J. Lat. Amer. Stud. 34, 71–114 © 2002 Cambridge University Press
DOI: 10.1017/S0022216X01006290 Printed in the United Kingdom

Financial Structure and Financing Models: The Brazilian Experience over the 1964–1997 Period*

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Abstract. The article analyses the Brazilian experience in financing economic activity from the 1964–67 reform until the 1990s. Two issues are addressed: first, what conditions explain the development of a model based on public and external credit in Brazil, quite different from the capital market based system conceived in the 1964–67 reform? Second, what are the perspectives for the development of an alternative model in the country, led by the national private sector? Based on international experience, two alternatives are considered: a) the expansion of the capital market, in order to make possible large scale direct financing; b) the formation of a private banking credit system, complementing or replacing both public and external credit. Despite undoubted improvements, tendencies observed up to 1997 suggest the persistence of the 'short-termist' profile that typically characterised the Brazilian financial system. Thus, the development of both capital market and banking credit models depends on financial policies devoted to this goal. General guidelines for such policies are suggested in the last section of the paper.

Introduction

In his analysis of the industrialisation experience of advanced economies in the post-war period, Zysman distinguishes three investment paradigmatic financing models: the *capital market system*, developed in the United Kingdom and the USA; the *private* (*banking*) *credit system*, of which Germany is the most typical case; and the *government* (or *public*) *credit system*, represented by the French and Japanese models.[1]

In Brazil the first attempt by the government to reorganise the financial structure was the 1964–67 financial reform. A *capital market system* was planned following the US model. In fact, however, quite a different system emerged in Brazil, one that was based on public and external credit.

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* This paper was developed as part of the *Money and Financial System Studies Group* within the Institute of Economics of the Federal University of Rio de Janeiro (IE/UFRJ). The author thanks Rogerio Studart for a thorough discussion of a previous version and the *JLAS* referees for their comments and suggestions. Any responsibility for eventual mistakes and omissions lies entirely with the author.

[1] See J. Zysman, *Governments, Markets and Growth* (London, 1983).

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Although quite distinct from the plan originally envisaged, it proved able to promote and support the country's late industrialisation process.

During the 1980s, however, a sharp decrease in government savings, and the international liquidity shortage triggered by the Latin-American foreign debt crisis, led to the collapse of the Brazilian financing model. In the 1990s the country's adhesion to the 'minimum state' model and the policy of financial liberalisation – initiated in the Collor de Mello government (1990) and intensified in the first mandate of Fernando Henrique Cardoso (1995–98) – confirmed the impossibility of reproducing the old financing model. Two options were possible for financial system development in Brazil: a) the expansion of domestic *capital market*, leading to the possibility of large-scale direct financing; b) the formation of a *private banking credit system*, as a complement or substitute for public and external credit.

This article examines the Brazilian experience of investment financing since the 1964–67 reform, and the perspectives for development of a new model led by the national private sector. Section two sets out an analytical framework, following the taxonomy of financing models proposed by Zysman. Section three examines the Brazilian financing experience, from the 1964–67 reform until the end of the 1980s. Section four makes the same for the 1990s, a decade which was quite distinct from its predecessor in several respects, especially in terms of macroeconomic and institutional features. Section five discusses some perspectives for development of a new financing model in Brazil, suggesting possible options for financial policy. Section six summarises the arguments presented in the article and offers some conclusions.

Investment Finance: an analytical framework

Financing Models

Capital market systems (CMS) were developed in the early industrialising economies, most notably in the UK and the USA. As the name suggests, they are characterised by the significance of capital markets in the process of investment financing. The typical suppliers of funds in this model are non-banking financial institutions, which usually issue medium- and long-term liabilities and hold assets with similar maturity structure. Commercial banks, in turn, advance short-term credits, matching the shortest term of their liabilities.

The typical structure of CMS is diversified and specialised. The financial instruments to which each type of financial institution may have access, according to the country's financial regulation framework, determine their specialisation. Wider regulation and segmentation are,

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therefore, features of such systems.[2] However, these characteristics are being gradually eroded in the CMS model-countries, which, since the beginning of the 1980s, have undergone a continuous process of financial deregulation.[3] Yet given that recent financial innovations have been characterised by the advance of securitisation, this deregulation process does not change the main characteristic of the CMS – the important role of capital markets in the process of investment financing, but in fact reinforces it.

Private credit systems (PCS) are exemplified in the German economy. In these systems investment financing is primarily supported through long-term loans sustained by large private banks, which, in turn, are organised as 'universal banks'. These operate with diversified asset and liability structures, reflecting their role in several segments of the financing market (short- and long-term credit and capital markets). In this model, financial systems appear concentrated in two different ways: by the reduced range of institutions, banks prevailing over non-banking institutions; and by the banks' size and market power, which is usually significant. Another structural feature of PCS is the smaller role of capital markets in the financing process, even for the largest firms, which would have easy access to funds in this market.

Regulation was also important to the formation of PCS, but counter to the direction of that in CMS. In the German case, financial regulation was guided by the need to create mechanisms to finance the economic upturn in the two post-war periods.[4] No area was prohibited to banks. Even participation or stock control of banks in the non-financial sectors was, and still is, explicitly allowed. This regulation partly explains the tendency of the German financial system towards concentration and conglomeration.

Government credit systems (GCS), identified with the French and the

[2] In the US experience, specialisation did not occur spontaneously, but rather as a result of the regulation imposed in the 1930s, aimed at ensuing the financial system's security through disciplining the sector competition. See Baer and Motte, 'The United States Financial System', in G. Kaufman (ed.), *Banking in Major Countries* (Boston, 1992); Zysman, *Governments, Markets*, pp. 266–81; see also T. Cargill, *Money, the Financial System and Monetary Policy* (London, 1983), pp. 188–221. In the UK case, although specialisation was spontaneously developed, it was also clearly stimulated by financial regulation. See D. Llewellyn, 'Competition, Diversification and Structural Change in the British Financial System', in G. Kaufman, (ed.). *Banking Structures in Major Countries* (Boston, 1992).

[3] For more on this subject see M. Edey and K. Hviding, 'An Assessment of Financial Reform in OECD Countries', *OECD Working Papers*, no. 154, 1995; also Jan Kregel, 'The Past and Future of Banks', in Ente per gli Studi Monetari, Bancari e Finanziari Luigi Einaudi: *Quaderni di Ricerche*, no. 21, March 1998.

[4] Zysman, *Governments, Markets*, pp. 251–65; see also R. J. Pozdena and V. Alexander, 'Bank Structure in West Germany', in G. Kaufman (ed.), *Banking Structures in Major Countries* (Boston, 1992), pp. 571–5.

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Japanese experiences of the post-war period, resemble the German model in that bank loans are the typical means of financing investment. However, there are important differences in structure compared to PCS. First, government institutions take the lead in the financing process. Second, these institutions are organised not only as development banks (supplying funds for the industrial sector), but also under several types of government agencies implementing specific financial policies. Thus, in structural terms the GCS appear more institutionally diversified and less concentrated than the PCS, while at the same time it maintains conditions of weak capital market and is characterised by the prevalence of indirect financing.

Operating conditions of the models

In spite of operational and structural differences, the three financing models have one operating condition in common: the need to attract long-term saving to the financial institutions, in order to enable them to acquire long-term assets. In addition to the creation of proper financial instruments, this depends on the country's capacity to generate aggregate saving and on a favourable environment for its conversion into financial savings; that is, into demand for medium- and long-term assets. Such conditions, in turn, depend on specific features of the financial sector – institutions, instruments and regulation, as well as structural and macroeconomic conditions.

A basic structural determinant of the aggregate saving is the stage of country's economic development: more (less) developed economies, with higher (lower) levels of aggregate and per capita income, are in a more favourable (unfavourable) position to generate aggregate savings. Another important structural factor is the income distribution profile: its concentration on profits, to the detriment of wages, tends to stimulate self-financing and restrict the access of financial institutions to long-term funds.[5] In such cases, the predominance of self-financing is more a *cause* than an *effect* of the weakness of financing mechanisms. This condition does not limit aggregate saving per se, but only their conversion into financial savings. However, it is well known that precarious development of long-term financial instruments narrows investment and economic growth rates.[6] Thus income concentration and the tendency for self-financing end up jeopardising the country's capacity to save.

[5] M. da C. Tavares, *Da substituição de importações ao capitalismo financeiro* (Rio de Janeiro, 1979) considers this question.

[6] See J. Gurley and E. Shaw, 'Financial Aspects of Economic Development', *American Economic Review*, vol. XLV, no. 4, September 1955, pp. 515–38; E. S. Shaw, *Financial Deepening in Economic Development* (New York, 1973); R. McKinnon, *Money and Capital in Economic Development* (Washington, DC, 1973).

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Among macroeconomic factors, the growth rate is the main influence over the amount of aggregate saving. Growing economies, particularly if growth is investment-led, have better conditions to save than those in recession, given that economic growth raises the level of income.

