CHAPTER 1

Euromarkets and Debt Crisis

The international debt crisis of the 1980s was the first global financial meltdown of the postwar era and represented a new wave of sovereign debt crises since the Great Depression of the 1930s. After the declaration of the moratorium on external debt principal payments by the Mexican government in August 1982, an increasing number of heavily indebted countries in the developing world come also under debt payment difficulties following the same path. The scale and extent of the defaults were a major threat for the international financial system because the amount of external debt in troubles represented several times the capital base of the world's largest banks. The outbreak of the crisis brought into an end the foreign bank lending boom to developing countries, particularly to Latin America, that had developed within the Euromarkets after the rise of international liquidity that followed the oil shock of 1973.

In the literature on the foreign debt boom leading to the crash of 1982, commercial banks from developed countries have attracted the lion's share of scholarly attention.[1] There are good reasons for their prominence since major US and European banks were the main depository institutions of the large surpluses of oil-exporting countries, and they were the largest international lenders to the developing world.

[1]For two classic accounts of the crisis, see William R. Cline, *International Debt Reexamined* (Washington, DC, 1995); Robert Devlin, *Debt and Crisis in Latin America: The Supply Side of the Story* (Princeton, 1989).

S. Alvarez, *Mexican Banks and Foreign Finance*,
https://doi.org/10.1007/978-3-030-15440-0_1

Also because, working together with them, a great number of other industrial countries' banks operating in London or connected to the world capital markets from their home countries were contributing to sovereign lending and taking part of syndicated credit deals through the Euromarkets. The banking industry of developed countries accounted indeed for the large majority of the international financial operations and capital flows, and they were in possession of the bulk of developing countries' external debt by the time of the outbreak of the crisis.

However, international finance and Euromarket activity were not limited to financial institutions from the industrial world. A closer look at the members of some syndicated lending operations reveals the presence of financial institutions from developing countries as well. In the case of Latin America, as this chapter shows, the most important banks of the region, notably from Brazil, Mexico and Argentina, were also involved with foreign finance and Euromarket operations. With a physical presence in the main world financial centers of the time, as shareholders of consortium banks or through their own agencies and branches, these banks gained access to the Eurocurrency interbank market and raise funds that they then used to finance the expansion of their international businesses. Like their counterparts from developed countries, Latin American banks were also participating in the so-called petrodollar recycling process and sovereign lending operations to their home countries.

There is little doubt that the volume of international lending of Latin American institutions was meager when compared to that of US, European or Japanese banks and that the amount of capital that they controlled represented only a minority of the Euromarkets and world capital flows. Neither were Latin American banks the main suppliers of funds to their home government or other public or private companies borrowing abroad. Nevertheless, by intermediating foreign capital with domestic borrowers these banks were intrinsically intertwined with the external indebtedness process of their countries, which means not only that they were involved in the creation of the crisis but also exposed to it. Moreover, because these banks were usually large domestic financial actors and the volume of international operations represented a significant part of the banking system, their potential problems represented a systemic threat for the domestic economies.

Mexico and the Global Crisis

On Friday August 20, 1982, in a meeting held with foreign bankers at the FRBNY, Mexican officials announced to the international financial community that they could no longer service its external debt. During previous weeks, Mexico's economic and financial authorities had already been in contact with their US counterparts regarding the insufficient reserves of the country to meet its external bank obligations. The repayment difficulties of Mexico were a source of considerable concern in the USA because a default could threaten the capital positions of the most prominent banks of the country.[2] To cope with the crisis, the US Treasury and Federal Reserve provided emergency financial assistance at the same time that they organized a collective response together with the International Monetary Fund (IMF), creditor governments and international banks as the situation went beyond their control and managing capacities and had the potential to hurt the financial stability of other industrial countries as well.

The moratorium declared by the Mexican government sent shock waves through the international financial system and unleashed crises at an international level. "Although Mexico," as IMF historian James Boughton has remarked, "was not the first indebted economy to erupt, nor the largest, nor the one with the most serious economic or financial problems, the 1982 Mexican crisis was the one that alerted the IMF and the world to the possibility of a systemic collapse."[3] Soon after the crisis erupted, Brazil and Argentina, the other two major international debtor countries back then, also approached their international creditors asking for refinancing. One by one, developing countries entered into multilateral debt renegotiations and, by the beginning of 1983, virtually all Latin American countries, with the exception of Colombia, were in discussions with the IMF, developed countries' governments, and private creditor banks to negotiate adjustment and rescheduling programs. As of November 1983, the IMF reported that 20 cases of debt restructuring by developing countries had been completed and 7 were still under negotiation, and Latin America accounted for 12 and 4 of these, respectively.[4]

[2] United States General Accounting Office, *Financial Crisis Management: Four Financial Crises in the 1980s*, May 1997, Chapter 2, 19–34.

[3] James Boughton, *Silent Revolution: The International Monetary Fund, 1979–1989* (Washington, DC, 2001), 281.

[4] IMF SM/83/227, Table 9, 38 and Table 1 in the Appendix.

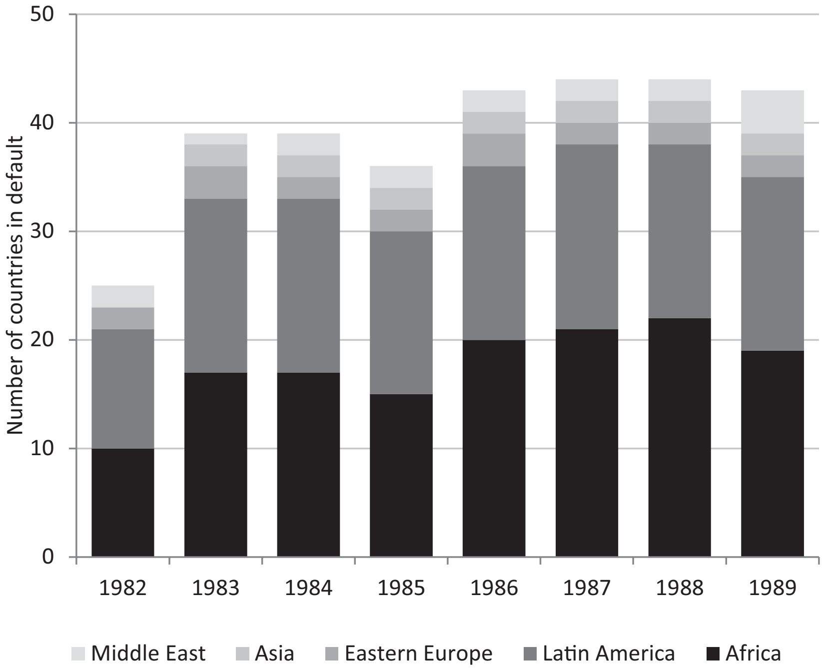

Fig. 1.1 Defaults in the developing world, 1982–1989 (*Source* Standard and Poor's [see text])

The international debt crisis of the 1980s was global, but its epicenter was in Latin America and Mexico was the country at the heart of the storm. Figure 1.1 illustrates the extent of external debt payment problems in the developing world based on the country default database of Standard and Poor's.[5] The number of countries in default on foreign currency bonds or bank debt went from 25 in 1982 to 39 in 1983 and over 43 in 1986. Latin America and Africa were the most affected regions, accounting for about 85% of such defaults, with developing economies in the Middle East, Asia and Eastern Europe making up the remaining 15%. The great number of debtor governments that approached the Fund is also an indicator of the magnitude of

[5] Standard and Poor's, *Rating Performance 2002: Default, Transition, Recovery and Spreads*, February 2003.

the problem, with almost all defaulting countries subscribing to an IMF agreement and adjustment program at some point during the crisis. In Latin America, the major economies like Mexico, Brazil and Argentina were in default for most of the decade and subscribed to several IMF or debt rescheduling agreements during this period.[6]

The importance and relevance of Latin America not only lay on the scope and intensity of its crises, but, most importantly, in the fact that the bulk of international debt was concentrated there. Table 1.1 shows the level of total outstanding external debt for the largest borrowing countries of the developing world as registered by the World Bank and the Bank for International Settlements (BIS). As of 1982, Brazil, Mexico, Argentina and Venezuela were the top four debtors in the developing world, with foreign indebtedness levels considerably higher than the ones observed for other indebted countries in Eastern Europe, Africa, Asia and the Middle East. In the case of Brazil, for instance, its external debt was about 3.5 times higher than Egypt's, which was the biggest non-Latin American defaulter. In comparison with African countries, which was the other region most impacted by debt crises, Brazilian debt represented 7.6 times that of Morocco, the largest defaulting economy of the region.

