. Their main sources of funds were credits from the central bank backed by legal reserves, government contributions, international credit and placement of their own securities.

As the management of development trusts was commended to the central bank and the main national development bank, their specific programs were integrated with comprehensive economic policy objectives and regional development plans, without losing flexibility.

Legal reserve regulations also enabled the central bank to fine tune interventions to neutralize domestic and external shocks, by means of reserve requirements that affected only the marginal increase in banking liabilities from a given date onwards. Marginal reserve requirements were also imposed on the private banking system in order to sterilize temporary excess liquidity; or to penalize rapidly growing liabilities in foreign currencies.

The monetary authority managed the various components of legal reserve regulations in a flexible way, adjusting selective credit regulations when it established marginal reserve requirements, so that the latter did not reduce credit flows to priority sectors (Sanchez-Lugo 1976).

During the stabilizing development period, legal reserve regulations neither increased the cost of finance to the private sector, nor produced a crowding-out effect on private domestic expenditure, because monetary and fiscal policies played a counter-cyclic role, and public expenditure was complementary to private sector demand (Tello 1984). As a matter of fact, the central bank refused to pay interest on excess reserves, in order to induce banks to prop up economic activity.

In addition to legal reserve regulations, the central bank established direct controls on the degree of leverage of financial intermediaries, the rate of growth of their liabilities, and the rates of interest they paid for different types of deposits. By means of these measures, the monetary authority preserved the solvency of the financial system and promoted balanced growth of the various institutions. Occasionally, these controls were also employed to sterilize liquidity, and to block capital flight from the country.

The monetary authority customarily left the banks free to determine loan rates, and only established upper limits for a few types of loans to lowest income groups.

Just as reserve coefficients were adapted to the particular needs and circumstances of a developing economy, so the Mexican central bank used open market operations and rediscount facilities for different purposes than are customary in developed countries.

In Mexico, the rediscount window was not utilized as a tool for regulating credit volume or interest rates. Rediscount facilities served two main purposes: i) as a means to channel financial resources to priority sectors, via the public development trusts; and ii) as a device to assist banks in fulfilling legal reserve obligations, when their deposits grew slowly or they faced unexpected withdrawals.

Similarly, open market operations were carried out differently from the practices adopted in the developed countries. The central bank did not attempt to regulate the money supply with this tool, because aggregate demand was not significantly influenced by the rate of interest, but rather by profit expectations (Brothers and Solis 1967). Open market operations were performed to stimulate capital market development, by providing liquidity to the bonds issued by public and private financial intermediaries. In these operations, securities were negotiated at par values, and traded volumes were determined by supply and demand (Sanchez-Lugo 1976). Open market operations with government securities had similar characteristics, and were undertaken only to enable commercial banks to satisfy the legal reserve.

Legal reserve regulations, until mid 1970's were complex, confusing and fragmented; but these deficiencies, far from hindering the execution of monetary policy, enabled the monetary authority to exercise discretion, and opened the door for negotiation and compromise between the authority and commercial bankers (Tello 1984).

Persuasion was widely used as a monetary policy device. The central bank used to inform bankers about the goals of monetary policy and the projected policy measures, in order to harmonize their interests and to achieve compromising agreements. Thanks to persuasion, the monetary authority was able to use two instruments for liquidity regulation and selective credit allocation, in addition to basic and marginal reserve requirements: these were the sterilization agreements, by means of which commercial banks accepted to contribute extraordinary deposits at the central bank; and secondly, the resolutions concerning additional credit allocation to priority sectors for specific purposes (Sanchez-Lugo 1976).

Selective credit policy was implemented not only by means of legal reserve requirements and special arrangements between the monetary authority and private bankers; but was strongly supported by public development banks.

These institutions were not subject to legal reserve requirements, but they directly financed strategic activities, with resources coming from their own security issues, government contributions and foreign loans (Orci 1983).

4. The early phase of financial reforms and its effects on banking and industry market structures

The stabilizing development model failed to generate the foreign exchange net inflow required to sustain the industrialization process. The evolution of international financial markets in the late 1960s and early 1970s, and the eventual collapse of the Bretton Woods international monetary order, accelerated the model's decay, because Mexican commercial banks engaged in speculative operations with foreign currencies, in response to increased volatility in international interest rates and exchange rates, and the banking liabilities from which legal reserves were computed declined, thereby depriving government of its main source of deficit finance (Cardero 1984).

With the intention of stopping domestic financial dis-intermediation, and as a means to raise funds from abroad, in 1970 the government authorized the hitherto specialized banks to merger and integrate their activities, so that they could compete internationally with a stronger capital position.

A few years later, in 1976, deposit banks were also allowed to carry out savings and investment bank operations, and they became the leading institutions of the newly created financial groups.

Commercial banks were allowed to operate overseas, and by means of their participation in international banking syndicates, they simultaneously eased private capital outflows, and government and public enterprises' foreign indebtedness.

Financial groups increased their economic and political power, and the banking market became increasingly concentrated. In 1970, 75 per cent of total banking assets were controlled by 18 institutions; whereas in 1979, the same share of total assets was controlled by only 6 banks. The number of banks also fell dramatically, from 240 to 100, in the same period (Quijano 1981).

In financial conglomerates, intermediaries different from banks became subordinate to the latter, and did not attempt to compete with them in offering better terms for corporate financing. Instead, financial groups operated so as to maximize overall group profitability. Institutional investors' portfolios were filled with securities issued by the corporations in which the banks had capital participation; and long term bank credit was available only for

these firms (Caso 1971, Cardero y Domínguez 1982). Thus, the stimulus to financial conglomeration also led to increasing industrial concentration (Cordero et al. 1983).

Financial and industrial conglomerates, in the 1970s, were exclusively controlled by Mexican investors, since the law forbade foreign investors to participate in holding companies (Jacobs 1981). Nevertheless, when domestic firms faced technology limitations for their development, they engaged in partnerships with foreign firms.