The above analysis suggests that the conditions for development of long-term financing are more difficult to achieve in the less developed economies. The international experience seems to confirm this hypothesis, showing that only in a few cases – USA, Great Britain and Germany – private and self-sustainable markets for long-term financial assets were endogenously produced. In all other countries, three alternative, often overlapping, patterns were observed: (a) concentration on self-financing; (b) concentration on foreign debt; (c) creation of public institutions and instruments to support and promote long-term financing. However, the first two alternatives – which have tended to prevail in many developing countries – do not represent a solution for the financing problem, but rather they are a symptom of its absence. Thus, in the countries where this 'model' prevails there is (at least in theory) potential for extending and expanding the banking system and/or the capital market.

Financial structure and financing model in Brazil: from the 1964–67 reform to the 1980s

The financing model conceived in the 1964–67 reform

Box 1 summarises the financial structure created by the 1964–67 reform.[7] As indicated, the task of providing or intermediating funds to finance investments was ascribed to four types of institution: the National Economic Development Bank (BNDE, Banco Nacional de Desenvolvimento Econômico), regional development banks, investment banks and brokerage firms.

Although it maintained an important role for the public banks, the 1964–67 reform tried to establish a 'private arm' in the Brazilian financial system, to be supported by the capital markets as in the US model. To accomplish this, clear market regulation needed to be established and conditions of access to long-term funds in the financial market created. The market regulations were established in a series of Central Bank and CMN Laws and Resolutions, drawn up during the second half of the 1960s.

[7] For a detailed description of the measures and laws of the 1964–67 financial reforms in Brazil, see A. C. Lemgruber, *Uma análise quantitativa do sistema financeiro no Brasil* (Rio de Janeiro, 1978), pp. 26–31, and A. F. Montoro Filho, *Moeda e sistema financeiro no Brasil* (Brasília, 1982), pp. 88–93 and 106–8. For a more analytical appraisal of the reform, see Tavares, *Da substituição*, pp. 219–33, and the interesting work of R. Studart, *Investment Finance in Economic Development* (London, 1995), chapters two and three.

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Box 1: *Brazilian Financial System according to the 1964–67 Reform*

Institutions	Operating Area
CMN – Conselho Monetário Nacional (National Monetary Council)	Created in 1964, with normative and regulative functions in the financial system
BACEN – Banco Central do Brasil (Central Bank of Brazil)	Created in 1964, as the executor of monetary policy
BB – Banco do Brasil (Bank of Brazil)	State-commercial bank, financing export and agriculture sectors
BNDE – Banco Nacional de Desenvolvimento Econômico (National Economic Development Bank)	Created in 1952 in order to operate with long-term selective financing for industrial and infrastructure sectors
Regional Development Banks	Similar to BNDE, but operating on regional basis
Commercial Banks	Short- and medium-term loans
Investment Banks	Regulated in 1966, typically meant to supply long-term credit and provide underwriting operations
Credit, Financing and Investment Companies (finance companies)	Consumer credit (short- and medium-term)
Housing Financial System	Created in 1964, it was formed by the Housing National Bank (BNH – Banco Nacional de Habitação), the Federal Savings Bank (CEF – Caixa Econômica Federal), state savings banks and real estate credit and savings institutions
Brokerage Firms	Primary and secondary stock markets

As for long-term savings, the diagnosis guiding the reform was that both the generation and allocation of savings were 'repressed' in Brazil. This phenomenon was created by the combination of rising inflation and nominal interest rates limited by the Usury Law (12 per cent a year), leading to low or negative real returns, especially for long-term assets.[8]

The inflationary process was fought (without success) with the PAEG (Government Economic Action Plan) – a gradual stabilisation plan based on fiscal, monetary and wages restriction.[9] The mechanisms created to motivate long-term finance were distinguished by market segments: credit institutions were authorised to issue liabilities with monetary correction clauses ('indexed liabilities'), extending to the private sector a condition already effective for the government securities since July of 1964; for the capital market tax exemption for savers and tax reduction for

[8] For an excellent theoretical discussion see Studart, *Investment Finance*, chapters two, three and eight.

[9] For a fuller consideration of this subject see M. H. Simonsen, *Inflação: gradualismo x tratamento de choque* (Rio de Janeiro, 1970), pp. 23–56.

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Table 1. *Brazilian Financial System (BFS): Number and Types of Financial Institutions (FI) – 1964–1997 – Selected years*

	Banking System												
		Commercial Banks			Multiple Banks								
Year	Total	Total	Private	Public*	Total	Private	Public	Invest. Banks	Federal Develop. Banks	Regional Develop. Banks	Finance Companies	Other FI	Total
1964	336	336	312	50	–	–	–	–	2	1	134	26	499
1976	116	116	79	43	–	–	–	39	3	12	135	1371	1676
1988	106	106	77	34	–	–	–	56	2	13	107	1501	1785
1989	179	66	39	28	113	108	6	36	2	12	70	1578	1877
1990	216	50	32	20	166	155	10	23	1	10	51	1555	1856
1991	225	45	32	15	180	165	14	21	1	8	45	1588	1888
1992	234	36	32	8	198	176	22	20	1	8	41	1582	1886
1993	242	36	31	7	206	183	23	17	1	6	40	1573	1879
1994	242	33	29	6	209	184	25	17	1	6	42	1744	2052
1995	238	35	31	6	203	178	25	16	1	6	46	1659	1966
1996	237	38	34	4	199	173	26	17	1	5	44	1127	1431
1997	216	36	na	na	180	na	na	22	1	na	na	na	na

Source: BACEN, *Relatórios Anuais* and *Boletins Mensais* (Annual and Monthly Reports), several numbers; IBGE, *Anuário Estatístico do Brasil* (Annual Statistic Report), several numbers; IBGE/ANDIMA, '*Sistema Financeiro*', 1997, p. 28 for 1989–1995; ANDIMA, '*Retrospectiva 1997*', for 1997.

(*) Including CEF and state Savings Banks; na = not available.

open companies was introduced in 1966.[10] Finally, the Brazilian economy was additionally opened up to direct foreign investment and loans, in order to increase financial market competition and efficiency.

The BFS after the 1964–67 reform

Several indicators attest to the success of the reform in broadening and diversifying the BFS (Tables 1, 2): (a) the number and types of financial institutions increased rapidly; (b) bank loans grew as a proportion of gross domestic product (GDP), showing an increase in financial intermediation; (c) the share of commercial banks in the loans market was strongly reduced in favour of non-banking institutions, suggesting some progress in long-term operations. In addition, the extraordinary growth of GDP during the so called 'economic miracle' period (1968–73) and the deepening of the imports-substitution process, promoted by the II Plano Nacional de Desenvolvimento (PND) during the 1974–79 period seemed to confirm the effectiveness of the 1960s financial model.[11] Such performance would not have been possible if the previous financial structure had not been changed.

As for the *modus operandi*, however, the BFS did not really resemble the model conceived in the 1964–67 reform: (a) the structural diversification, mirrored in the several types of financial institutions, did not correspond to the proposed market segmentation, giving rise instead to a more concentrated bank-centred market structure than that which had existed prior to the reform; (b) investment banks did not become direct suppliers or mediators of long-term funds, but rather of working capital; (c) long-term deposits did not turn out to be a significant source of funds for private institutions; (d) capital markets did not become an important means of investment financing – until the end of the 1980s primary issues of shares and corporate bonds were, on average, inferior to 2.5 per cent of the aggregate investment (Table 4). Thus, neither in the 'economic miracle' nor in the II PND did local capital market or private banks have an important role in financing; instead, investment and growth in these two periods were supported by public (via BNDE) and external loans.

The concentrated structure of the financial market in the 1960s, under the hegemony of commercial banks, hindered the emergence of non-banking independent institutions. Many new institutions established at the time were created or later incorporated by existing commercial

[10] See F. A. Lees, J. M. Botts and E. R. P. Cysne, *Banking and Financial Deepening in Brazil* (New York, 1990), pp. 242–8.

[11] For more on this aspect see A. B. de Castro and F. E. P. de Souza. *A economia brasileira em marcha forçada* (Rio de Janeiro, 1985); J. Serra, 'Ciclos e mudanças estruturais na economia brasileira do pós-guerra', in L. G. Belluzzo and R. Coutinho (eds.), *Desenvolvimento capitalista no Brasil: ensaios sobre a crise* (São Paulo, 1984).