Along with the highest levels of total foreign debt, Latin America was also the region holding the bulk of commercial bank claims. In June 1982, before the outbreak of crisis, commercial banks from the G10 and Switzerland reported total outstanding claims on Latin American countries to be US$191.5 billion, an amount representing as much as 58.7% of their assets with developing countries. Mexico, in particular, was the country where banks' exposure was the largest and along with Brazil, Venezuela and Argentina, accounted for almost 85% of their Latin American assets. The figures of Table 1.1 make evident the extent to which Africa was much less of a problem than Latin America for creditor banks since, although largely affected by defaults, it represented only 8.7% of the assets of developed countries' banks. After Latin America, the regions where banks' exposure was the highest were Eastern Europe and Asia, but the volumes of assets were considerably lower, and defaults and debt crises were much less frequent there.

[6] Devlin, *Debt and Crisis in Latin America*, 183–90; Robert Devlin and Ricardo Ffrench-Davis, 'The Great Latin America Debt Crisis: A Decade of Asymmetric Adjustment', *Revista de Economía Política* 15 (1995), 117–42.

Table 1.1 External borrowing of the largest developing debtor countries by region

	Total External debt			*Years in Default 1982–89*	*Total Ext. Bank Debt*[b]	
	1972	*1982*	*Annual growth (%)*		*June 1982*	
	US$ Mil.	*US$ Mil.*			*US$ Mil.*	*Share (%)*
Latin America					**191,490**	**58.7**
Brazil	11,864	94,429	23.1	1983–89	50,460	15.5
Mexico	8352	86,275	26.3	1982–89	62,405	19.1
Argentina	6894	43,787	20.3	1982–89	23,627	7.2
Venezuela	2614	32,182	28.5	1983–88	22,805	7.0
Chile	2963	13,959	16.8	1983–89	10,888	3.3
Peru	3585	10,871	11.7	1983–89	5134	1.6
Colombia	2965	10,520	13.5		5002	1.5
Ecuador	538	7808	30.7	1982–89	4343	1.3
Uruguay	440	1907	15.8	1983–85, 1987	1045	0.3
Eastern Europe					**43,311**	**13.3**
Yugoslavia	3438	16,077	16.7	1983–89	9243	2.8
Hungary[a]	n.a.	6739			6777	2.1
Greece[a]	1339	6719	17.5		8795	2.7
Poland	n.a.	n.a.		1982–89	13,643	4.2
Romania	n.a.	n.a.		1982–83, 1986	4375	1.3
Asia					**40,522**	**12.4**
India	10,029	27,810	10.7		1341	0.4
Indonesia	5863	25,133	15.7		4963	1.5
Philippines	2671	24,413	24.8	1983–89	8125	2.5
Korea	3088	21,499	21.4		16,591	5.1
Malaysia	940	13,354	30.4		3777	1.2
Thailand	1229	12,235	25.8		2826	0.9
Pakistan	4055	11,527	11.0		759	0.2
Africa					**28,527**	**8.7**
Algeria	1550	17,639	27.5		6465	2.0
Morocco	1186	12,401	26.5	1983, 1986–89	3352	1.0
Nigeria	1082	11,992	27.2	1982–89	5732	1.8
Ivory Coast	580	8961	31.5	1983–89	2929	0.9
Sudan	452	7169	31.8	1982–89	959	0.3
Tanzania	1396	6130	15.9	1984–89	257	0.1
Zaire[a]	573	4049	21.6	1982–89	984	0.3
Tunisia	753	3777	17.5	1982	933	0.3
Middle East					**22,245**	**6.8**
Egypt	1952	27,323	30.2	1984	4726	1.4

(continued)

Table 1.1 (continued)

	Total External debt			*Years in Default 1982–89*	*Total Ext. Bank Debt[b]*	
	1972	*1982*	*Annual growth (%)*		*June 1982*	
	US$ Mil.	*US$ Mil.*			*US$ Mil.*	*Share (%)*
Turkey	3555	19,716	18.7	1982	2912	0.9
Israel[a]	3585	14,900	15.3	1989	5832	1.8
Syria[a]	337	2616	22.8		595	0.2
Jordan[a]	171	1685	25.7	1989	516	0.2

Note 'n.a.' indicates not available, '*Mil.*' indicates million
Source Total external debt: World Bank's World Development Indicators; Total external bank debt: BIS, International Banking Statistics, 1977–1991, April 1993; Years in default: Standard and Poor's (see Fig. 1.1)
[a]Total External debt includes only Public/Public guaranted external debt
[b]Total banks claims of BIS reporting countries

The large indebtedness level of developing countries was the result of a vigorous borrowing–lending process that took place during the decade preceding the crisis. Between 1972 and 1982, as exhibited in Table 1.1, heavily indebted defaulting countries increased their external debt at average annual rates ranging from 11.7 to 31.8%. The provision of foreign financing was essentially done through syndicated or direct international loans granted by private commercial banks operating in the Euromarkets. After the oil shock of 1973, the Euromarkets became the dominant institutional mechanism for recycling the oil-exporting countries' large revenues, which were deposited in the international banking system, to the private and public sectors of borrowing countries.[7] As a result of this petrodollar recycling process, commercial banks evolved into the most important source of international financing and the main creditors of developing countries, surpassing the prior predominant positions of international organizations and governments from the industrial world.

Mexico, because of its large oil wealth, became a preferred destination for international lenders, and, along with other countries in the region, it attracted the lion's share of Eurolending. By 1981, Latin America

[7] Philip A. Wellons, *Borrowing by Developing Countries on the Euro-Currency Market* (Paris, 1977).

had absorbed almost two-thirds of the loans extended to the developing world, and US banks were prominent suppliers of portfolio flows to the region.[8] For Mexico, Eurocredits proved to be a better source of funds than Eurobonds and other financial instruments available in the international capital markets. As Mexican scholar Sergio Negrete Cárdenas notes, as early as 1974 and "in just six months, with two syndicated loans, Mexico had borrowed virtually the same nominal amount accumulated through bond offerings in the 1963–72 decade."[9] As of 1982, bank lending represented about 90% of Mexico's total outstanding liabilities to non-official creditors, while the balance consisted of publicly issued bonds and other credit facilities from private non-banking institutions.

Bank International Lending

The expansive phase of the 1982 debt cycle was funded upon the enthusiastic wave of foreign bank loans to developing countries that took place during the years preceding the crisis. After several decades of operations largely concentrated on retail banking inside national boundaries, US and European banks started to develop businesses abroad and to continuously expand their international financial activities during the late 1960s and early 1970s.[10] The internationalization of the banking industry and the re-opening of the international capital markets that followed the end of Bretton Woods were accompanied by an increasing penetration in the developing world and a boom of cross-border bank lending. Between 1973 and 1979, total outstanding bank claims on developing countries grew at an estimated average annual rate of 35.8%, slowing down to 24% in the 1979–1980 period, 18% in 1981 and 7% in 1982, the year in which the crisis started.[11]

The Euromarkets were the institutional platform from where private commercial banks built up their international businesses and lending

[8] Barbara Stallings, *Banker to the Third World: U.S. Portfolio Investment in Latin America, 1900–1986* (Berkeley, 1987), 94–104.