Technology dependence and protectionist policies discouraged domestic industrial firms to compete in international markets; and given the narrow internal market, they were largely committed to meeting price-inelastic, high income strata demands. For these reasons, industrial conglomerates were predisposed to operate under conditions of oligopolistic competition.

Financial reforms in the 1970's, by increasing concentration and oligopoly, did not bring about a fall in intermediation costs. Actually, in 1980, the largest two banks exhibited significantly higher average costs than their medium-sized competitors; nevertheless, the ratio of profits to liabilities in the former was twice the ratio in the latter (Quijano 1981). The largest banks profitability was accounted for by the economies of scope accomplished in their respective financial groups, and the intermediation of foreign loans to the public sector.

The increased political power of private bankers, jointly with the augmented volatility of international interest rates, after the second reform of the Bretton Woods system in the mid 1970s, led to changes in the way monetary policy was conducted. From 1977 onwards, direct controls on interest rates were gradually substituted for market mechanisms, wherein the banking oligopoly behaved collusively.

In 1978, the government began to issue treasury bills, and exchanged them for other government liabilities held as legal reserves, with the intention to regulate liquidity through conventional open market operations, as in more developed financial systems. One year later, the central bank began to determine interest rate on its credit to commercial banks by means of market auctions; and from 1981 onwards, this mechanism was also utilized to determine the interest rates on central bank deposits (Bazdresch 1983).

As monetary policy kept on supporting the exchange rate peg, while domestic financial groups were speculating in foreign exchange markets, government external debt

increased sharply. When the tight monetary policies implemented in developed countries to hold down oil demand succeeded, and oil prices began to fall, in 1982, the Mexican government was unable to re-negotiate its foreign debt, and so were domestic private banks. The Mexican peso had to be successively devalued during that year, without stopping capital flight.

The exchange rate crisis was immediately followed by a banking crisis, since one third of private banking liabilities were denominated in foreign currencies. To guarantee foreign lenders that inter-bank loans would be reimbursed, the government nationalized commercial banks, and established a short-lived exchange rate control regime.

As multilateral organizations provided emergency aid to the government, and financial facilities were extended under severe conditionality, conventional practices in developed countries gradually substituted the mechanisms by means of which monetary policy was hitherto conducted. Following the Washington Consensus guidelines, financial markets were deregulated and opened to foreign investors.

5. The 1982 debt crisis and the second phase of financial reforms

The 1982 debt crisis put an end to the import substitution industrialization strategy led by the state. Most analysts pointed to excessive state intervention and protectionist policies as the main causes of the sluggish growth in exports and the country's over-indebtedness that eventually plunged it into crisis (Sachs 1986).

This diagnosis opened the door to neoliberal development policies based on the assumption of free market efficiency, and far-reaching reforms in the financial system were undertaken.

From 1982 to 1987, the government implemented orthodox stabilization policies, allowing the exchange rate to float and depreciate; raising interest rates; and resorting to cuts in government expenditure, privatisation of public enterprises, and substitution of indirect taxes for income taxes, in order to eliminate fiscal deficits. At the same time, international trade was significantly liberalized, and foreign direct and portfolio investments were promoted, allowing for free international capital mobility, and assuring equal treatment to national and foreign investors.

Financial reforms, in this period, had two main objectives: firstly, to raise domestic savings; and secondly, to stimulate capital market development. Both aims were linked to the solution of the debt crisis through the Brady Plan: the former would enable the country to generate the export surplus to service the debt; and the latter would provide the financial infrastructure required for state owned enterprises privatisation, and for exchanging external debts for national assets.

Financial reforms also aimed to reallocate bank resources from the government to the private sector; and to pave the way for larger foreign direct and portfolio investments, which at the time were regarded as less compromising than international credit (Singh and Weisse 1998).

This strategy was functional for the reconstitution of private domestic financial groups, after commercial banks were nationalized. Security houses became the new centres of industrial and financial conglomerates (Basave 2000), and they were conferred privileges over the banks, in order to foster capital market development (Minushkin 2005).

Meanwhile, commercial banking was re-structured. In 1983, one year after credit institutions were nationalized, the number of commercial banks was halved by means of mergers and concessions revocation, in order to reduce intermediation costs, raise capitalization levels, and increase efficiency.

In 1984, a new law for the central bank abolished legal reserve requirements, and dismantled selective credit allocation guidelines. It established declining portfolio regulations for the banking sector, with the aim of gradually eliminating government financing through banks' holding of government securities. The new law also limited Treasury overdrafts in its account at the central bank to 1 per cent of central government budgetary income. From then onwards, monetary policy would increasingly rely on conventional open market operations.

Public development trusts were reduced in number, and also in the volume of resources they received from the government and the central bank, given that government expenditure was curtailed, and central bank financing shrank after legal reserve derogation.

Private security houses, by contrast, prospered. They were given exclusive authorization to manage the newly created private investment funds, and also to carry out

secondary market trading of government securities; while both activities were expressly forbidden to nationalized credit institutions.

Interest rates on bank deposits were regulated in such a way that they did not compete with private investment funds returns; while resources raised through the latter were largely invested in government securities, because the private capital market was too thin and narrow.

These reforms led to banking disintermediation, without fostering private investment, because the orthodox stabilization program negotiated with the IMF hinged on currency depreciation, and it drove the annual rate of inflation to three digits levels, at the same time that real domestic aggregate demand fell; from 1982 to 1987, the average annual rate of inflation was 85 per cent, and the average annual rate of growth of GDP was minus 3 per cent (López-González 2001).

Following neoliberal recommendations about setting positive real interest rates, nominal loan rates became so high, that private sector economic agents gave up borrowing from banks, and domestic credit was allocated almost entirely to the public sector, which at that time was unable to raise funds in international financial markets.