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Table 2. *BFS loans to private and public sectors: distribution (%) by final suppliers – 1968–97 – Selected years (December data)*

	Banking System											Total			
			Commercial Banks			Multiple									
Year	Total	B. do Brasil	Total	Public	Private	Total	Public	Private	Invest. Banks	BNDES	Others FI	Public FI	Private FI	Publ. + Priv. (1)	Total/ GDP %
1968	66.4	23.1	43.3	13.0	30.3	–	–	–	5.4	3.4	24.6	49.1	50.9	100.0	26.1
1976	50.3	23.3	26.9	9.9	17.0	–	–	–	10.0	6.2	33.5	57.3	42.7	100.0	56.2
1980	48.9	20.1	28.8	10.7	18.1	–	–	–	10.8	6.5	33.8	55.9	44.1	100.0	48.5
1985	38.1	11.0	27.1	6.1	21.0	–	–	–	8.6	2.6	50.7	49.1	50.9	100.0	41.5
1989	43.7	9.1	6.9	2.2	4.7	27.7	1.9	25.8	2.1	2.2	52.1	25.3	74.7	100.0	76.2
1990	61.1	11.9	7.2	3.3	3.9	42.0	6.4	35.6	2.1	3.5	33.3	52.9	47.1	100.0	37.5
1991	66.5	14.4	7.4	3.2	4.2	44.7	9.4	35.3	1.9	4.7	26.9	54.3	45.7	100.0	42.5
1992	64.9	14.1	3.8	0.7	3.0	47.0	12.3	34.8	1.8	4.2	29.1	57.2	42.8	100.0	61.4
1993	74.9	10.5	2.9	0.4	2.6	61.5	17.2	44.3	0.9	3.0	21.2	50.6	49.4	100.0	91.8
1994	71.1	19.5	3.3	0.4	2.9	48.4	9.9	38.5	0.7	4.5	23.7	55.2	44.8	100.0	43.5
1995	69.3	18.0	3.6	0.3	3.3	47.7	11.9	35.8	0.6	4.5	25.6	58.0	42.0	100.0	42.0
1996	73.1	12.8	2.4	0.3	2.1	57.9	25.1	32.8	0.4	4.4	22.1	59.3	40.7	100.0	44.1
Jun 1997	75.5	12.2	2.3	0.3	2.0	61.0	21.7	39.3	0.4	3.9	20.2	53.8	46.2	100.0	48.1
1997	75.7	8.7	2.1	0.2	1.9	64.8	17.9	46.9	0.3	4.5	19.5	46.3	53.7	100.0	54.4

Source: BACEN, *Boletins Mensais* and *Suplementos Estatísticos*, several numbers.

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Table 3. *Brazil: macroeconomic indicators – 1968/1997 – Annual average*

Period	Real Growth of GDP % (1)	Investment Rate: % I/GDP (2)	Inflation Rate (3)	Interest Rate of Federal Bonds (4)		Public Deficit: % over GDP (5)	Foreign Debt (5) (US$ bi)	International Reserves (7) (US$ bi)
				Nominal	Real			
1968–73	11.2	21.2	19.1	6.0+mc	na	na	3.8–12.6	0.3–6.4
1974–80	6.9	23.7	51.8	31.0	−13.7	7.5	17.2–53.8	5.3–6.9
1981–83	−2.2	19.6	129.7	129.8	0.0	6.1	61.4–81.3	7.5–4.6
1984–86	6.9	17.2	161.6	181.1	7.4	3.8	91.1–101.7	12.0–6.8
1987–92	0.3	15.9	940.8	995.7	5.3	3.4	107.5–110.8	7.4–23.7
1993–94	5.0	14.9	1731.1	1890.3	8.7	0.3	114.2–119.6	32.2–38.8
1995	4.2	16.6	14.8	53.1	33.4	5.0	129.3	51.8
1996	2.8	16.5	9.3	27.4	16.5	3.8	144.1	60.1
1997	3.7	18.1	7.5	25.0	16.3	4.4	167.8	52.1

Sources: Columns 1 and 3: FGV, *Conjuntura Econômica*, several numbers; Col. 2: Studart, *Investment Finance*, 1995, p. 201 and IBGE, *Contas Nacionais* (several numbers); Col. 4: Andima, *Taxas de Juros*, pp. 63–74; Col. 5–7: BACEN, *Boletins Mensails*; mc = monetary correction.

Notes: (a) Investment and GDP data at constant prices; (b) Inflation rates measured by a general price index (IGP-DI); (c) Public Deficit: nominal concept until 1982 and operational concept from 1983 on; (d) Foreign Debt (medium- and long-term) and International Reserves: balances at the beginning and at the end of each period.

Table 4. *Brazilian capital market: selected indicators – 1966–1997 – Annual average*

Period	Stock Exchange Index (%)	Inflation Rate (%)	Traded Value to Primary Issues Ratio (%)	Primary issues to Invest. Ratio (%)
1966–71	85.5	24.4	5.7	1.9
1972–74	−17.3	21.6	23.1	0.7
1975–79	23.6	45.6	21.2	0.6
1980–89	305.3	271.8	11.8	2.6
1990–93	669.7	1240.8	11.4	3.8
1994	1059.7	1093.8	13.8	5.3
1995	−1.3	14.8	8.2	6.1
1996	33.4	9.3	6.7	10.9
1997	44.8	7.5	20.6	6.7

Source: CVM, *Informativo Mensal* (several numbers) and BACEN, *Boletim Mensal* (several numbers), for the two first columns; our own elaboration, based on data from CVM, *Informativo Mensal*, and BACEN, *Boletim Mensal*, for the two last columns.

banks.[12] In addition, as shown by Studart,[13] government financial policy after the reform was marked by successive relaxation of the legislation, something which further contributed to banking concentration, particularly by strengthening the investment banks. Initially it was envisaged that the basic financing source of these banks would be long-term indexed liabilities, issued both in the domestic and foreign markets – the later backed by Central Bank Resolution 63. However, as domestic issues became difficult, the government gradually gave way to the pressures of investment banks, allowing them to issue short-term liabilities.

As the investment banks' liabilities became shorter, a similar trend was observable on the asset side. Investment banks started to operate in the same market segment of the finance companies: they counted on equal funding conditions in the domestic market, but had the advantage of accessing foreign funds (cheaper than the domestic ones) through the '63 operations'. Only commercial banks, which also had access to these external operations (in addition to the exclusiveness of cash deposits), were able to compete with investment banks. Therefore, following the 1964–67 reform, a process of banking concentration took place, which then led to the formation of financial conglomerates. These organisations brought together several types of financial institution under the leadership of a commercial or an investment bank.[14]

In the stock market the fiscal incentives produced a *boom*, but these

[12] Tavares, *Da substituição*, pp. 227–8.
[13] Studart, *Investment Finance*, pp. 122–3.
[14] Lees, Botts and Cysne, *Banking*, pp. 112–13.

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were guided by short-term financial advantages (from the tax exemptions) and not by accurate prospective analyses. Such trends culminated with the crash of the Stock Exchange at the end of 1971 and drained the market for two decades. During the 1970s the relation between traded values in the secondary and primary segments increased rapidly (Table 4), indicating the speculative nature of the market at the time. In 1976 two attempts were made to reorganise the stock market and bring about its recovery: a) the emission of a Corporation Law that established several operating and accounting rules for open companies; b) the creation of the 'National Securities Commission' (CVM – Comissão de Valores Imobiliários), acting as the regulator and supervisor of the capital market. Nevertheless, faced with the lack of confidence triggered by the crash of 1971 and several other adverse conditions to long-term business planning, these measures were not able to secure a recovery of the Brazilian stock market and to transform it into an important source of investment financing.

Three fundamental factors may have caused the failure of the 1964–67 reform: a) a precarious understanding of the sources of financial restraint in developing countries; b) failures in the management of financial policy, marked by advances and retreats throughout the 1960s and 1970s; c) the persistence of inflation, with galloping inflation by the 1980s.

As mentioned above, the logic guiding the reform stressed the importance of the *real rate* of return on assets. Coupled with the government's preference for a gradualist price stabilisation, this approach determined that the reform would emphasise measures aimed at augmenting *nominal rates* of assets return – this was the role of the monetary correction and fiscal incentives. Considering the return per *unit of time*, however, monetary correction equally rewarded short- and long-term investments. Thus, in practice, there was no advantage in holding long-term bonds.

Moreover, monetary correction may only be an efficient mechanism to protect real income under moderate and steady inflation rates that allow time to wait for monetary earnings without significant income losses. This, however, was not the case in Brazil in the period following the reform, especially after 1974. Facing a volatile inflation environment, indexed assets attracted savers, but not the financial institutions, which had their liabilities indexed to variable and unpredictable indexes. Pre-fixed monetary correction, which prevailed for some assets,[15] was also unable to boost savings: given the unstable inflation, this kind of assets would imply a real income loss if actual inflation surpassed the pre-fixed monetary correction – not an uncommon occurrence in Brazil.

[15] See Lemgruber, *Uma análise quantitativa*, pp. 38–41.