[9] Sergio Negrete Cárdenas, 'Mexican Debt Crises: A New Approach to Their Genesis and Resolution', Unpublished PhD diss., University of Essex, 1999, 154.

[10] Carlo E. Altamura, *European Banks and the Rise of International Finance: The Post-Bretton Woods Era* (London, 2017).

[11] Jeffrey D. Sachs, 'Introduction', in Jeffrey D. Sachs (Ed.), *Developing Country Debt and the World Economy* (Chicago, 1989), 1–34.

activities. Initially originated as a pool of dollars held outside the US banking system in the postwar period—the so-called Eurodollars, it was then expanded by European countries during the 1960s and 1970s, primarily in London, becoming a much larger and active market of dollar-denominated foreign currency deposits and Eurocurrency operations. While in the early times these operations consisted essentially of placing or borrowing funds in the Eurocurrency interbank markets, the banks progressively enlarged their business through the creation of new instruments, notably the Eurobonds and Euroloans, intended to finance non-bank customers. Particularly important was the syndicated Euroloan market, whose access was largely restricted to all but the most creditworthy clients prior to the oil shock in 1973, but went on to become the main lending instrument for public and private sector borrowers from developing countries.[12]

The historical rise in oil prices was a decisive factor in the evolution of foreign lending to developing countries in the lead-up to the 1982 debt crisis. Eurocurrency deposits, which had grown almost threefold over the 1970–1973 period, became the largest single depository for the substantial trade surplus of oil-exporting countries from 1974 on.[13] As large amounts of US dollar liquidity streamed into international private banks in London, they became available to the rest of the banking system through the Eurocurrency wholesale interbank markets, providing the banks with considerable new loanable funds. A mechanism, known as the petrodollar recycling process, was set into motion, where dollars flowing to Organization of Petroleum Exporting Countries (OPEC) as result of the increase in oil exports were recycled and flowed back to the rest of the world. Within the international banking and financial system, the petrodollar surpluses boosted the syndicated Eurocredit market, which eventually overcame the Eurobonds and other traditional types of private finance as source of financing in the international capital markets.

The counterpart to the rush of international bank lending was a large-scale demand for external finance. At the aggregate level, the increasing

[12] Miguel S. Wionczek, 'The LDC External Debt and the Euromarkets: The Impressive Record and the Uncertain Future', *World Development* 7 (1979), 175–87.

[13] Daniel R. Kane, *The Eurodollar Market and the Years of Crisis* (London, 1983), 110–11; Richard Roberts, *Take Your Partners: Orion, the Consortium Banks and the Transformation of the Euromarkets* (London, 2001), 94.

surpluses accumulated by oil-exporting countries were, after all, a mirror image of the deteriorating current account of oil importers. This included both industrial countries, which consumed the largest share of global energy production, and developing economies, which had structurally negative trade balances and were dependent on imported oil for growth. Within this context, the international banking sector had the resources and was particularly well situated to intermediate financial surpluses and deficits between countries on a worldwide scale. To the extent that the private banking institutions allocated international liquidity to countries where foreign capital was needed, as Benjamin Cohen and Fabio Basagni have argued, they helped to accommodate the shift of global external imbalances provoked by the rise in energy costs.[14]

The reconfiguration of world trade flows and balances was accompanied by a change in the balance of payment financing patterns in the developing world. In contrast to industrial countries, which mainly attempted to adjust oil-related deficits through an expansion of exports, developing countries increasingly relied on external borrowing based on recycled petrodollars, primarily bank lending, to bridge the wider financial gap. There were, however, important differences in the development of foreign indebtedness across regional groupings of developing countries, with middle-income economies borrowing relatively more from private financial markets than their low-income counterparts. In Africa, for instance, where external debt expanded more rapidly than in any other region, foreign borrowing relied almost exclusively on official sources of funds. While official creditors accounted for as much as 85% of external financing of low-income oil-importing countries between 1973 and 1982, the correspondent share for higher income countries was only 25%.[15]

The escalation of commercial bank indebtedness in the developing world was, therefore, a predominantly middle-income economy phenomenon. Among the largest borrowers in this group, as classified by the World Bank, were oil exporters, such as Mexico, Venezuela and Algeria, and upper-middle-income countries like Brazil, Spain, Argentina, Yugoslavia and South Korea.[16] By the beginning of the 1980s, these

[14] Benjamin J. Cohen and Fabio Basagni, *Banks and the Balance of Payments: Private Lending in the International Adjustment Process* (London, 1981).

[15] Jeffrey D. Sachs, 'LDC Debt in the 1980s: Risk and Reforms', NBER Working Paper Series No. 861 (1982), 13.

[16] World Bank, *World Development Report*, August 1981, 49–63.

eight countries accounted for about two-thirds of total outstanding bank debt. Although with different backgrounds, a common feature among them was that they had all participated in the postwar economic boom and were perceived to be relatively prosperous emerging economies at the time of the oil shock, qualifying for bank loans according to the usual country risk criteria.[17] In contrast, access to the Euroloan market by lower-income economies was much more limited, and they could only borrow meager amounts from international private commercial banks.

The increased participation of middle-income countries in bank lending came along with a growing concentration on Latin American borrowers. The period from the end of World War II to 1980 "was marked by the highest economic growth rates [that had been] attained by Latin America in its entire history."[18] Economic performance during the years between 1966 and 1973 was particularly outstanding also when compared to other developing countries in expansion such as East Asia, whose weighted average annual growth rate was lower than the levels attained in Latin America.[19] In addition to strong economic growth, Latin American economies had displayed an improvement in the purchasing power of their exports, along with greater diversification in the commodities exported and destination markets for their products. Thus, by the time of the first oil shock, Latin American countries had positioned themselves as a preferred place where to invest banks' increasing loan funds: They were creditworthy and considered good borrowers in the private international capital markets.

Lending to Latin America was attractive to the banks, but also appealing to industrial countries policymakers seeking to ease the impact of oil shocks. Faced with the big balance-of-trade deficits of the mid-1970s, as Philip Wellons has alleged, the governments of major industrial countries sought to expand exports to developing countries, and Latin America was a good market.[20] As these economies underwent industrialization processes, they became more reliant on capital goods and equipment

[17] Irving S. Friedman, *The World Debt Dilemma: Managing Country Risk* (Washington, DC, 1983).

[18] Luis Bértola and José Antonio Ocampo, *The Economic Development of Latin America Since Independence* (London, 2012), 139.

[19] See Barry J. Eichengreen and Albert Fishlow, 'Contending with Capital Flows: What Is Different About the 1990s?', in Miles Kahler (Ed.), *Capital Flows and Financial Crises* (New York, 1996), 23–55.