At the stock exchange, the market value of listed companies abruptly fell, pushed down by the rise in interest rates and economic recession. As currency depreciation stubbornly accelerated inflation, an unmanageable vicious circle arose, which enabled foreign investors to acquire domestic firms at bargain prices.

Given that government securities yielded higher returns than productive investment, and recurrent currency devaluations generated perverse expectations of further depreciation, domestic investors took refuge in these two financial assets; thus, net fixed investment fell, capital flight continued, and government internal debt soared.

Strict application of conventional stabilization policies threw the country into a hyperinflation process coupled with severe recession. The economy's two main constraints to steady growth, structural inflation and structural trade imbalance, were ignored in the Washington Consensus paradigm, which attempted to achieve internal and external equilibrium by means of relative price adjustments and free market mechanisms.

As foreign trade was liberalized, the import coefficient increased, without being lessened by exchange rate adjustments (see Graph 2). Only through the depressive effects of currency depreciation on domestic income did the trade balance improve.

Currency depreciation, on the other hand, exacerbated inflation so that the country's relative price advantage quickly vanished, thereby calling for another exchange rate adjustment.

In this way, structural inflation and structural trade imbalance frustrated the development strategy recommended by the Washington Consensus.

At the end of 1987, on the verge of social instability, the government, that so far had gained international credibility, summoned domestic political and economic forces to a social compromise in order to implement a heterodox shock stabilization program. This alternative strategy aimed at stopping inertial inflation and ensuring a recovery in income growth. It was centred on an exchange rate peg and a negotiated incomes policy, both endorsed by a social pact. Wages would be restrained on the condition that entrepreneurs increased employment; and employers would moderate profit margins provided government maintained fiscal austerity (Alberro and Ibarra 1987).

The exchange rate anchor was notably successful. It immediately brought inflation down and discouraged speculative capital outflows. Furthermore, as the government decreased the fiscal deficit, and carried out structural reforms to open strategic sectors to foreign investors, nominal exchange rate stability and inflation control stimulated a voluminous inflow of foreign capital. Interest rates went down and investment flourished.

At the same time the government deficit was reduced, regulations on banks portfolio were relaxed, and credit to the private sector expanded. In 1988, government securities in banks' portfolios only amounted to 4 per cent of total assets, and the government took steps to prepare credit institutions to be re-privatised. In that year, interest rates on bank deposits were deregulated, and banks were allowed to operate investment trusts. In 1990, banks were authorized to pay interest on sight deposits; and a new law removed the prohibition on banks to integrate financial groups, and permitted foreign investors to participate with a maximum of 30 per cent in these institutions' capital.

The process of banks disincorporation from the public sector lasted until 1991.

Given that commercial banks were authorized to integrate financial groups, once they were privatised, they began to operate as universal banks. One year later, regulations on insurance companies' portfolio investments were eliminated.

From 1987 to 1989, capital market institutions were also privatised, deregulated and opened to foreign investors (see chronology of financial market reforms in Appendix); at the same time, interest payments ceased to be deductible from income taxes, in order to encourage corporations to raise funds through the placement of new shares in the stock market.

In 1992, the government undertook the reform of the public pension fund, and the recently privatised banks were commended the administration of the new private pension fund system.

The old pension system was a pay-as-you go scheme, sponsored by the government, with undefined contributions and defined benefits, which involved growing contingent fiscal liabilities. The Washington Consensus had blamed these types of schemes for discouraging private saving, retarding capital market development, and being an important cause of inflationary finance (Ghilarducci and Ledesma 2000, Uthof 1998). The new pension system was designed as a private fully funded plan, based on individual capitalization; workers' contributions would enter in individual accounts at investment funds, which would be administered by specialized institutions integrated to private commercial banks.

In 1992, the Mexican government concluded negotiations for the North American Free Trade Agreement (NAFTA) with the United States and Canada, which came into force in 1994. Financial services received very favourable treatment, since they were protected for 10 years, during which foreign banks could have a maximum share of 25 per cent of assets in the local market, and foreign security houses 30 per cent (Martínez-Atilano 1996).

In order to fulfil this agreement, a new law on foreign direct investment was passed in 1993, which eliminated prior restrictions to foreign investors' participation in domestic firms' capital up to 49 per cent. As a matter of fact, NAFTA went beyond any prevailing international agreement on foreign investment liberalisation and protection, as it assured equal treatment to national and foreign producers, and extended the concept of investment to include a wide variety of corporate assets and liabilities (Cardero 2000). The government

disposition to satisfy foreign investors' demands also accounted for the country's admission to the OECD, in 1994, and its subsequent adherence to the Multilateral Investment Agreement (MIA).

The last reform of the Mexican financial market re-organization, in this phase, concerned central bank independence. In 1993, the country's constitution was amended, and a new law for the central bank was approved and enforced from 1994 onwards, by means of which the monetary authority became autonomous from the government, and was made responsible for domestic price stability as a primary policy objective.

6. The private credit boom and the 1994 crisis

From 1988 to 1994, the heterodox stabilization policy sustained by successive social agreements (*pactos*) seemed to work satisfactorily. Inflation rates fell to one digit levels; the external debt was restructured according to the Brady Plan, and the country gained new acceptance in international financial markets; privatisation of state firms, fiscal austerity, and nominal exchange rate stability, decreased country-risk perception among foreign investors; and a stringent monetary policy, when international interest rates were falling as a result of recession in the largest developed economies, drew huge flows of short-term foreign capital into the country.

In that period, a net capital inflow of above 90,600 million dollars enabled Mexico to recover its growth path and to increase its reserve of international assets, notwithstanding the fact that the exchange rate peg and trade liberalisation were increasingly worsening the trade account of its balance of payments.

Tight monetary policies implemented through open market sales of government securities, coupled with nominal exchange rate stability, induced banks to raise short-term funds at low interest rates in international financial markets, and to lend them short in local currency, thereby increasing their financial margin.