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The Brazilian Banking Strategy in the 1980s

The strengthening of private banks throughout the 1970s did not result in the formation of a *private credit system* in Brazil. Barriers to long-term investment were dramatically accentuated in the 1980s by the context of deep macroeconomic disequilibrium, shaped by: (a) rigid external restraints, due to two oil crises (in 1973 and 1979), followed by rising interest rates in the USA; (b) the high Brazilian foreign debt, mostly owed by the federal government; (c) an acute fiscal deterioration; (d) galloping inflation; and (e) several failed stabilisation attempts. On the one hand these conditions determined an erratic macroeconomic performance and an extremely unfavourable environment for investment and indebtedness. In such a context, self-financing, feasible by a rising 'mark up', became predominant among non-financial firms and strongly reduced business opportunities for the financial system.[16]

On the other hand, the public sector financial restraints created a profitable short-term business opportunity for the banking system. The slowdown of the economy penalised tax receipts and generated systematic budget deficits. Thus, in addition to a high foreign debt, the federal government also accumulated a growing internal debt. To roll this over in a context of accelerated inflation the government was gradually forced to accept worse financing conditions – that is, short-term liabilities with increasing (nominal) interest rates. In this scenario, the 'automatic zeroing' mechanism was created: through it BACEN repurchased public bonds 'in excess' from banks' portfolios, thus eliminating their eventual reserve deficits.

Under the 'zeroing' mechanism the acquisition of government securities became a profitable and practically risk-free business for banks. In turn, they used these securities to avoid the deposit losses ('money flight') that usually occurs in economies under high inflation rates, leading to banking crisis. Throughout the 1980s Brazilian banks developed many kinds of indexed deposits, maintaining their attractiveness for savers, who, in turn, financed the banks' acquisitions of short-term public bonds. Furthermore, as inflation accelerated, nominal interest rates were gradually

[16] In 1984 self-financing rose to 76.8 per cent of the funds used by national private companies and 87.7 per cent for the foreign private ones; in 1978, these percentages were, respectively, 58.8 per cent and 76.7 per cent (Lees, Bott and Cysne, *Banking*, p. 330). Only state companies, whose self-financing capacity was eroded by their high foreign debt, by the international interest rate shock and by the government policy of price controls (as part of the anti-inflationary policy), raised the use of third parties funds in this phase, reducing their self-financing from 50.7 per cent in 1978 to 40.4 per cent in 1984. See also Almeida, 'Instabilidade da Economia e Estrutura Financera das empresas no Brasil do Ajustamento Recessivo', *Texto para Discussar IEI/UFRB*, no. 178 (Rio de Janeiro, 1988) and Studart, *Investment Finance*, pp. 85–6.

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

Table 5A. *Commercial Banks asset composition (%) – 1968–97 – Annual average*

Selected items	1968–73	1974–80	1981–83	1984–86	1987–88	1989–92	1993–94	1995–Jun/97	1997
Private Banks									
Available	7.4	5.5	2.2	0.9	0.4	0.5	0.4	0.5	0.6
Reserve Requirements	12.7	10.4	5.3	7.6	3.2	7.7	3.3	2.0	2.8
Inter-banking Operations	na	na	na	na	na	4.9	4.6	6.5	5.1
Public Bonds	0.3	1.6	7.6	4.9	14.9	12.8	9.6	10.6	11.5
Private Securities	1.9	3.6	3.1	4.4	18.8	6.3	11.5	2.3	10.0
Fixed-Income	na	1.6	2.7	3.9	17.9	2.7	10.5	1.3	9.3
Floating-Income	na	0.0	0.4	0.4	1.0	3.6	0.9	0.9	0.7
Credit Operations	59.1	58.9	45.6	50.0	39.7	35.7	36.4	31.3	35.3
Foreign Assets and Exchange Oper.	4.8	9.8	18.0	13.5	8.8	22.2	28.8	33.2	26.0
Fixed Asset	6.5	5.6	10.6	12.0	10.5	9.5	8.0	6.3	6.8
Other Short-Term Oper.	7.3	4.6	7.7	6.8	3.6	0.3	−2.8	7.4	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	51.0	42.7	45.3	42.9	44.0	9.4	5.6	6.1	6.4
Public Banks									
Available	6.7	4.2	1.5	0.5	0.4	0.4	4.2	2.3	0.9
Reserve Requirements	6.6	5.0	2.8	4.1	3.3	9.6	5.6	7.7	10.3
Inter-banking Operations	na	na	na	na	na	−0.5	6.0	2.3	16.7
Public Bonds	2.4	2.6	4.9	3.7	6.6	16.4	15.5	18.9	10.8
Private Securities	0.8	1.0	0.5	2.8	7.6	3.3	4.4	12.0	7.8
Fixed-Income	na	0.2	0.3	2.5	6.9	1.4	2.1	11.2	6.8
Floating-Income	na	0.0	0.1	0.3	0.7	1.9	2.2	0.8	1.0
Credit Operations	75.0	74.6	76.3	72.0	69.9	45.9	43.9	36.5	28.6
Foreign Assets and Exchange Oper.	2.2	4.6	5.2	6.5	3.6	6.0	8.5	4.8	6.7
Fixed Asset	4.3	3.5	6.0	6.9	7.0	7.1	7.6	5.7	5.7
Other Short-Term Oper.	2.0	4.4	2.9	3.5	1.7	11.7	4.4	9.7	12.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	22.0	22.4	20.4	19.9	11.6	5.1	0.7	0.7	0.9

Source: Own calculations, based on data from BACEN, *Boletim Mensal* and *Suplemento Estatístico*, several numbers.

(*) Ratio (%) of the asset of the banking segment to the aggregate asset of the set of focused financial institutions: commerical banks + investment banks + multiple banks + BNDES.

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

Table 5B. *Investment Banks and BNDES – Asset composition* (%) – *1968–97 – Annual average*

Selected items	1968–73	1974–80	1981–83	1984–86	1987–88	1989–92	1993–94	1995–Jun/97	1997
Investment Banks									
Available	3.6	2.2	0.9	1.0	0.2	1.0	0.3	0.1	0.1
Public Bonds	0.4	0.2	2.7	1.1	12.1	7.4	8.9	20.8	64.4
Private Securities	10.0	4.9	11.4	6.4	19.8	16.1	23.9	9.1	8.6
Fixed-Income	5.5	3.4	6.3	3.9	18.0	10.6	17.3	4.8	5.7
Floating-Income	4.5	1.5	5.0	2.6	1.8	5.5	6.6	4.3	2.9
Credit Operations	68.9	77.4	73.1	76.8	45.3	38.2	22.8	18.1	18.5
Foreign Assets and Exchange Oper.	na	na	na	na	3.5	5.5	34.3	18.8	12.3
Fixed Asset	1.4	1.9	8.2	10.9	11.0	19.8	16.7	25.9	30.2
Other Short-Term Oper.	15.6	13.5	3.7	3.8	8.1	12.0	−7.0	7.0	−34.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	16.5	18.7	12.4	10.6	10.6	3.2	2.9	1.8	0.0
BNDES									
Available	2.3	0.7	0.3	2.3	1.6	0.0	0.0	0.1	0.0
Public Bonds	na	2.9	2.4	1.4	0.7	0.3	0.5	1.3	2.1
Private Securities	24.6	9.1	0.7	0.5	1.3	4.7	5.5	5.3	7.4
Fixed-Income	na	0.9	0.4	0.4	0.4	2.4	4.0	2.9	5.7
Floating-Income	24.6	8.2	0.3	0.1	0.9	2.3	1.4	2.4	1.7
Credit Operations	56.4	80.3	74.8	70.1	59.5	45.4	51.9	60.5	65.8
Direct (from BNDES)	47.5	57.9	53.3	47.3	45.5	33.0	25.8	23.3	29.2
Intermediated (by other FI)	8.8	22.4	21.5	22.8	28.1	24.8	26.1	37.2	36.5
Foreign Assets and Exchange Oper.	na	na	na	na	na	0.7	0.8	0.2	0.0
Fixed Asset	0.4	4.1	14.4	16.5	14.3	22.5	28.1	20.1	18.0
Other Short-Term Oper.	16.4	3.0	7.4	9.1	22.6	26.4	13.2	12.5	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	10.5	21.6	26.0	26.7	24.8	16.7	15.0	13.8	16.7

Source: Own calculations, based on data from BACEN, *Boletim Mensal* and *Suplemento Estatístico*, several numbers.

(*) Ratio (%) of the asset of the banking segment to the aggregate asset of the set of focused financial institutions: commerical banks + investment banks + multiple banks + BNDES.

being 'indexed' to *expected* inflation – and no longer to *past* inflation. This kept the banks more protected against inflationary risk than they were in the 1970s.

The macroeconomic instability in Brazil during the 1980s explains some important features of the banks' strategy in this period, reflected in the changes in their asset composition (Tables 5A to 5C):[17] (a) the increase in the share of short-term public bonds; (b) the reduction of credit operations; (c) high investments in payment systems technology, aiming to reduce operational costs and maximise inflationary revenues (from the 'zeroing' mechanism); (d) the 'outside' diversification, that is, towards non-financial sectors – these last two items evidenced by the increase of fixed-to-total asset ratio.

Thus, since the early 1980s the financial conglomerates established in the previous decade gave way to formation of 'holding companies' under the leadership of the same banks that, until then, had controlled the conglomerates. These holding companies had been regulated by the 1976 Corporation Law. This law facilitated the accounting and fiscal procedures for operations transferring funds among companies under the control of the holding company. Since Brazil had no restrictions on ownership of non-financial firms by financial institutions (a condition which still prevails today), the 1976 Corporation Law ended up encouraging the formation of financial holdings, with ramifications for non-financial sectors (Table 7).[18]

The ownership relations between the large banks and non-financial companies contributed to an increase in their size and the practice of self-financing, which consequently enhanced the trend towards financial disintermediation.[19] Thus, in Brazil, in contrast to more developed financial systems, the disintermediation process did not result in expansion of the stock market, but rather in self-financing.