[20] Philip A. Wellons, *Passing the Buck: Banks, Governments, and Third World Debt* (Boston, 1987).

from industrial countries. Imports of goods and services were also increasing as a consequence of Latin American countries' high rates of economic growth, their population explosion and the rapid urbanization process they underwent. In such a context, the multiplying effects of trade and investment projects financing on industrial countries' exports to the region revealed significant.[21]

Latin American Banking Presence

An outstanding, though largely neglected, feature of the lending boom to Latin America during the decade leading up to the 1982 crisis was the participation of domestic commercial banks in the external indebtedness process of the region. In the case of Mexico, for instance, José Manuel Quijano has pointed out that Mexican banks took part in approximately a third of the total credit raised by the country's public and private sector borrowers in the syndicated Euroloan markets between 1974 and 1978.[22] Likewise, Brazilian banks led eight syndicated loans to Brazil and participated in another 29 between October 1978 and December 1979, of which 20 went to home country borrowers while the remainder were mainly granted to other Latin American countries. Although to a much lesser extent, Argentine banks were also involved in the Euromarkets and participated in international lending, as did banks from Venezuela and other smaller Latin American countries as Colombia, Chile and Peru.

The first steps of Latin American banks in international lending and the world capital markets were done through their participation as shareholders of London-based consortium banks in the early 1970s. Consortium banks—also called Eurobanks—as the Bank of England portrayed them, were banks "owned by other banks but in which no one bank has more than 50% ownership and in which at least one shareholder is an overseas bank."[23] These institutions were, therefore, independent

[21] In this regard, some scholars have argued that the boom in international lending and borrowing by developing countries was actually encouraged by industrial country governments. See, for instance, Ethan B. Kapstein, *Governing the Global Economy: International Finance and the State* (Cambridge, 1994); Eric Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Ithaca, 1996).

[22] José M. Quijano, *México: Estado y Banca Privada* (Mexico City, 1987), 241–58.

[23] 'Consortium Banks on Course', *The Banker*, February 1976, 167.

banks collectively owned by several different banks, mainly established in London and conceived for conducting Eurocurrency operations in any of its forms. The first of its type was the Midland and International Banks (MAIBL), established in 1964, but many others were created in the upcoming years as part of a process that went hand in hand with the development of the Euromarkets. As the size of the Euromarkets grew exponentially in the wake of the oil crisis of 1973, the number and the scale of operations of consortium banks in London also surged.[24]

During the heydays of the 1970s and 1980s, when the Eurocurrency markets experienced its most dynamic expansion, virtually every major international bank participated in at least one consortium bank. But their ownership was not limited to the world's largest international banks, and it often included small banks from many countries or regions that sought to combine their resources and get involved in international finance. This group of London-based international consortium banks included a large variety of institutions which focused on a diversity of businesses ranging from short-term trade finance to longer-term bonds and credits to multinationals and foreign governments all around the world or from specific geographical areas or industries. As they expanded, consortium banks became active players in the development of international banking, with especial participation in syndicated deals and direct sovereign lending to developing countries.

Table 1.2 provides information on the ownership composition of the consortium banks with Latin American partnership operating in London during this period. Between 1972 and 1974, four of such banks were created with the participation of Latin American shareholders. The involvement of Latin American banks in consortium banking was part of a trend among a handful of developing country financial institutions that got involved in the international financial community and the Euromarkets at that time. As reported in the financial magazine *The Banker*, client nations of the international money and capital markets had been increasingly promoting, through government-controlled domestic banks or private sector banks, the creation in London of consortium banks, in partnership with European and North American banks, specialized in international banking to local customers.[25] Thus, in addition to

[24] Roberts, *Take Your Partners.*

[25] 'Consortium Banks at the Crossroads', *The Banker*, November 1977, 115–19.

Table 1.2 London-based Latin American consortium banks

	Founded	*Founder Banks*	
		Latin America	*Other*
European Brazilian Bank	1972	Banco do Brasil (31.9%)	Deutche Bank (13.7%), UBS (13.7%), Dai-Ichi Kangyo Bank (8.8%)
Libra Bank	1972	Banco Itau (8%), Bancomer (8%)	Chase (23.6%), Mitsubishi Bank (10.6%), Royal Bank of Canada (10.6%), Westdeutsche Landesbank (10.6%), Credito Italiano (7.1%), National Westminster (5%), Swiss Bank Corporation (10.6%) Espirito Santo (5.9%)
International Mexican Bank	1974	Banamex (38%)	Inlat (13%), Bank of America (20%), Paribas, Cai-Ichi Kangyo, Deutsche Bank and UBS (7.25% each)
Euro-Latinamerican Bank	1974	Banca Serfin, Banco de Colombia, Banco de la Nacion, Banco de la Nacion Argentina, Banco de la Republica Oriental del Uruguay, Banco del Estado de Chile, Banco do Brasil, Banco Industrial de Venezuela, Banco de Pichincha, Banco Mercantil de Sao Paulo (each less than 6%)	Algemene Bank, Banca Naziolale del Lavoro, Banque Bruxelles Lambert, Banque Nationale de Paris, Barclays Bank International, Bayerische Hypotheken, Dresner Bank, Osterreichische Landerbank, Banco Central, UBS, Deutsche Sudamerikanische Bank (each less than 5%)

Source Richard Roberts, *Take Your Partners: Orion, the Consortium Banks and the Transformation of the Euromarkets* (London, 2001)

those owned by large international banks, there were a significant number of other consortium banks that had participation of banks from borrowing countries themselves.

Among Latin American consortium banks, the Euro-Latin American Bank, also known as the Eulabank, was the largest with assets of

£1518.2 million in 1982. It was 50% European and the other 50% belonged to 10 Latin American banks from nine different countries, to which Banco del Estado de Bolivia would be added in 1979. It was founded to strengthen the economic ties between Latin America and Europe, and its main focus was on medium- and long-term Eurocurrency loans, project finance and Latin American trade finance. The other three Latin American consortium banks were the European Brazilian Bank (Eurobraz), created under the initiative of and majority owned by Banco do Brasil with 31.9% of the shares, the Libra Bank, of which Brazil Banco Itaú and Mexico Bancomer owned 8% each, and the International Mexican Bank (Intermex), which was majority owned by Banamex with 38% of the shares. The function of these banks, as Philip Wellons explained, was "to act as a go-between for domestic borrowers, including their home office, and to raise money (…) in world markets for their home countries."[26]

Along with these institutions, Latin American banks started also to open their own international banking offices. Between 1973 and 1982, as exhibited in Table 1.3, the number of Latin American branches and agencies in London increased from six to 18, with the majority of them created after 1977. In terms of nationality, while in 1973 only four Latin American countries—Argentina, Brazil, Mexico and Chile—had banking representation in London, by 1982 the number had increased to nine. Similarly, during this period, Latin American banks also opened branches and agencies in the USA, where their expansion was even more dramatic. While in 1973 there were only seven banking offices of Latin American banks in the USA—5 of those being Brazilian, the number jumped to 48 by the end of 1982. Like in London, the opening of US agencies and branches by Latin American banks was largely concentrated in the 1977 to 1982 period, and New York was the main destination.

As in London, the USA also experienced outstanding growth in its foreign banking community in the 1970s.[27] The abolition of the Interest Equalization Tax, along with the expiration of exchange controls in January 1974, made the US capital market once again relevant for

[26] Wellons, *Borrowing by Developing Countries*, 77.

[27] See United States General Accounting Office, *Considerable Increase in Foreign Banking in the USA Since 1972*, August 1979; Henry S. Terrell and Sydney J. Key, 'The Growth of Foreign Banking in the United States: An Analytical Survey', *Federal Reserve Bank of Boston* 18 (1977), 54–90.