The capital inflow brought about inflation in the country's thin asset markets, and gave rise to sizable capital gains, that further stimulated the capital inflow and discouraged productive net-investment (Correa 1997, Huerta 2002).

As the capital inflow broadened, and the central bank attempted to sterilize its effects on base money, by selling government bonds and raising interest rates, the vicious

circle continued. By that time, the increased volatility in domestic and international financial markets had shortened the terms to maturity of domestic financial assets, so that the effectiveness of central bank open market operations on credit volume was limited. Central bank influence on credit supply, by means of higher interest rates on reserves, was also diminished for two reasons: first, because private banks developed liability management techniques, specifically borrowing in international markets, and were not so dependent on central bank reserves as before the liberalising reforms; and second, because their financial margins became so large, that the plausible range of variation in central bank rates was insufficient to discourage lending.

Given that regulations on commercial banks portfolios had been lifted, and real interest rates on domestic loans were still high in relation to corporate profitability, bank credit was increasingly utilised to finance private consumption, which was augmented on account of trade liberalisation. Credit demand for consumption, in addition, has usually exhibited a low interest rate elasticity; so that it enabled bankers to maximize profits by widening financial margins.

Graph 4 shows credit allocation in the public and private sectors, as percentages of GDP, from 1979 to 1999. It can be seen that, from 1988 to 1994, credit to the private sector increased from 11 per cent of GDP, to 43 percent; while credit to the public sector declined from 20 to 8 per cent of GDP.

(Insert Graph 4)

Private credit expansion did not encourage productive investment, as neoliberal theorists expected (see Graph 5). From 1990 to 1994, during the credit boom, the annual average growth rate of gross fixed investment at constant prices was 8 per cent, while total bank credit volume was growing at an annual average rate of 16 per cent, and credit to the private sector at 28 per cent also in real terms.

(Insert Graph 5)

In fact, fixed capital accumulation did not recover from the debt crisis until the exchange rate was anchored and the profitability of fixed assets exceeded expected capital gains from foreign assets. In Mexico, where private capital markets are narrow and thin, corporate fixed investment has been traditionally financed out of retained profits; and given that the import content of investment projects is high, gross fixed investment has exhibited

a strong negative correlation with the exchange rate, which reflects the substitutability between productive investment and foreign asset holdings in firms' balance sheets.

Graph 6 shows that the stock market inflation observed in the first half of the 1990s did not raise fixed investment growth, but rather slowed it down; and in the second half of that decade, the two variables exhibited opposite trends.

(Insert Graph 6).

In Mexico, as in other developing countries, stock markets have not been able to contribute to investment funding, because their narrowness and thinness bring about high asset price volatility. As the Mexican stock market was opened to foreign investors, and speculative short term capital flows exacerbated market price volatility, higher country-risk evaluations raised the cost of long term finance, thereby offsetting the benefits of increased market capitalization (Singh and Weisse 1998).

Financial market liberalising reforms not only were ineffective in raising productive capital accumulation, but by stimulating private consumption, they actually led to a decline in the economy's propensity to save. The share of gross internal savings in GDP declined from 21 per cent in 1988, to 15 per cent in 1994.

By 1993, the effects of the credit boom and trade liberalisation on the balance of payments were visible, and the current account deficit rose to 5.7 per cent of GDP; at the same time, the stock market capitalization growth rate declined, so that speculative attacks on the currency began. In 1994, the government was compelled to issue dollar denominated Treasury bills (*Tesobonos*) for an amount of 24 billion dollars, in order to exchange them for the peso denominated bills held by US institutional investors; while private banks faced growing difficulties to renew their credit lines with foreign banks. The country's reserve of foreign assets declined sharply, from 28 billion dollars in February to only 6 billion in December, in spite of aggressive central bank policy measures, that drove up money market real interest rates from 4 to 20 per cent through the year.

At this point, the exchange rate peg was untenable, and the government was forced to abandon it; the currency was put to float, and it depreciated by more than 70 per cent before the end of the year.

As the currency depreciated and inflation accelerated, the monetary authority raised interest rates further. By the first quarter of 1995, the inflation rate in annual terms had

risen from 7 per cent in 1994 to 59 per cent, and nominal bank loan rates had climbed to 86 per cent.

Since financial groups were heavily exposed in foreign currency, they became insolvent, and credit stringency followed. Recession and inflation rapidly increased the share of non-performing loans in banks' balance sheets. Bank debtors were unable to fulfil their obligations, firstly because most loan contracts were on a flexible rate basis, and the reference rate suddenly rose to unanticipated levels; secondly, because credit toughness hindered debt re-structuring; and thirdly, because the downturn in economic activity deprived them from their expected income (Huerta 1997). The rate of growth of GDP fell from 7 per cent in 1994 to minus 8 per cent in 1995.

In the first quarter of 1995, the US government and multilateral financial institutions provided an emergency financial package to the Mexican government, backed by future oil export revenues, in order to prevent the country from defaulting on its debt to its foreign lenders.

The government bailed out the banking sector by issuing non-negotiable government securities and exchanging them for the non-performing loans, through the trust fund for bank deposit insurance (*Fobaproa*), leaving the banks in charge of recuperating the credits. Since the government agreed to participate with 75 per cent of debtors default, and also consented to paying a spread over market rates on the non-negotiable securities held by the bankers, the latter lacked incentives to recuperate the credits, and the cost of the bail out increased in the aftermath of the crisis, reaching 14 per cent of GDP in 1997.

Graph 7 illustrates the evolution of central government internal debt at constant prices since the end of the 1970s. It can be seen that, in 1997, the value of non-negotiable government securities in banks' portfolios amounted to 1.8 times the value of all other outstanding government bonds and bills.