[17] Fundação do Desenvolvimento Administrativo (FUNDAP), 'Evolução e impasses do crédito', *Relatórios de Pesquisa*, No. 4, 1988; also FUNDAP, 'Estratégias e padrão de rentabilidade dos bancos múltiplos privados: 1988/92', in *O Novo Formato Institucional do Sistema Financeiro Brasileiro*, *Relatórios de Pesquisa*, No. 1, 1993.

[18] It is interesting to note that activity in the non-financial sector is an exclusive trait of national companies, especially private ones. This trend probably reflects the differences between national and foreign banks concerning their regulation pattern and market strategies.

[19] The banks' investments in their own enterprises are recorded as 'fixed assets', and not as 'credit operations'. Similarly, for the companies, this operation affects this 'net worth' and not the degree of their indebtedness.

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

Table 5C. *Multiple Banks – Asset composition (%) – 1988–97 – Annual average*

Selected items	1988–90	1991	1992	1993	1994	1995	1996	1995–Jun/97	1997
Private Banks									
Available	0.5	0.7	0.4	0.4	0.6	1.1	0.7	0.6	0.7
Reserve Requirements	10.7	15.8	4.0	3.5	9.0	5.3	4.6	6.8	8.3
Inter-banking Operations	na	5.5	9.0	13.1	1.2	5.5	−1.3	0.8	2.3
Public Bonds	27.6	1.1	13.0	8.0	5.4	7.0	16.4	10.7	15.8
Private Securities	11.8	3.3	4.3	3.9	10.4	5.7	3.0	4.3	4.4
Fixed-Income	10.8	2.4	3.5	2.9	9.0	3.8	1.8	2.9	2.8
Floating-Income	1.0	0.8	0.8	1.0	1.3	1.8	1.2	1.3	1.6
Credit Operations	27.6	37.8	38.2	41.4	46.6	44.1	45.1	44.2	40.3
Foreign Assets and Exchange Oper.	8.2	14.8	16.9	18.6	13.3	14.2	13.5	17.0	12.2
Fixed Asset	8.2	16.7	13.3	11.4	11.9	12.4	13.0	12.4	12.9
Other Short-Term Oper.	5.3	4.4	0.8	−0.2	1.6	4.8	5.1	3.2	3.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	41.3	47.0	50.1	54.3	52.4	58.8	51.2	50.3	56.0
Public Banks									
Available	0.5	0.4	0.5	0.4	0.6	0.4	0.4	0.4	0.7
Reserve Requirements	6.7	10.5	2.9	3.2	4.7	4.0	32.4	4.0	8.5
Inter-banking Operations	na	0.8	6.9	6.2	3.1	1.1	3.4	3.1	−36.7
Public Bonds	9.4	4.6	5.4	3.8	25.2	10.7	2.6	3.2	74.4
Private Securities	2.1	3.6	3.6	6.1	9.5	25.1	34.5	31.6	19.6
Fixed-Income	1.3	1.7	2.4	2.3	6.0	23.0	32.9	30.3	17.3
Floating-Income	0.7	1.9	1.2	3.7	3.5	2.1	1.6	1.3	2.2
Credit Operations	38.5	58.8	60.6	57.4	45.6	44.5	45.6	46.7	21.6
Foreign Assets and Exchange Oper.	1.6	4.3	6.5	6.6	3.0	1.7	2.6	2.7	3.8
Fixed Asset	4.5	11.7	8.8	8.1	5.7	5.0	5.1	5.0	7.1
Other Short-Term Oper.	36.7	5.4	4.8	8.1	2.7	7.6	−26.6	3.2	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	6.5	18.6	21.1	20.3	24.6	16.8	28.0	27.6	18.1

Source: Own calculations, based on data from BACEN, *Boletim Mensal* and *Suplemento Estatístico*, several numbers.

(*) Ratio (%) of the asset of the banking segment to the aggregate asset of the set of focused financial institutions: commerical banks + investment banks + multiple banks + BNDES.

Table 6A. *Commercial Banks – liability composition (%) – 1968–97 – Annual average*

Selected items	1968–73	1974–80	1981–83	1984–86	1987–88	1989–92	1993–94	1995–Jun/97	1997
Private Banks									
Demand Deposits	56.6	39.8	17.6	19.2	8.4	2.8	3.1	2.8	3.4
Saving Deposits	na	na	na	na	0.1	0.0	0.0	0.0	0.0
Time Deposits	5.1	7.3	8.3	21.7	14.2	20.1	27.0	16.1	13.8
Interbanking Deposits	na	na	na	na	15.0	1.2	−7.3	4.3	5.6
Obligations for Intermediation	7.5	8.9	6.7	1.7	7.5	7.4	3.3	0.7	0.4
Foreign Obligations	na	22.5	35.6	31.6	19.6	29.4	34.1	32.2	39.0
Short-term	na	na	na	na	na	15.3	22.8	22.1	21.7
Medium- and Long-term	na	na	na	na	na	19.5	11.3	10.1	17.4
Exchange Operations	11.1	17.5	11.8	7.2	2.5	9.2	19.7	24.2	19.3
Own Capital	12.1	11.3	13.1	15.0	14.4	15.0	13.5	11.6	10.5
Other Operations	7.6	−7.2	6.9	3.6	18.4	14.8	6.6	8.1	7.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	51.0	42.7	45.3	42.9	44.0	9.4	5.6	6.1	6.4
Public Banks									
Demand Deposits	39.9	28.9	16.3	16.6	13.2	7.3	8.9	9.9	9.5
Saving Deposits	na	na	na	na	1.0	0.6	2.4	3.7	5.2
Time Deposits	3.8	4.3	5.0	10.7	4.9	7.2	9.6	22.1	23.5
Interbanking Deposits	na	na	na	na	−0.2	−1.1	4.1	2.4	7.9
Obligations for Intermediation	15.1	37.2	44.7	40.9	44.7	26.8	13.8	4.2	3.5
Foreign Obligations	na	11.0	17.0	14.7	10.3	5.2	1.9	3.0	2.6
Short-term	na	na	na	na	na	1.1	1.9	2.3	1.6
Medium- and Long-term	na	na	na	na	na	3.4	0.0	0.7	1.0
Exchange Operations	11.5	9.4	3.5	3.8	0.6	4.5	5.7	3.2	5.0
Own Capital	15.8	10.5	8.6	9.7	14.0	17.3	15.1	12.0	12.0
Other Operations	13.9	−1.2	5.0	3.7	11.6	32.2	38.6	39.5	30.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	22.0	22.4	20.4	19.9	11.6	5.1	0.7	0.7	0.9

Source: Own calculations, based on data from BACEN, *Boletim Mensal* and *Suplemento Estatistico*, several numbers.

(*) Ratio (%) of the liability of the banking segment to the aggregate liability of the set of focused financial institutions: commerical banks + investment banks + multiple banks + BNDES.

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

Table 6B. *Investment Banks and BNDES – liability composition (%) – 1968–97 – Annual Average*

Selected items	1968–73	1974–80	1981–83	1984–86	1987–88	1989–92	1993–94	1995–Jun/97	1997
Investment Banks									
Time Deposits	32.1	46.3	49.6	48.2	26.6	38.8	71.9	31.2	26.0
Interbanking Deposits	na	na	na	na	11.4	−20.5	−61.2	−12.9	4.4
Obligations for Intermediation	21.3	27.6	4.6	7.8	11.3	15.3	7.7	3.3	4.8
Foreign Obligations	12.8	14.5	27.2	22.9	14.1	10.1	14.4	10.6	6.8
Short-term	na	na	na	na	na	2.7	5.2	1.7	0.4
Medium- and Long-term	na	na	na	na	na	7.1	9.3	8.8	6.4
Exchange Operations	na	na	na	na	na	2.7	18.2	16.1	11.0
Own Capital	13.6	10.8	18.4	21.1	20.0	36.0	28.4	35.3	29.4
Other Operations	20.4	0.9	0.1	0.0	16.7	17.5	20.6	16.5	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	16.5	18.7	12.4	10.6	10.6	3.2	2.9	1.8	0.0
BNDES									
Time Deposits	na	0.1	0.1	0.0	0.3	0.1	0.0	0.0	0.0
Obligations for Intermediation	14.3	30.4	22.5	19.3	44.9	42.0	29.0	38.7	44.5
Public Power Obligations	11.9	29.3	43.0	45.0	48.9	36.4	31.3	28.7	26.6
Foreign Obligations	6.2	9.8	13.4	14.8	11.6	8.7	4.7	4.4	6.5
Short term	na	na	na	na	na	0.0	0.0	0.0	0.0
Medium- and Long-term	na	na	na	na	na	7.4	4.7	4.4	6.5
Exchange Operations	na	na	na	na	na	0.7	0.7	0.2	0.0
Own Capital	66.1	30.4	20.9	20.7	18.5	30.0	33.9	27.4	21.9
Other Operations	1.5	0.2	0.1	0.2	−24.2	−18.0	0.5	0.7	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	10.5	21.6	26.0	26.7	24.8	16.7	15.0	13.8	16.7

Source: Own calculations, based on data from BACEN, *Boletim Mensel* and *Suplemento Estatístio*, several numbers.