Table 1.3 Number of foreign agencies and branches of Latin American banks

	London			*United States*		
	1973	*1977*	*1982*	*1973*	*1977*	*1982*
Latin America	**6**	**9**	**18**	**7**	**16**	**57**
Argentina	2	2	2	1	1	8
Brazil	2	4	6	5	9	27
Chile	1	1	1	0	0	1
Colombia	0	0	2	0	1	3
Mexico	1	1	4	1	3	10
Peru	0	0	1	0	0	0
Uruguay	0	0	1	0	0	1
Venezuela	0	1	1	0	2	5
Panama	0	0	0	0	0	1
Paraguay	0	0	0	0	0	1

Source London: *The Banker* magazine (several issues); USA: FFIEC 002 Call Reports

foreign borrowers and international banks. Apart from New York, the London's rival international financial center, California and Chicago also welcomed an increasing number of foreign banks, though on a much smaller scale. In 1980, foreign banking assets in New York accounted for approximately 70% of US total foreign banking assets, compared with the 23% of California and 3% of Chicago.[28] As for Latin American banks, the total assets of their agencies and branches in the USA reached nearly US$10 billion in 1982, of which those located in New York accounted for 63.1%, Los Angeles and San Francisco 17.7 and 12.7%, respectively, and Miami, Chicago and Washington the remainder. The main reason that Latin American banks established locations in the USA, and in particular in New York, was to access its money market and open a dollar-based funding channel.

The presence of Latin American financial institutions abroad shows that debtor countries, like their creditor counterparts, also underwent a process of internationalization in the banking sectors. This process of foreign expansion was the result of a combination of domestic and external factors that push the banks to look beyond the national market and get involved in a more dynamic and attractive international atmosphere. In Latin America, banking institutions were operating within a system

[28] *The Banker*, February 1980, 87.

heavy regulated by monetary authorities, or domestic *financial repression* as defined by Ronald McKinnon and Edward Shaw,[29] and in the case of Mexico, the banks were suffering from an erosion of their funding and lending capacities linked to inflation and the interest rate policy of the central bank. International finance and the Euromarkets, on the other hand, offered the banks with a new, unregulated, more flexible space to develop their businesses and overcome local financial constraints.

Wholesale Interbank Money

A central feature of the expansion of international bank lending during the 1970s was its large interbank element. Although the interbank market had always been at the core of the international banking system, it took on an increased role after the first oil shock, becoming, in Michael Moffitt's words, "the mainstay of the Euromarkets."[30] "Interbank transactions [were]," as reported by the Bank of England—the institution under whose jurisdiction most of these activities took place, "the most frequent form of trading in the Euromarket."[31] Figure 1.2 shows the evolution of the Euromarkets, namely external and local positions in foreign currency of BIS reporting banks, along with its interbank component. Interbank activity increased from less than US$200 billion in 1973 to over US$1 trillion by 1982, accounting for between two-thirds and three quarters of the Euromarkets during the entire period. The large size of the Eurocurrency interbank market makes the Euromarket look essentially like an international wholesale money market, where banks could access dollars, sterling, marks, francs and any other currencies around to conduct their local and offshore businesses.

International interbank transactions consisted of fast, informal transfers of short-term funds between banks. They not only enabled individual banks to lend without being tightly constrained by deposits attracted from the non-banking sector, but, like other money market transactions, they also provided a way to adjust the volume and nature

[29] Ronald I. McKinnon, *Money and Capital in Economic Development* (Washington, DC, 1973); Edward Shaw, *Financial Deepening in Economic Development* (New York, 1973).

[30] Michael Moffitt, *World's Money: International Banking from Bretton Woods to the Brink of Insolvency* (New York, 1984), 69.

[31] 'Eurobanks and the Inter-Bank Market', *Bank of England Quarterly Bulletin*, September 1981, 352.

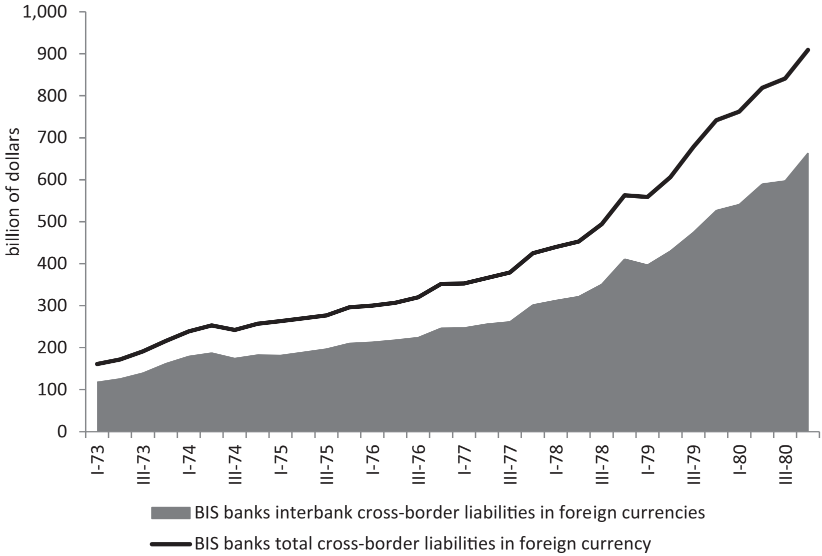

Fig. 1.2 Euromarkets and the international interbank market in the 1970s (*Source* John G. Ellis, 'Eurobanks and the Inter-Bank Market', *Bank of England Quarterly Bulletin*, September 1981, 351–64)

of their assets and liabilities. At an international level, the interbank market acted as a channel from banks with a domestic dollar base or an excess of deposits to direct lending toward banks where lending opportunities exceeded deposits. Indeed, as the Eurocurrency deposits expanded, the interbank market provided a flexible device that made large amounts of loanable funds quickly ready for use. To the extent that liquidity was available at a price—London InterBank Offered Rate (LIBOR) plus a premium, banks could borrow in the Eurocurrency market to fund domestic and international credits to corporations, governments and other customers. This both allowed the banks to meet new lending opportunities and encouraged the recycling of petrodollars, while letting them hedge the interest and exchange rate risks that arose from their foreign business.

Consortium banks, which were major players in the Euromarkets and recycling process, relied heavily on the international interbank market to develop their business. Unlike commercial banks, they had no branch network or territorial presence and were thereby unable to cultivate a strong retail deposit base. They were instead largely dependent on the purchase of deposits in the wholesale money markets, with a liability structure heavily concentrated on obligations to the banking sector. Their main funding source was short-term borrowing from other banking institutions, but they also drew on negotiable London dollar certificate of deposits, floating-rate loan notes, Eurobonds, loans from other branches and domestic funds from parent banks.[32] Conversely, the asset side of the balance sheet was mainly made up of medium- and long-term Euroloans, and to a much lesser extent, liquid assets and reserve balances in the form of informal credit facilities with other banks. As a result of their intermediating activities, a significant degree of maturity transformation built up along the interbank chain and in the balance sheets of consortium banks.

While initially limited to the world's major international banks, the interbank market became increasingly used by a larger number and wider variety of actors as it expanded. The market grew from a few hundred participants in the mid-1970s to well over 1000 banks from more than 50 countries by the early 1980s.[33] This expansion entailed both greater volumes of operations between banks in the same financial center, as well as more cross-border business, including inter-office positions and genuine interbank activities among banks throughout the world. Many smaller institutions, ranging from regional banks in advanced industrial countries to commercial banks in less developed countries, became active participants in the Eurocurrency interbank market. As in the case of consortium banks, this interbank market provided them with an attractive wholesale source of funding to develop their domestic and international activities. In the case of large Latin American banks, the network of foreign agencies and branches in main international financial centers served as the platform from where the head offices could become involved in the Euromarkets.

Table 1.4 presents the 1982 balance sheet of the London agencies and branches of commercial banks from the three larger Latin American debtor countries. The consolidated assets and liabilities were US$8.5

[32] Gunter Dufey and Ian H. Giddy, *The International Money Market* (Englewood Cliffs, 1994), 216–32; Steven I. Davis, *The Euro-Bank: Its Origins, Management and Outlook* (New York, 1980).