(Insert Graph 7)

The 1994 crisis not only exemplifies the systemic risks that commonly arise from the combination of an exchange rate peg and financial liberalisation (Kaminsky et al. 1998); it also demonstrates that central banks, in countries subject to structural inflation, are powerless to prevent foreign capital outflows by means of open market operations. In Graph 3, it can be noticed that from 1988 to 1994, the rate of inflation declined *pari passu*

with the real exchange rate, because the rate of inflation of Mexico's trade partners was even lower; therefore, exchange rate risks increased while inflation was slowing down. If the monetary authority had attempted to set nominal interest rates at the parity level, in order to compensate for the peso appreciation, real interest rates would have soared, and the economic downturn would almost certainly have produced a banking crisis even earlier.

7. Foreign banks penetration, derivatives market development and banking credit decline

In order to support banks recapitalisation, in 1995, the deposit insurance fund (*Fobaproa*) obtained credit from the central bank, and acquired undercapitalised banks' bonds, backed by shares of stock. During the following two years, private banks were allowed to raise capital from domestic and foreign investors, and most of them redeemed their convertible bonds before maturity. At the end of the recapitalisation program, *Fobaproa* sold the remaining shares after redemption to other domestic and foreign financial intermediaries.

In this way, the crisis speeded up foreign banks penetration in the Mexican market, notwithstanding the fact that the North American Free Trade Agreement (NAFTA) conceded protection for 10 years to domestic financial groups.

The market share, in terms of assets, of foreign capital controlled banks rose from 1 per cent in 1994, to 40 per cent in 1999, 53 per cent in 2000, and 90 per cent in 2004 (Macedo 2000, Correa and Maya 2002, Berumen 2004).

The increased participation of foreign institutions, neither has fostered market competition, nor has improved efficiency in resource allocation. On the contrary, market concentration has increased; and banks profitability has been sustained with wider financial margins on shrinking credit volume, as well as with holding of government securities (Rodríguez-Montemayor 2003).

The share of credit in total banking assets decreased from 75 per cent in 1994, before the crisis, to 15 per cent in 2004; and loan rates mark-up over deposit rates increased from 62 per cent before the crisis, to 256 per cent at the end of 2004 (see Graph 8)

(Insert Graph 8)

At the same time, commercial banks' holding of public sector securities has broadened. In March 2004, it accounted for 17 per cent of their assets; and the share of

government non-negotiable securities from the banking bail out represented merely one third of it, whilst government bonds sold to preferential customers in repurchase agreements accounted for more than half of it.

These changes in the structure of banks' balance sheet are associated to market imperfection in the bank deposit market, which was not adequately taken into account when interest rates were liberalised.

Most neoliberal theorists assumed free competition predominated in financial markets, and anticipated that, as interest rates were deregulated, banks would struggle for resources by offering higher deposit rates, thereby increasing institutional savings. Only few of them considered the possibility of oligopolistic competition in banking, and feared liberalisation would result in wider financial margins and lower bank lending. Hence, on these grounds, they recommended that central banks should behave in a discretionary way, and only gradually increase interest rates (Galbis 1981).

None of them anticipated that as deposit rates were liberalized, banks would *reduce* them; and in fact, that is exactly what has happened in the Mexican banking system. High market concentration, foreign banks market penetration, and financial innovations both in payment practices and in risk administration techniques, have enabled financial groups to collude and establish an oligopsonistic bank deposit market.

The privilege exclusively conferred to non-banks for selling government securities in retail markets, during the period in which private banks were expropriated, has also contributed to this phenomenon; after banks were reprivatised and integrated into financial groups, they shared in the monopolistic retail market for government bills, and have hindered interest rate arbitrage in the money market.

As a result of this barrier to competition, bank deposit rates have always been below treasury bill rates of similar maturity. From 1995 onwards, however, this differential has markedly widened (see Graph 9); and in 2004, the risk free asset return was 3 times the interest rate on bank deposits.

(Insert Graph 9)

It is widely admitted that in open financial systems, the price elasticity of credit demand increases, as the largest firms are able to raise funds in the international market (Radecki and Reinhart 1989). By contrast, retail banking services keep some degree of

monopoly power in their jurisdiction, to the extent they reduce firms' and households' transaction costs (Sarr 2000); as a result of this externality, sight deposit demand is less elastic with respect to interest rates. In addition, technical innovations and changes in payment practices, such as plastic money and electronic money transfers, which are carried out through current bank accounts, have also lowered the interest elasticity of deposits demand.

This asymmetry in the elasticities of banking services demands, explain why in open financial systems, bankers' market power manifests in higher financial margins, but not as a result of higher loan rates, but as a consequence of lower deposit rates (Levy and Mántey 2004).

Graph 9 illustrates this phenomenon in Mexico. It shows that since 1995, commercial banks' financial margin has followed an upward trend analogous to the differential between the treasury bill rate and bank deposit rate; while the ratio of the loan rate to the treasury bill rate not only has been more stable, but actually declined from 1.46 in average during the first half of the 1990s, when banks were reprivatized, to 1.19 in average after the 1995 crisis, when foreign banks increased their share in the domestic market.

Oligopsonistic competition in the bank deposit market has four negative consequences, as it enables bankers to exact a risk free differential between government securities yield and the cost of deposits:

- It discourages private capital markets development
- It reduces bank lending, particularly corporate loans to finance production
- It diminishes the effectiveness of open market operations by the monetary authority
- It results in the over-indebtedness of public entities

In financial systems centred on commercial banking, as they are in most countries, capital markets develop as a result of bankers' efforts to match their assets and liabilities maturities, since banks issue bonds in order to finance long term investment projects (Studart 1995). Oligopsonistic banking, in these economies, frustrates capital market development, because bankers lack incentives to raise funds at market interest rates, as they pay low interest rates on sight deposits.

Financial intermediation, therefore, concentrates on the short-term. If financial groups are permitted, and they operate as universal banks, as it has been in Mexico after banks were re-privatised, competition among different financial intermediaries is precluded, and commercial banks decide the conglomerate commercial policy, thereby hindering interest rates arbitrage and long term funding.