(*) Ratio (%) of the liability of the banking segment to the aggregate liability of the set of focused financial institutions: commercial banks + investment banks + multiple banks + BNDES.

https://doi.org/10.1017/S0022216X01006290 Published online by Cambridge University Press

Table 6C. *Multiple Banks – Liability composition (%) – 1988–97 – Annual average*

Selected items	Média 1988–90	1991	1992	1993	1994	1995	1996	1995– Jun/97	1997
Private Banks									
Demand Deposits	5.2	5.5	3.1	1.8	4.7	3.6	3.0	4.8	5.3
Saving Deposits	17.2	10.7	10.2	11.0	13.6	13.5	15.1	14.5	17.8
Time Deposits	9.4	20.7	26.4	24.7	25.5	24.9	21.0	19.0	19.3
Interbanking Deposits	−2.1	−2.4	1.8	3.3	0.5	−1.5	3.3	3.0	3.8
Obligations for Intermediation	2.3	3.6	3.6	3.6	4.4	10.0	5.2	4.5	3.6
Foreign Obligations	10.4	18.2	16.5	20.5	14.6	16.4	20.2	18.0	18.5
Short-term	na	5.0	12.1	14.1	9.3	11.4	13.8	12.7	11.3
Medium-and Long-term	na	13.2	4.5	6.4	5.3	5.0	6.3	5.3	7.2
Exchange Operations	na	1.7	9.6	10.0	8.6	9.5	8.8	18.0	7.9
Own Capital	12.0	21.6	18.5	16.2	15.4	9.3	15.3	14.9	14.5
Other Operations	45.6	20.5	10.3	8.7	12.6	14.4	8.3	3.1	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	41.3	47.0	50.1	54.3	52.4	58.8	51.2	50.3	56.0
Public Banks									
Demand Deposits	3.8	7.0	4.3	3.6	5.4	4.8	4.9	5.1	8.1
Saving Deposits	5.2	8.9	8.2	10.5	12.1	14.3	10.1	11.0	16.4
Time Deposits	4.8	12.0	19.4	20.9	13.0	15.0	13.9	11.8	16.1
Interbanking Deposits	0.4	3.1	2.1	2.0	3.3	3.3	10.2	10.4	−0.4
Obligations for Intermediation	22.8	24.2	22.9	16.8	13.1	6.4	4.6	5.8	4.5
Foreign Obligations	2.5	5.2	6.9	7.2	3.9	2.7	2.9	2.9	4.5
Short-term	na	1.0	5.2	5.1	2.8	2.1	2.7	2.7	4.0
Medium- and Long-term	na	4.2	1.7	2.1	1.1	0.5	0.2	0.2	0.4
Exchange Operations	na	0.8	2.4	3.4	1.4	0.9	1.0	1.0	1.2
Own Capital	9.4	18.6	17.9	20.1	5.5	3.5	5.5	5.6	9.9
Other Operations	51.1	20.2	15.9	15.6	42.4	49.1	46.9	46.4	39.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative Weight of the Segment (*)	6.5	18.6	21.1	20.3	24.6	16.8	28.0	27.6	18.1

Source: Own elaboration, based on data from BACEN, *Boletim Mensal* and Suplemento Estatistico, several numbers.

(*) Ratio (%) of the liability of the banking segment to the aggregate liability of the set of focused financial institutions: commercial banks + investment banks + multiple banks + BNDES.

The BFS in the 1990s (1990–97)

The New Macroeconomic and Institutional Environment

The first half of the 1990s brought important changes to the Brazilian economy. At first this period was marked by the return of voluntary capital flows to Latin America, ending a long period of external restraint initiated in 1982 with the 'debt crisis'.[20] The return of capital flows was made possible by two factors: (a) the implementation of the 'Brady Plan', which organised the securitisation (and reduction) of Latin America's foreign debt; (b) the context of high liquidity and decreasing interest rates prevailing in the main capital exporters to developing countries (USA and Europe).

In Brazil external restraint began to be eased in 1992 when a new foreign debt agreement was signed (following several unsuccessful attempts) under the 'Brady Plan' rules. In the same year, two other factors contributed to recovering the foreign investors' trust and interest in the Brazilian economy: (a) the impeachment of President Fernando Collor, which ended the political and economic impasse that had marked the country during his mandate; (b) the adoption of an orthodox macroeconomic policy, governed by high real interest rates, daily exchange rate devaluations, tax increases and a rigid control of public expenditure. In 1994, a new foreign debt agreement (also under the 'Brady Plan') and the price stabilisation accomplished by the 'Real Plan', an 'exchange-rate based' stabilisation programme, provided new impetus for capital inflows.

At the institutional level, a process of financial liberalisation began in Brazil in 1987. As in other developing countries, it was guided by the opening and deregulation of the financial sector. The most important measures were: (a) the CMN's Resolution 1289 (in 1987), regulating the operations of non-resident individual savers in the Brazilian capital market; (b) the regulation of foreign capital funds devoted to the securitisation of Brazilian foreign debt (1988); (c) the 'Annex IV' to the CMN's Resolution 1289 (1991) that regulated and stimulated the operations of institutional investors in the domestic capital market through tax exemption and authorised the creation of foreign privatisation funds; (d) the Annex V to the CMN's Resolution 1289 (1992), authorising the issue of shares from Brazilian companies in foreign stock markets, through the so called *American depositary receipts* (ADR).[21]

[20] See R. Ffrench-Davis and S. Griffith-Jones (eds.), *Os fluxos financeiros na América Latina – um desafio ao progresso* (Rio de Janeiro, 1997).

[21] See Associação Nacional das Instituições de Mercado Aberto (Andima), *Brazil for Foreign Investors*, 1998, pp. 117–18.

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Table 7. *Some great financial holdings operating in Brazil, by net asset value – December 1997* (*R$ Million*)

Enterprise	Net Asset Value	Activity Areas: Financial Sector	Activity Areas: Non-Financial Sector
		I – National Private Holdings	
1. Bradesco	6.117	Commercial banking; private security; brokerage; credit cards; insurance; capitalisation securities	Wood; furniture; paper; cattle raising; information technology; telecommunications
2. Itaú	5.515	Commercial banking; private security; finance company; brokerage; leasing; insurance	Wood; furniture; paper; chemistry (including petroleum by-products); electronics; transport services; international trade
3. Unibanco	3.079	Commercial banking; private security; insurance	–
4. Sul América	2.607	Commercial banking; brokerage; insurance; capitals; securities	Construction, agriculture
5. Real	1.975	Multiple, commercial and investment banking; finance company; real estate credit; private security; brokerage; insurance; capitals; securities	–
6. Gerdau	1.610	Multiple banking	Forest cultivation; transport services; steel and iron production; cattle raising
7. Bozano, Simonsen	1.215	Multiple and commercial banking; brokerage; consumer credit	Construction; wood; agribusiness; coffee processing
8. Finasa	1.121	Commercial and investment banking; insurance; brokerage; leasing	Information technology; telecommunications
9. Vicunha	1.014	Investment banking; brokerage; investment company	Textile and metallic products; transport services; telecommunications; agriculture

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		II – National Public Holdings	
1. BNDES	10.440	Development banking	–
2. Banco do Brasil	6.003	Commercial and investment banking; insurance; brokerage; finance company; credit cards; leasing	Information technology; telecommunications
3. CEF	4.642	Commercial banking; insurance; real estate credit	Information technology; telecommunications
4. Banespa	3.929	Commercial banking; insurance	–
5. Banrisul	374	Commercial banking; brokerage; leasing	Information technology; telecommunications; transport serv.,
		III – Foreign Holdings	
1. HSBC Bamerindus	1.367	Commercial banking; insurance; brokerage; leasing; credit cards	–
2. Sudameris	571	Commercial and investment banking; credit cards; brokerage; leasing	–
3. BankBoston	522	Multiple and commercial banking; real estate credit; capital market	–
4. ABN Amro	345	Commercial banking; leasing	–

Source: Gazeta Mercantil, *Balanço Anual 1998*, pp. 76–80 and 116–120.