[33] Ian H. Giddy, 'Risk and Return in the Eurocurrency Interbank Market', *Greek Economic Review* (August 1981), 158–86.

Table 1.4 Branches and agencies of Latin American banks in London (End-June 1982, millions of dollars)

	Brazil			*Mexico*			*Argentina*		
	Assets	*Liab.*	*Net P.*	*Assets*	*Liab.*	*Net P.*	*Assets*	*Liab.*	*Net P.*
Banks	3921	4520	−599	1068	1824	−756	1308	750	558
In the UK	404	1435	−1031	260	1147	−887	350	194	156
Outside the UK	570	1938	−1368	331	429	−98	176	498	−322
Own offices overseas	2947	1147	1800	477	248	229	782	58	724
Non-Banks	1083	369	714	984	52	932			
In the UK	90	40	50	0	0	0			
Outside the UK	993	329	664	984	52	932			
Other	178	292	−114	70	246	−176	20	578	−558
Negotiable papers	4	199	−195	3	243	−240	0	555	−555
Other	174	93	81	67	3	64	20	23	−3
Total	5182	5181	0	2122	2122	0	1328	1328	0

Note The net position is computed as the difference between assets and liabilities, '*Liab.*' indicates Liabilities, '*Net P.*' indicates Net position
Source Bank of England archive, Task Force, 13A195/1

billion, of which 61.1% corresponded to Brazilian banks, while their Mexican and Argentine counterparts accounted for the remaining 23.2 and 15.7%, respectively.[34] The large part of liabilities to banking institutions, which accounted for as much as 85% of the total obligations of the Brazilian and Mexican agencies, makes the interbank nature of these agencies' funding strategies clear. The fact that the net position, computed as the difference between assets and liabilities, vis-à-vis other banks was negative implies that they were net borrowers in the interbank market. On the asset side, the net position with the head office and other non-banking institutions was positive, indicating that the foreign liquidity these offices raised in the international wholesale markets was channeled to parent banks or to other borrowers outside the UK.

Access to international wholesale liquidity was not limited to the London Eurocurrency interbank market since Latin American banks were also present in the USA. As Table 1.5 shows, the balance sheet of the US agencies and branches of Brazilian, Mexican and Argentine commercial banks had a similar structure to their London counterparts. As of June 1982, they had consolidated assets and liabilities of about US$9.5 billion, of which US$8 billion or 85% was owed to banking institutions. Of this amount, 67.2% were liabilities to banks in the USA, while the remaining 14.1 and 18.7% were liabilities to banks abroad and head offices, respectively. In fact, although levels varied among the countries, banks in the USA were agencies' main creditors, accounting for between 40 and 60% of their total liabilities. The large part of these obligations consisted of deposits and trade balances that the banks held with the agencies, but there were also substantial amounts of federal funds, borrowed money and interbank credit lines. Like in the case of London, the net position of the agencies was negative, meaning they were funding themselves in the US money market. Obligations with the non-bank sector, both in the USA and abroad, and other liabilities represented an average of 15% of the balance sheet liabilities.

In contrast, the net position of the agencies compared to the non-banking sector was largely positive. The private and public non-bank sector was indeed their main debtor, accounting for about 40%

[34] The four Brazilian banks were Banco do Estado de Sao Paulo, Banco do Brasil, Banco Real and Banco Mercantil do Sao Paulo; the four Mexicans were Banamex, Bancomer, Banca Serfin and Multibanco Comermex; and the two Argentine were Banco de la Nación Argentina and Banco Galicia y de Buenos Aires.

Table 1.5 Branches and agencies of Latin American banks in the USA (End-June 1982, millions of dollars)

	Brazil			*Mexico*			*Argentina*		
	Assets	*Liab.*	*Net P.*	*Assets*	*Liab.*	*Net P.*	*Assets*	*Liab.*	*Net P.*
Banks	2942	3507	−565	924	2551	−1627	631	1899	−1268
In the US	727	2707	−1979	300	1854	−1554	114	784	−670
Outside the US	496	277	219	264	488	−224	430	358	72
Own offices overseas	1719	523	1196	360	210	150	87	757	−670
Non-Banks	1326	827	500	1904	10	1894	1354	156	1198
In the US	217	734	−517	8	1	7	6	110	−104
Outside the US	1109	93	1016	1896	10	1886	1348	46	1302
Other	224	159	66	81	347	−266	143	73	70
Negotiable papers	1	81	−80	2	293	−291	27	28	−1
Other	223	77	146	79	54	24	116	45	71
Total	4492	4492	0	2909	2909	0	2127	2127	0

Note The net position is computed as the difference between assets and liabilities, '*Liab.*' indicates Liabilities, '*Net P.*' indicates Net position
Source FFIEC 002 Call Reports

of consolidated total assets. These claims primarily consisted of lending facilities to final borrowers outside the USA. Loans and advances granted by Argentine and Mexican agencies to non-US residents reached US$1.3 billion and US$1.6 billion, respectively, amounts that represented as much as 99% of their loan portfolio. As for Brazilian banking offices, the corresponding figures were US$1 billion and 84%. These were either direct loans granted from the US agency to a foreign borrower or syndicated credits that their parent banks participated in, along with other international banks, through them. This balance sheet structure suggests that the function of these agencies and branches consisted in raising interbank money to finance international loans.

In the case of Mexico, the use of the international wholesale markets by leading domestic banks to fund cross-border lending created new risks and vulnerabilities. Heightened reliance on foreign interbank borrowing meant a higher weight of foreign currency external debt in the liabilities, while dollar-denominated claims were largely concentrated in Mexican borrowers, who mainly operated in the domestic currency. In addition, the use of interbank money as the basis for funding loans resulted in the accumulation of significant maturity and interest risks mismatches, which compromised the financial and solvency position of the agencies and branches as the crisis approached. After Mexico's moratorium declaration, the size of the international interbank market shrank, and this became a serious problem for banking institutions heavily dependent on foreign wholesale interbank liquidity, largely exposed in their home countries, and with only very limited alternative source of funding.[35]

The Impact of the Crisis

The outbreak of the crisis in Mexico represented a shock to the international interbank market, and it disturbed the normal funding transactions and rollovers of existing money market lines with the agencies and branches of Mexican banks and from other Latin America countries. Bankers' acceptances, pre-export financings, straight Eurodollar

[35] Jack M. Guttentag and Richard J. Herring, 'Funding Risk in the International Interbank Market', in Wilfred J. Ethier and Richard C. Marston (Eds.), *International Financial Markets and Capital Movements: A Symposium in Honor of Arthur I. Bloomfield* (Princeton, 1985), 19–32.

and prime-based advances all became increasingly difficult in a nervous and uncertain market atmosphere. As the crisis spread throughout the region, the increased risk perception on operations with banks from troubled countries prompted creditor banks to reduce their businesses and involvement with them, stopping the renewals of interbank claims, with some of them demanding to be paid off at maturity.