Through the last decade, domestic banks' net earnings have been increasingly dependent on the risk free financial margin obtained by investing and dealing in public sector securities. Prudential regulations concerning precautionary reserves on graded credit assets, enforced after the crisis, have further discouraged bank lending; and despite total banking assets having recovered from the downturn, and even increased in size relative to GDP (from 72 per cent in December 1994, to 112 per cent in March 2004), bank credit has steadily declined from 51 per cent of GDP at the end of 1994 to 18 per cent in early 2004 (see Graph 10).

(Insert Graph 10)

As bank lending in real terms has shrunk, its structure has also changed (see Table 1). The share of loans to non-financial economic activities fell from 67 per cent in 1994, to 43 per cent in 2004; while consumer credit rose from 8 to 17 per cent in the same period; and loans to the deposit insurance institution (IPAB) and other entities in charge of managing the banking bail out increased from 2 to 11 per cent, in the same period. These developments indicate bank credit has been increasingly allocated among borrowers whose credit demands are interest inelastic (Toporowski 1993), so that they enable bankers to enlarge the financial margin.

Presently, bank profitability rests on two different components: on the one hand, higher credit risks and wider financial margins on a smaller credit volume; and on the other hand, increasing trade in public sector securities, with a lower but risk free financial margin.

Commercial banks' dealing in public sector bonds has increased sharply in the last decade on account of two types of non-traditional banking activities: one is the repurchase agreements with their preferential customers, by means of which the latter get a slightly higher return on their deposits, by sharing with the bankers part of the bonds yield. The second one is through bank operations in financial derivatives markets.

In 1998, an organized financial derivatives market began to operate in Mexico, as a self-regulated market. Only the eight largest financial groups were authorized to participate as operating agents, and they were also the trustees in the private institution in charge of derivative contracts settlement and liquidation. The same year, the monetary authority conceded private banks permission to negotiate reciprocal credit lines for securities settlement.

From then onwards, banks have been increasingly engaged in risk administration services. Commercial banks asset position in derivative contracts amounted to 13 per cent of total assets in 1994, and in 2004, it was equivalent to 45 percent of bank resources, and 4.9 times the value of outstanding loans.

Operations in derivative markets have been particularly advantageous for the biggest banks for three reasons. Firstly, because on account of their being self-regulated markets, the established yield on the margin that is paid to bank customers is settled in such a way as to exceed the expected cost (for the bank) of the possible occurrence; and also because in oligopolistic banking systems, negotiated yields on the margin leave room for extra profits for the operating bank, since the opportunity cost of funds for bank customers (i.e. the deposit rate) is always lower than the opportunity cost of funds for the banker (i.e. the risk-free asset return).

Secondly, because in operations with financial derivatives, banks do not take credit risks, and therefore they are not compelled to create reserves; hence, these activities involve a more profitable use of resources (Kregel 1998).

Thirdly, because by operating in self-regulated markets, bankers evade harmful changes in monetary policy measures. The largest banks' independence from the monetary authority's sway has been strengthened, as they joined the International Swaps and Derivatives Association, and adopted its contract guidelines for over the counter derivatives trading, in year 2000.

Actually, oligopsony in the bank deposit market, by widening financial margins, reduces the efficacy of central bank interventions through open market operations. In this market structure, it is possible that deposit and lending rates change in opposite direction to the interest rate influenced by the central bank (Rojas and Rodriguez 1999, Kamin et al. 1998).

As oligopolistic commercial banks in deregulated financial systems downgrade monetary intermediation in favour of public sector securities trading, credit rationing intensifies; and firm expansion, contrary to the stated objectives of financial liberalisation, ends up being more dependent on self-finance and trade credit.

In Mexico, this phenomenon has been evident during the last decade. Economic recovery after the 1995 crisis has been supported by credit from sources different from domestic commercial banking, mainly by credit from suppliers and direct foreign loans. In 2004, these alternative lenders provided two thirds of private sector financing, and 74 per cent of corporate credit demand. The credit market survey carried out by the central bank indicates the main reason why firms do not resort to bank credit is that loan rates are too high.

Development banks have been unable to compensate for private bank credit stringency. Even though they remain as government financial agents, in charge of supplying credit to public entities and intermediating loans from multilateral agencies, they have been restricted in the intermediation of domestic savings. Liberalising reforms carried out in the late 1980s and early 1990s, following Washington Consensus guidelines, precluded development banks from accepting deposits and directly allocating their resources; and confined them to providing only second floor banking services to the private sector, as a way to reduce their operational costs (Suarez-Davila 1996, Manrique 2005). Neoliberal politicians assumed these public institutions would raise funds from international financial markets at lower cost than commercial banks, so that they would be able to offer attractive discounting facilities to the latter, in order to induce their lending to priority sectors. In this way, the industrial policy objectives would be fulfilled, while development banks administration would become more efficient, and the asymmetric information problems that up to that time discouraged commercial bank lending to those sectors would gradually disappear (Cotler 2001).

After these reforms, the share of time deposits and notes in development banks' liabilities fell from 78 per cent on average during the first half of the 1980s to 18 per cent at the end of the nineties; and the share of external debts rose from 6 to 65 per cent in the same period.

Once development banks were banned from deposit markets, and commercial banks' oligopsony was strengthened, public securities intermediation became more profitable than lending to priority sectors, regardless of development banks' discounting facilities. In addition, foreign investment in banking lowered international funding costs, so that the relative advantage that development banks previously had vanished; and as commercial banks reduced the credit flow to economic activities, their demand for development bank resources also declined. Similarly, economic policies based upon fiscal restraint have reduced public sector financial requirements. These two factors have accounted for the decay in development banks' influence on economic conditions, ever since they became second floor banking institutions. In 2004, their credit assets in real terms were 25 per cent lower than in 1997, and amounted to only 6 per cent of GDP (Gomez-Ochoa 2005).