As regards financial deregulation policy, in 1988 a banking reform (Central Bank Resolution 1524) authorised the creation of 'universal banks' in Brazil – here called 'multiple banks'. Under the new regulation, commercial and investment banks were authorised to merge or consolidate with finance companies into a multiple bank. In effect, the 1988 banking reform meant the recognition by the government of the reality of the banking system, which, in fact, already operated as multiple banks. Evidence of this was the rapidity with which this type of institution was structured and grew in the BFS. In the first year under the new regulations alone (1989), 113 multiple banks were formed and the ratio of their assets to the total loans of the BFS, as well as to the aggregate asset of the four main long-term financing institutions (see Box 1) increased rapidly (Tables 1, 2 and 5C). However, an important change brought by the new banking law was the extinction of the old chartering mechanism, which allowed the opening of new financial institutions due to purely bureaucratic (non-technical) criteria. From 1988 onwards the chartering of new banks was based only on technical criteria, that is on capital and skill requirements, strengthening the security and credibility of the Brazilian banking system.

The new conditions and the BFS

In general, macroeconomic and institutional conditions in the 1990s were favourable to financial activity in Brazil: (a) the access of financial and non-financial institutions to foreign capital was recovered; (b) economic activity was stimulated and, in 1993, investment rates began recovering (Table 3); (c) credit operations were revitalised, because of the economic upturn and price stability; (d) the capital market was stimulated, increasing the ratio of primary issues to capital formation and reducing the burden of purely speculative operations in the secondary market (Table 4).

The banking system. The effects of the new macroeconomic and institutional context on the Brazilian banking system may be seen through the changes in its asset and liability structures during the 1990s (Tables 5 and 6). In the multiple banks, the main changes in asset composition until 1997 were the decline of the share of government securities and the increase in credit and external operations.[22] On the liability side, the most visible change was the rise in the share of time deposits, foreign bonds and exchange operations. All these changes were more marked in the private

[22] The analysis of the banking system in the 1990–97 period is limited to the first semester of 1997 in an attempt to avoid data 'contamination' through the effects of the Southeast Asia financial crisis that began in July of the same year and affected financial markets in several other countries, including Brazil.

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multiple banks than in the public ones, reflecting the higher degree of autonomy of the former.

Commercial banks, investment banks and BNDES (it gained an 'S' for Social in 1982) showed important differences in relation to multiple banks. In the commercial banks' asset structure, the only significant change was the increase in the share of external operations – also led by private banks. Public bonds fell modestly and credit operations *lost* participation in the asset structure of these banks. Such changes suggest that commercial banks are becoming more skilled in the intermediation of foreign funds. This hypothesis is reinforced by analysis of their liability structure, where the only items showing significant changes were also linked to external sector. Investment banks showed similar trends to commercial banks, reducing credit operations and with increases only in operations linked to foreign sector, both on the asset and liability sides.

As a state development bank BNDES operates more in line with the objectives of official economic and financial policies than with market conditions. This pattern explains the fact that changes in its asset and liability structure have indicated trends distinct from those observed in other banks – even in the multiple banks, which are the main BNDES' potential competitors in the long-term credit market. Only the shares of private securities and fixed asset ratios showed significant changes in BNDES' asset structure in the 1990s. Credit operations experienced a relative decline in the 1989–94 period, recovering after 1995, but without returning to the (higher) levels of the 1980s.

It is worth noting that the reduction of BNDES' credit was not merely a feature of the 1990s, but rather constituted a clear long-term trend, which has been accentuated since the beginning of the 1980s. Coupled with other changes in the asset structure, this trend might just indicate a new operation strategy towards disintermediation. Were this the case then the fall in traditional loans would be offset, at least in part, by an increase in the share of private securities. Most important of all, BNDES' total assets would probably stabilise or even grow. However, BNDES' asset ratio to aggregate asset of the four main financing institutions analysed here was considerably reduced in the nineties, from an average of 24.8 per cent in the 1974–88 period to 15.2 per cent in 1989–97. Thus, in addition to a new strategy, the changes in its asset structure pointed to an effective reduction in the bank's contribution to investment financing in Brazil.

The reduction of BNDES' contribution to the financing of capital formation in Brazil reflects shifts on the government's attitude to the economy. Since the beginning of the 1990s it has defended the 'minimum state' model. Such a posture is also reflected in the BNDES liability

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Table 8. *Brazil: gross inflow of foreign capital composition* (%) – *1991–97*

Year	Direct Investment	Portfolio Investment			Money Loans	Trade Credit	Total	
		Total	Anexx IV	Others			%	US$ Million
1991	6.0	6.5	4.1	2.4	37.9	49.6	100.0	11.627
1992	7.4	21.7	16.7	5.0	44.8	26.0	100.0	17.791
1993	2.7	46.1	44.7	1.3	33.8	17.5	100.0	32.667
1994	5.2	58.0	47.7	10.3	20.3	16.5	100.0	43.073
1995	6.1	45.9	40.9	5.0	29.5	18.5	100.0	53.885
1996	12.1	32.4	29.1	3.3	35.5	20.0	100.0	78.949
1997	13.8	30.1	25.0	5.2	27.5	28.5	130.1	128.984

Source: BACEN, *Boletim Mensal*, several numbers.

structure, which shows a constant reduction in 'public power obligations'. This loss of fiscal funds was not offset by other 'external' sources, but by its own capital, that passed from 18.5 per cent in 1987–88 to 33.9 per cent in 1993–94 and 27.4 per cent in 1995–97.

The increasing importance of self-financing for BNDES probably explains a good deal of the reduction of its role in investment financing, as well as the aforementioned change in its operative strategy. While access to third party funds is hindered, either because of the shortage of these funds or because of the bank's preference for a more conservative management, its capacity to expand credit supply, as well as the bank's profitability, becomes increasingly constrained.[23] In this environment 'securitised' assets are favoured, not only because they represent a business alternative, but also because of their strategic advantages: they do not commit the bank's own capital (except for a short time, in 'unmatched' operations) and thus allow also higher flexibility and liquidity to the bank than conventional loans.[24]

The same rationale possibly applies to the decline of the share of credit operations in the investment banks' asset structure, as their own capital ratios in the 1990s were similar to BNDES' level (around 30 per cent). By comparison, it is worth noting that the share of this item in investment banks' and BNDES' funding sources during the 1990s was practically twice that observed in multiple banks – the only banking sector that substantially increased credit operations. Furthermore, among the focused institutions, multiple banks have widened their asset ratio to aggregate

[23] See H. P. Minsky, *Stabilizing an Unstable Economy* (New Haven, 1986), pp. 234–8.

[24] On the advantages of securitising loans in bank assets, see J. A. C. Santos, 'Commercial Banks in the Securities Business: A Review', *BIS* (*Bank For International Settlements*), Working Papers No. 56, June 1998. About the experience of American and European banks in this respect, see Kregel, 'The Past and Future', and Edey and Hviding, 'An Assessment'.

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asset, suggesting that its credit ratio growth also meant an increase in its market share. The highest leverage ratio of these banks – that is, assets to equity ratio – is certainly one of the reasons behind this result.

However, concerning credit operations, it is important to note that, until 1997, the recovery was led by short-term operations. The only groups that gained shares in total loans were individual consumers and commerce (Table 9), whose credit demands are concentrated in terms lower than one year. The market share of sectors that usually demand long-term financing (such as industry and housing) were unaffected. Another indicator of (and reason behind) the observed weak propensity of the Brazilian banking system for long-term operations emerged from its liability structure. The similarity between multiple and commercial banks in what concerns time deposits ratios is striking: it was 21.2 per cent, on average, in the multiple banks (between 1992–97), these being supposed to operate with longer maturities, and 20.7 per cent (1993–97) in the commercial banks, which usually operate with short-term businesses. Furthermore, the solid increase of foreign funds in the banks' liability structure in Brazil occurred, almost exclusively, because of short-term funds, while the share of long-term funds shrank slightly in all institutions analysed.

Investment funds, pension funds and the capital market. A recent trend in BFS, which is not observable in bank balance sheets, is the emergence and growth of mutual investment and pension funds. These institutions have been important to the development of capital markets in several countries because their assets are largely composed of long-term fixed- and floating-income securities.

Investment funds were first regulated in Brazil at the beginning of the 1990s, in order to ease the rolling over of the high public debt in the context of high inflation. Through these funds, banks bought indexed government securities and funded them by issuing short-term indexed deposits, offered to the public. Such deposits were easily accepted by savers, because, in practice, they were very similar to demand deposits. In July 1995 CMN determined several changes in the sector regulation, establishing high reserve requirements for the short-term asset holdings of these funds and stimulating longer-term operations with low or null reserve requirements. At the time, the fixed-income Financial Investment Funds (FIF) (still in effect today) were created under four distinct maturity structures: FIF 30, FIF 60 and FIF 90, respectively with minimum 30, 60 and 90 days-term, and the Short-Term FIF, without a legal minimum term.