Figure 1.3 shows the evolution of the liabilities to banking institutions of the US and London agencies and branches of Brazilian, Mexican and Argentine banks in 1982. It provides a clear perspective on the erosion of interbank funding that these agencies suffered around the outbreak of the international debt crisis. In the last third of 1982, Brazilian agencies lost US$1.7 billion dollars in the interbank market, an amount representing a drop of 25% of their outstanding obligations in only three months. In the case of Mexico, the agencies lost about US$886 million or 30% of interbank funding between June and September of 1982. As for the Argentine banks, the decline of interbank liabilities was

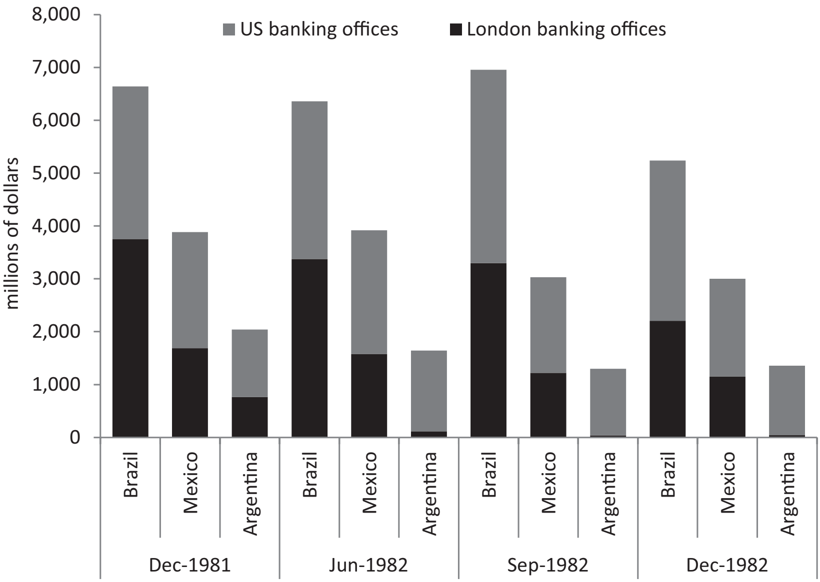

Fig. 1.3 Interbank liabilities of Latin American bank's foreign agencies and branches (*Source* London: Bank of England archive, Task Force, 13A195/1; USA: FFIEC 002 Call Reports)

largely concentrated in the London agencies, presumably related to the Falklands War that began in April 1982. The problems in the interbank deposit businesses were, however, not confined to Latin Americans, with a number of other foreign banking institutions, mainly from Portugal and South Korea, also encountering funding difficulties in the London Eurocurrency market. Although to a lesser extent, consortium banks also faced hard times funding themselves in the interbank market, and some of them were indeed forced to request substantial support from their shareholders.

As interbank money dried up, the funding pressures of the foreign offices of Latin American banks increased. International banks were their single most important suppliers of immediate liquidity, and, as discussed in Chapter 5, they had only limited capacity to adjust their assets since most of them were long-term loans or illiquid claims. Most of them did not have a liquidity cushion and were unable to fund themselves outside the international interbank market. They had no dollar retail deposit base, were not secured by the Bank of England in London or the Federal Deposits Insurance Corporation (FDIC) in the USA and could not borrow from their discount windows. Recourse to foreign exchange from head offices and parent central banks in a context of dwindling international reserves and balance of payment crises in their home countries was not a realistic possibility either. The contractions in interbank liabilities could, therefore, seriously damage the liquidity, and even the solvency, position of these agencies, creating the very real risk that they would no longer be able to reimburse their creditors on time.

But the possibility of a disruption of interbank payments had implications that went beyond the financial situation of the individual institutions. If a bank or an agency became unable to repay its liabilities, then the solvency of those banks which had provided it with interbank funds would also be called into question. Under such circumstances, there was a danger that the failure of one bank or agency, which in the absence of the interbank market would have been an isolated incident, would spread throughout the banking system and cause a domino effect collapse. The Mexican agencies had US$5.2 billion of outstanding interbank liabilities spread throughout thousand banks across different international financial centers and that amount reached about US$15 billion when including Brazilian, Argentinean, Chilean and Peruvian banks.[36] Given the high volume, the uncollateralized nature and the pyramid structure of these interbank transactions, the potential systemic danger resulting from a payment disruption by Latin American banks was not negligible.

The situation of the agencies was indeed a matter of serious concern for policymakers and financial authorities from both debtor and creditor countries. From the beginning of debt renegotiations, Latin American central bankers and secretaries of finance insisted on the need to maintain interbank deposits at the offshore agencies of their domestic banks. To that end, spreads were revised upward and yields were increased substantially to encourage the banks to maintain or increase deposit levels, but the leakage continued. Agencies looked to cover the loss of funding through asset reduction, the use of headquarters' internal liquidity, emergency support from home country central banks and the use of overnight credit lines, but these solutions were insufficient. Eventually, creditor countries' supervisory authorities, especially the Federal Reserve and the Bank of England, intervened to persuade international banks to limit the reduction of their deposits to ensure that foreign branches of Latin American banks did not default on their obligations and maintain confidence in the system.

Different approaches were used to secure the renewals of interbank deposits at maturity. As sovereign debt lawyer Lee Buchheit explains, some countries, such as Argentina and Brazil, asked their creditors to sign formal agreements whereby creditor banks agreed to maintain their interbank deposit liabilities at their levels on the date of the moratorium declaration.[37] Other countries, like Mexico or the Philippines, agreed to a clause in their restructuring documents that stated that a default event would be triggered if the aggregate level of interbank liabilities placed with the offshore agencies and branches of their domestic banks were to drop below certain levels. For their part, debtor banks agreed to continue to pay interest on these liabilities when they came due and their home governments and central banks to make the necessary foreign exchange available to do so. The principle underlying these approaches was to avoid

[36] Brazil US$6 billion, Mexico US$5.2 billion, Argentina US$1.4 billion, Chile US$1.2 billion and Peru US$1.2 billion. FRBNY archive, Box 108403, The International Interbank Market and International Banking Lending, June 28, 1985.

[37] Lee C. Buchheit, 'But What Do We Do About All Those Interbank Lines?', *International Financial Law Review* 10 (1991), 15–16.

restructuring interbank debts, which could seriously disturb the international financial market, and caused problems for proposed rollovers.

These schemes were an integral part of the broader financial packages and restructuring programs implemented to handle debt payment crises and guarantee the stability of the international financial system. The strategy developed by the group of creditor countries governments, the IMF and international banks to deal with Mexico consisted in the restructuring of bank debt and the provision of new lending conditioned on a Fund-supported program.[38] The rationale behind this approach was to secure reimbursement by stretching out the payment schedule while raising the trade surplus and supplying additional credits as to cover the external financing gap of the countries. The Fund austerity measures were featured as aiming to address fundamental macroeconomic disequilibrium in troubled countries and to liberate resources and foreign exchange that could be used to service external debt. The approach and rescheduling deals developed to handle the Mexican crisis, which would be at the forefront of debt negotiations and financial firefighting during most of the decade, set a pattern of crisis management for other indebted countries coming into sovereign debt crisis onwards.[39]

The involvement of creditor countries and international agencies was key for coping with the crisis and preventing major problems in the banking system. After all, as Paul Volcker concedes, the debt management strategy provided lender of last resort assistance to the national and international banking system through the involvement and contribution of a multiplicity of actors.[40] The increase in official lending from creditor governments and international organizations, along with the savings that austerity programs generated in debtor economies, was then used to finance an outward transfer of resources to the benefit of creditor commercial banks. Latin American countries, which had previously been net recipients of resources from abroad, became net exporters of capital beginning in 1982. International commercial banks provided new loans as part of the restructuring agreements, but they received a much

[38] Harold James, *International Monetary Cooperation Since Bretton Woods* (Washington, DC, 1996), 347–408.

[39] Paul Krugman, 'LDC Debt Policy: 1', in Martin Feldstein (Ed.), *America Economic Policy in the 1980s* (Chicago, 1994), 691–722.

[40] Paul A. Volcker and Toyoo Gyohten, *Changing Fortunes: The World's Money and the Threat to American Leadership* (New York, 1992), 203.

larger amount from borrowing countries in debt service payments, which allowed them to rebuild their capital base and increase their reserves until they were in a better position to accept losses without compromising the confidence in the international banking system.