8. Private banking oligopsony and public sector over-borrowing

Commercial banking oligopsony not only discourages bank lending to the private sector, but it also retards private capital market development; and as institutional investors develop, and their demand for long-term high-grade financial assets increases, this market imperfection places an additional burden on public finance.

Historically, capital market development in commercial banking centred financial systems has started from government issues of risk free assets, and direct long term debt securities placed by banks, as a means to match the maturity structure of their assets and liabilities (Studart 2000). In Mexico, however, banks have lacked incentives to compete with the government in raising funds from the capital market, on account of deposit market oligopsony, which provides them with abundant cheap short-term resources; and as they have concentrated on short-term lending, the supply of high-grade long-term private securities has remained slender.

By contrast, institutional investors' demand for long-term high-graded securities has been growing fast in the last decade, as a result of financial liberalisation and pension fund privatisation. This exerts continuous upward pressure on government security prices, thereby forcing the monetary authority to intervene through open market government security sales, in order to prevent the fall in interest rates.

In 2000, the central bank began to issue its own bonds for monetary control (Brems); and more recently, it has also intervened by placing the government-backed securities issued by the Institute for Banking Savings Protection (IPAB bonds), the new deposit insurance institution.

During 2004, the share of government and government-backed securities (i.e. Brems and IPAB bonds) in private pension funds was 83 per cent, though they were allowed to invest up to 35 per cent of their portfolio in private sector securities; in insurance companies, the share of public sector securities was 70 per cent; and in the investment funds managed by private banks, it was 68 per cent. The value of government and government-backed tradable securities outstanding, in this year, accounted for 53 per cent of all non-monetary liabilities in the financial system, and it was nearly equivalent to the stock market capitalization (Mántey 2004b).

In view of the fact government operating expenditure has been kept under strict control, and the Treasury has nearly achieved fiscal balance, the funds raised through government securities, and also a part of the IPAB bonds, have been deposited by the government at the central bank. These deposits accounted for two thirds of base money in 2004. In Graph 11, it can be observed that the fiscal support to the central bank, that is the excess of government deposits over central bank credit to the government, has been increasingly negative since the end of the 1980s, and it has been the main determinant of the country's foreign asset reserve dynamics.

(Insert Graph 11)

In fact, the government has become the *issuer of last resort*; and it is involved in a vicious intermediation of savings, which does not contribute to increase productive capacities, but finances foreign volatile financial assets, in the risky monetary policy strategy of sustaining an overvalued exchange rate.

9. Concluding remarks

Mainstream macroeconomic theory assumes free competition predominates in product and factor markets; accordingly, policy recommendations based on it emphasize liberalization of markets as the means to achieve optimum resource allocation. When that assumption is

void, orthodox economic policies may become highly disruptive, and government intervention may be necessary in order to achieve socio-economic goals.

Since the early 1980s, Mexico has embarked on a neoliberal development strategy, which took for granted that domestic financial and real markets operated under free competition. In this paper, we analysed two cases in which this assumption did not hold, and liberalising reforms brought about decidedly detrimental results in terms of Mexico's economic development.

The first case concerned oligopolistic barriers to technology transfer from developed to developing nations, which gives rise to two phenomena that have traditionally constrained income growth in Mexico as well as in other Latin American countries: they have been called *structural inflation* and *structural trade imbalance*.

The second case referred to oligopolistic competition in commercial banking, where payment system externalities, and financial innovations, generate oligopsonistic deposit markets.

In fact, structural inflation, structural trade imbalance, and deposit banking oligopsony, have accounted for the most damaging effects on the development strategy implemented by the Mexican government since the early 1980s, following the Washington Consensus guidelines.

In opposition to conventional beliefs, structural inflation and structural trade imbalance preclude balance of payments stabilization by means of exchange rate adjustment, because currency devaluations produce a magnified response in inflation, and imports demand is price inelastic. For this reason, once foreign trade was liberalised, Mexican policy makers have been prone to slow down economic activity and overvalue the currency, in order to curb inflation and stabilize the trade balance. This policy mix, however, prevents a long-run solution to those two main constraints to national development, which can only be removed by speeding up the industrialisation process.

Recession, as a stabilization policy alternative, is untenable when the exchange rate anchor depends on foreign capital inflow, because it quickly deteriorates the fiscal balance and slows down stock market capitalisation. Experience has taught emerging countries that as these two fundamental parameters worsen, short-term capital flow reversal is inevitable, and the dangers of a twin exchange rate and banking crises arise.

In addition, growth restraint, in economies subject to structural inflation and structural trade imbalance, results in heavy downward pressure on labour incomes, because it induces producers to enlarge their mark-ups, even as rising unemployment weakens labourers bargaining power. When tight economic policies are coupled with currency overvaluation, as frequently happens in these types of economies, producers largely resort to workers dismissal and real wage reduction to withstand competition.

Oligopolistic competition in commercial banking, on the other hand, brings about harmful effects on private capital market development and government indebtedness, as financial markets are deregulated and opened to foreign investors. In this market structure, interest rate liberalisation causes financial margins to widen, not because loan rates increase, but because deposit interest rates fall below the rate of return on the risk free financial asset (*i.e.*, treasury bills).

As financial conglomerates are able to obtain a risk free financial margin in government securities trading, other market distortions follow, which discourage commercial bank lending. When interest rate liberalisation is coupled with bank credit deregulation, credit to production shrinks, and bank resources are increasingly allocated among interest inelastic borrowers (e.g. in consumption loans).

In this way, imperfect competition in commercial banking frustrates financial liberalisation goals: firms 'expansion remains constrained by retained earnings, as in financially repressed economies; and the propensity to save declines.

Deposit market oligopsony not only discourages bank lending, but it also retards private capital development, since bank centred financial conglomerates lack incentives to issue long-term direct debts that compete with government bonds.