Domestic Front

Within this international framework, economic policy in debtor countries also played an important role in the increasing recourse to foreign finance and external indebtedness. In the case of Mexico, macroeconomic management, namely fiscal and monetary policy, contributed to the creation of the financial crisis of 1982 and influenced the subsequent debt renegotiations. In particular, the combination of loose fiscal control with a fixed foreign exchange rate regime underpinned a series of macroeconomic problems and imbalances that made the Mexican domestic economy vulnerable to changes in the international capital markets and the external shocks of the late 1970s and early 1980s.

After the devaluation of August 1976, which marked the end of two long decades of foreign exchange stability in Mexico, the national currency stabilized at the new parity of 22.5 pesos per dollar by the beginning of 1977. The currency crisis was the result of fundamental disequilibrium in the balance of payments related to the inflationary process, fiscal deficits and negative current account balances that had been increasingly affecting the domestic economy since the beginning of the decade. With the outbreak of the crisis, Mexican authorities looked for financial assistance from the USA and subscribed to a three-year standby agreement with the IMF. However, the Fund-stabilization program, which called for the usual monetary and fiscal austerity measures, was quickly abandoned in June 1978, and macroeconomic management dispensed with the targets of fiscal deficit, external indebtedness and wage increases in favor of more expansionary economic policies.[41]

Over the following years, as the oil reserves of the country expanded, the Mexican government became even more deeply engaged in a growth-led strategy based on strong fiscal stimulus. However, while current and capital public expenditures in terms of GDP rapidly increased

[41] Edward Buffie and Allen Sanginés-Krause, 'Mexico 1958–86: From Stabilizing Development to the Debt Crisis', in Jeffrey D. Sachs (Ed.), *Developing Country Debt and the World Economy* (Chicago, 1989), 141–68, esp. 141–47.

between 1978 and 1982, revenues expanded at a much more modest pace and the fiscal deficit soared.[42] Foreign borrowing came to finance the bulk of the budget needs, but the public sector made also use of domestic financing from the banking system as well as the sale of new financial instruments, the Treasury certificates (Cetes), to the public. The surge in public spending and the increasing role of the government in the domestic economy coupled with expansive economic policies measures boosted the aggregate demand and generated further inflationary pressures. During the 1977–1982 period, the rises in nominal wages and inflation followed a very similar pace, and the expansion of the monetary base and money supply was usually much faster than the evolution of the price level.

Within a currency board regime, high and rising inflation led to a considerably overvalued foreign exchange rate. Between 1977 and 1982, the Mexican peso appreciated in real terms against the dollar at an average annual rate of 6.5%, which represented a cumulative appreciation of 37.5% over the entire period. By the time of the devaluation of February 1982, the real exchange rate had attained similar levels to the level reached in the eve of the 1976 currency crisis. The appreciation of the real foreign exchange along with a deterioration of the country's terms of trade and a strong demand for imports driven by the process of large economic growth in the late 1970s had a strong negative impact on the trade balance. On the other hand, the rise of international interest rates worsened the current account deficit, which almost tripled from 2.4 to 6.2% of GDP between 1977 and 1981. The surpluses on the capital account, largely based on external borrowing, allowed for a balancing of the Mexico's external position even as the current account steadily deteriorated.

Under such circumstances, the policy of the Mexican government and the central bank to maintain the parity of the national currency with the dollar fueled the expectations of a future devaluation. Within a system of free foreign exchange convertibility and negative domestic real interest rates, such expectations translated into increasing amounts of capital flights, especially since the second half of 1981. From 1981

[42] Ernesto Zedillo, 'The Mexican External Debt: The Last Decade', in Miguel S. Wionczek (Ed.), *Politics and Economics of External Debt Crisis: The Latin American Experience* (Boulder, 1985), 294–324.

to mid-1982, the Mexican private sector fled the national currency and the outflow of dollars reached about US$16.5 billion.[43] In the domestic financial sector, depositors moved their savings from pesos to accounts denominated in dollars and started to withdraw the balances from the banking system and transfer the money abroad. The mechanism for capital flight was made possible by the engagement of Banco de Mexico in selling dollars at the parity rate while international reserves were replenished by the increasing recourse to foreign capital and external debt.

The wave of capital flight became indeed closely intertwined with the external indebtedness process and the macroeconomic imbalances mentioned above. As the government increased spending and the central bank expanded the monetary supply, the higher money balances in the hands of the private sector led to a weakening of the exchange rate as it converted cash into foreign currency.[44] The trend created inflationary pressures that the central bank unsuccessfully attempted to control by keeping the exchange rate from depreciating by selling dollars, thereby leading to a rise in the foreign assets holdings of the private sector that were largely taken out of the country. With a negative trade balance, an adequate level of central banking reserves was maintained only by foreign exchange inflows from oil exports and private and public sector borrowing in the international capital markets.

As the outflow of capital continued and fiscal and current account-deficits grew, Mexico experienced the largest run-up in foreign debt of the period. Between the beginning of 1980 to the end of 1982, total external debt more than doubled from US$40.2 to 84.8 million. While increasing by 12.6 and 20.3% in 1978 and 1979, total external indebtedness accelerated with growth rates of 26 and 47.6% in 1980 and 1981 respectively. The lion's share was due by the state, but the private sector was also increasingly borrowing abroad. In fact, private foreign debt increased from 22.9% of total external debt in 1977 to 33.3% in 1980 and 30.6% by the end of 1982. Mexico's large private industrial firms

[43] The phenomenon of capital flight against the Mexican currency has originated a literature on the "peso problem" and speculative attacks in unsustainable fixed foreign exchange regimes. See, for instance, William S. Krasker, 'The "Peso Problem" in Testing the Efficiency of Forward Exchange Markets', *Journal of Monetary Economics* 6 (1980), 269–76.

[44] Sachs, 'Introduction'.

and commercial banks had direct access to overseas financing, and they could therefore benefit from a wide range of foreign bank loans at more attractive rates and financial terms than scarce and expensive domestic funding despite the currency risk.[45]

Faced with such a deteriorating economic situation and the tightening of international credit, the government adopted a number of measures by mid-1981 aimed at improving the balance of payments and reducing the fiscal deficit. To ameliorate the external situation, the annual depreciation rate of the peso against the dollar was slightly raised, import controls were restored while export subsidies increased, and interest rates revised upwards more regularly. In terms of public finances, the government announced a reduction in the annual budget of the public sector and introduced some rules and regulations to avoid future budget increases.[46] The adjustment program proved, however, unsuccessful in addressing the underlying macroeconomic imbalances, and by the end of the year, the flight of capital and the deterioration of the country's external position had accentuated. As of early 1982, Banco de Mexico decided to withdraw from the currency market and let the peso float freely.

New stabilization programs were announced in the aftermath of the devaluation of February 1982. The measures to be implemented were similar to the ones adopted in the previous program, and they aimed to curb aggregate demand through restrictive fiscal and monetary policies.[47] But inflation continued to escalate and, fueled by political uncertainty in an electoral year, capital flight started again in mid-March and, after almost five months of stability for the peso, the Mexican currency depreciated by about 150% in August to a maximum of 114.7 pesos per dollar. With the waves of devaluations and the rise of international interest rates, the peso value of outstanding dollar obligations of Mexican borrowers soared, leading to the suspension of foreign debt service payments by the private sector first and the eventual moratorium declaration of the government afterward.

[45] Isabel Molina Warner, 'El endeudamiento externo del sector privado y sus efectos en la economía mexicana', *Comercio Exterior* 31 (1981), 1140–47.

[46] See Carlos Tello, *La nacionalización de la banca en México* (Mexico, DF, 1984), 77–81.

[47] Robert E. Looney, *Economic Policy Making in Mexico: Factors Underlying the 1982 Crisis* (Durham, 1985).