As institutional investors develop, the demand for government securities increases, which exerts downward pressure on interest rates. In these circumstances, the central bank that has given up direct liquidity control policy instruments, and relies on open market operations as the main tool of monetary policy, becomes dependent on government over-borrowing to regulate the rate of interest.

Monetary policy implemented through open market operations, in oligopolistic banking markets, becomes inefficient, because banks' financial margins are so large, that the plausible range of variation in central bank rates does not greatly affect financial groups

profitability, and therefore their lending decisions. In addition, banks preference for short-term reserve assets, as a result of their competitive advantage in the deposit market, reduces the scope of monetary policy conducted through open market operations, since interest rates variations do not greatly influence the market value of banks' financial assets. Finally, when bank credit stringency promotes trade credit expansion and foreign corporate financing, and these alternative sources of finance grow to be sizeable, monetary policy through open market operations becomes powerless to influence economic activity, and restrictive economic policies must be implemented by means of government expenditure cuts.

As a matter of fact, in emerging economies that exhibit structural inflation, and choose to anchor the exchange rate, monetary policy implemented through open market operations cannot prevent foreign capital flow reversals; this is so, because inflation declines as the currency overvalues, so that the central bank can only set the parity rate of interest at the cost of deep recession.

Neoliberal writers assumed imperfect competition in emerging financial markets would be eliminated by opening them to foreign financial intermediaries. In Mexico, however, the increased participation of foreign financial institutions has neither fostered market competition, nor improved efficiency in resource allocation. Contrariwise, market concentration has increased, and as self-regulated derivative markets were encouraged, highly profitable innovative risk administration operations have further discouraged bank lending and stimulated government securities trading.

Actually, in deregulated economies, foreign investment in financial services poses new obstacles to national development, because banks' freedom in credit allocation may cause undesirable concentration through hostile take-overs of domestic small firms (Singh and Weisse 1998, Vidal 2002, Giron 2002), or it may hinder domestic industry integration, as foreign banks allocate credit among their affiliated firms. In Mexico, these threats are evident, as the banking institutions in charge of the private pension fund management have been authorised to invest part of their reserves in foreign stocks.

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Chronology of Liberalising Financial Reforms (1973 – 2003)

1973

Financial institutions are allowed to integrate in financial groups

1976

Formerly specialised banks are authorised to operate as multiple banks

1977-1978

The government begins to issue Treasury bills, with the aim to regulate liquidity through open market operations.

1979

Interest rates on central bank credit start being determined through auction markets.

1981

Auction markets are also established to set interest rates on central bank deposits.

1982

Commercial banks are nationalised, and the government takes responsibility for their foreign debts. Private financial groups are allowed to re-structure around security houses.

Interest rates on Treasury bills begin to be determined in auction markets.

Various development trust funds are liquidated in order to slim public administration.

The number of commercial banks falls from 60 to 29, as a result of mergers and liquidations.

1984

A new central bank law abolishes previous legal reserve regulations, and replaces them by portfolio guidelines which initially affect 35 per cent of bank resources, but would gradually diminish to end in a 10 per cent liquidity ratio. The law also sets a limit central bank credit to the government equivalent to 1 per cent of government budgetary income.

Security houses are authorised to manage private investment funds, while nationalised banks are precluded to offer this service.

1986

Interest rates on development bank deposits and bank acceptances are liberalised.

1987

Nationalised banks are authorized to manage security investment trust funds.

Income tax law is reformed, and interest payment deduction is limited, in order to encourage firms to get finance through new stock issues.

The formerly public entity in charge of securities deposit, settlement and liquidation, is privatised.

1988

Interest rates on any kind of bank deposits are liberalised.

1989

The securities market law is reformed, in order to allow foreign investors to trade in domestic stocks and to invest in private investment funds. Nevertheless, the law precludes their participation in security houses capital.

1990

The government begins commercial banks re-privatisation. Foreign capital is permitted up to 30 per cent of an institution's net worth.

Commercial banks are allowed to pay interest on check deposits.

A new law to regulate financial conglomerates removes banks prohibition to integrate financial groups.

The securities market law is reformed to allow foreign investment in security houses up to 30 per cent of their net worth, and also to permit foreign investors to trade in government securities.

1991

The remaining 10 per cent liquidity coefficient imposed on banks is eliminated, and from then on monetary policy comes to be conducted mainly through open market operations.

New prudential regulations are enforced, and banks minimum capitalisation standards are imposed, in line with Basle Agreements.

1992

The government initiates the transformation of the public pay-as-you-go pension fund system into a private individual capitalisation scheme.

North American Free Trade Agreement (NAFTA) negotiations conclude, and the government accepts foreign financial intermediaries subsidiaries up to a market share of 25 per cent of banking assets and 30 per cent of security houses assets in 10 years.

1993

New foreign investment law, abrogates the maximum limit up to 49 per cent of foreign capital in domestic firms.

Restrictions on insurance companies portfolio investments are removed, and they are allowed to possess securities issued by other members of their financial group.

1994

NAFTA is put into effect.

New central bank law confers it independence from the government, and commits it to achieve price stability as its prime objective.

1995

The central bank authorizes banking institutions and security houses to carry out securities borrowing and lending operations.

The central bank is empowered to issue bonds for monetary regulation purposes (*Brems*).

1996

A new law establishes the institutions that will manage the private pension system, and allows them to be integrated to private financial groups.

1998

The largest financial groups are authorized to carry out operations with financial derivatives. The Mexican derivatives market is founded as a self-regulated private institution.

Banks get permission to provide each other credit facilities for securities compensation.

2000

Domestic financial groups adhere to the International Swaps and Derivative Association guidelines for O-T-C derivatives trading.

2001

Banks are allowed to lend in foreign currencies at interest rates determined by foreign authorities.

2003

The monetary authority establishes a mechanism to channel extraordinary oil export incomes to the exchange market.