Table 10 presents some indicators of the mutual investment funds industry in Brazil in December 1997. At that time the sector held assets

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Table 9. *BFS Loans to Private and Public Sectors: distribution (%) by final debtors – 1992–97*

Period	Debtors							Total		
	Government (*)	Industry	Commerce	Housing	Consumers	Others	%	R$ Million of Dec/97	Real Growth (%)	
									6 months	12 Months
Dec/1992	14.5	25.3	6.1	27.4	2.5	24.2	100.0	267.722	–	–
Dec/1993	10.9	33.5	7.2	19.4	2.9	26.2	100.0	366.316	30.4	36.8
Dec/1994	11.1	23.6	9.6	23.1	7.6	25.1	100.0	267.547	9.6	−27.0
Jul/1995	7.9	27.0	11.4	23.6	7.3	22.9	100.0	259.684	−2.9	6.4
Dec/1995	8.6	26.6	11.7	22.6	6.6	23.9	100.0	285.012	9.8	6.5
Jul/1996	11.0	25.5	11.3	22.7	6.2	23.2	100.0	295.070	3.5	13.6
Dec/1996	11.1	27.2	10.2	21.6	8.0	21.8	100.0	309.672	4.9	8.7
Jul/1997	13.7	24.8	10.2	20.5	9.3	21.6	100.0	333.585	7.7	13.1
Dec/1997	8.7	26.7	9.8	22.8	11.7	20.3	100.0	296.466	−11.1	−4.3

Source: Own elaboration, based on data from BACEN, *Boletim Mensal* and *Suplemento Estatístico*, several numbers.
(*) It includes only the tipycal activities activities of federal and state government. The state-enterprises are included in the other items.

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Table 10. *Mutual investment funds in Brazil – 1991/97 – Current R$ Million*

Recent Evolution	1991	1992	1993	1994	1995	1996	1997
Net Asset Value (NAV)	12.117	19.073	24.820	41.431	73.001	126.931	141.861

Situation in December 1997

	FIF							
Selected Items	Short-term	30 days	60 days	90 days	Equity Funds	Foreign Cap. Funds	Other	Total
Net Asset Value (NAV)	6.262	8.542	94.493	2.814	15.539	4.479	9.732	141.861
% over Total NAV	4.4	6.0	66.6	2.0	11.0	3.2	6.9	100.0
Portfolio Composition:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal Bonds	17.6	31.3	43.4	18.0	5.6	61.3	68.4	39.2
Private Bonds	5.1	11.4	15.2	12.7	0.9	6.1	29.9	13.6
Short-term Operations	17.6	46.9	28.2	58.8	0.0	0.0	1.7	23.7
Shares and Corporate bonds	1.1	1.6	3.6	2.3	87.9	0.7	0.0	12.2
Reserve Requirement	53.0	4.8	0.0	0.0	0.0	0.0	0.0	2.6
Others	5.5	4.0	9.7	8.2	5.5	31.9	0.0	8.7

Source: BACEN, *Boletim Mensal*, April 1998.

Table 11. *Aggregate asset of BFS – December 1997*

Type of FI	Asset R$ Million	Asset % over Total
Banco do Brasil	103.162	16.9
Commerical Banks (CMB)	26.463	4.3
Multiple Banks (MB)	267.919	43.9
Private	202.471	33.2
Public	65.448	10.7
Investment Banks	6.916	1.1
BNDES	60.438	9.9
Federal Saving Bank (CEF)	110.054	18.0
Regional Saving Banks	1.355	0.2
Regional Develop. Banks	4.571	0.7
Finance Companies	4.180	0.7
Housing Banks	6.155	1.0
Credit Associations	19.195	3.1
Brokerage Firms	578	0.1
Total of BFS	610.986	100.0
Banks*	573.962	93.9

Source: BACEN, *Suplemento Estatísitco* of the *Boletim Mensal*, March 1998.
(*) It includes: Banco do Brasil, CMB, MB, BNDES, CEF, Regional Saving and Development Banks.

of around R$ 142 billions, largely concentrated in FIF 60 (67 per cent). If compared to the situation prior to the changes in regulation in 1995, this level of concentration signalled some progress in the lengthening of the maturities of savings in Brazil. A similar indication was the recent expansion of mutual equity funds: by mid-1996, they represented only three per cent of the whole funds market,[25] whereas this share rose to 11 per cent in 1997. In contrast, however, two factors suggest that this progress in the savings allocation pattern continues to advance at a slow pace: (a) the small share of the FIF 90, which represents only two per cent of the total assets of the funds industry, although, like FIF 60, it benefits from the exemption of compulsory reserves; (b) the portfolio composition of the longer term funds, which is still strongly concentrated in high liquidity assets – particularly federal public bonds.

Like mutual investment funds, pension funds have experienced a vigorous growth in Brazil in the last few years (Table 12), especially the 'closed entities'.[26] By the end of 1997, they held assets of up to US$ 78

[25] Banco Central do Brasil (BACEN), *Boletim Mensal do Banco Central do Brasil* e *Suplementos Estatísticos*. (Brasília, 1996).

[26] 'Closed' pension funds are those maintained exclusively by the employees and capital of a specific company. This type of pension fund is dominant in Brazil, while the 'open' entities (those maintained for individual contributors) are still little active: their aggregate assets represent less than ten per cent of that of 'closed' funds, estimated at

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Table 12. *Closed Pension Funds in Brazil – Selected indicators – 1991/1997*

Items	1991	1992	1993	1994	1995	1996	1997
Number of Entities	256	266	297	328	344	349	339
Number of Contributors	1731	1682	1652	1757	1778	1698	1788
Number of Beneficiaries	153	165	178	211	225	245	426
Portfolio Value (US$ Million)	17.989	23.026	32.568	55.081	59.055	68.982	77.832
% over GDP	3.4	4.4	5.9	9.5	9.7	10.5	11.5
Portfolio Composition (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Public Bonds	7.4	6.5	4.0	3.8	4.4	5.7	3.7
Shares and Corporate Bonds	34.4	30.4	37.3	41.0	34.7	35.7	32.4
Real Estate	19.3	20.3	16.0	14.4	14.9	12.9	10.4
Time Deposits	12.6	15.9	14.5	11.5	14.6	9.6	7.6
Investment Funds	1.5	4.2	9.8	12.4	11.9	19.4	30.0
Fixed-income	nd	nd	9.8	12.4	11.9	16.8	19.3
Floating-income	nd	nd	nd	nd	nd	2.6	10.7
Others	24.8	22.7	18.4	16.9	19.5	16.7	15.9

Source: Abrapp (by internet), for 1993–97 and *Revista Abrapp*, December 1996, for 1991–92.

billions, with approximately 43 per cent of them applied in floating-income securities. The remaining 57 per cent was held in short-term assets (public bonds, banking deposits, etc.) and the real estate market.

Another source of funds to the Brazilian capital market in the 1990s was foreign investments, regulated by 'Annex IV'. Following the general trend of capital flows to the country, a rapid rise occurred in operations under Annex IV, reaching an annual average greater than US$40 billion between 1993–95 (Table 8). Since then, these investments have declined relative to the first years of the Brazilian financial opening: the annual average fell to US$27 billion in 1996–97 and investments acquired a more speculative and volatile profile.

Investment funds, pension funds and foreign resources from Annex IV boosted the Brazilian stock market in the 1990s, and began moderately to change the investment profile. The increase in the ratios between issues and capital formation, and between issues and value traded in the secondary market (Table 4, columns 3 and 4) indicates a degree of strengthening of the role of the capital market in the process of investment financing in Brazil.

Prospects for the Formation of a New Financing Model in Brazil

Structural conditions: the inheritance of the 1980s

Today, the BFS is formed by all financial institutions listed in Box 1, with two exceptions: (a) the exclusion of BNH (National Housing Bank), which ceased to exist in 1986, when its functions were taken over by CEF (Federal Savings Bank); (b) the inclusion of multiple banks from 1988 on. In structural terms, the BFS may be now characterised as a *bank-based system* given that loan institutions comprise 94 per cent of the sector's asset (Table 11). Due to its successful performance throughout the period of macroeconomic instability during the 1980s, today the Brazilian banking system is a solid one.

In mid-1995, shortly after the Mexican currency crisis, BACEN increased the interest rate significantly, devaluated the exchange rate (at about six per cent) and changed the exchange regime from a fixed-exchange to a band system. At this time, the Brazilian banking sector had

US$77.8 billion by the end of 1997. See Anapp, Associação Nacional das Entidades Abertas de Previdência Privada, *Mercado de previdência privada aberta – dados do setor de previdência privada aberta*, available on the internet at http://www.anapp.com.br. See also Associação Brasileira das Entidades Fechadas de Previdência Privada (Abrapp), *Informações estatísticas consolidadas*. Available on the internet at http://www.abrapp.org.br.

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increasing non-performing debt ratios and went through a 'liquidity crisis'. However, as Carvalho has shown, this setback did not become a *systemic* banking crisis.[27] The problem was promptly addressed by BACEN through conventional 'last resort' loans (to those banks which were short of liquidity) and the implementation of measures to support the restructuring of the sector. These restructuring measures were based on liquidation of the troubled banks and the implementation of PROER (Banking System Restructuring and Enhancing Programme). PROER consisted of Central Bank loans, funded by resources from the bank's compulsory reserves, which were offered to financially viable banks interested in acquiring those facing liquidity crises. The Central Bank's strategy reduced the impact of such banking crises on overall economic activity (Table 3). This would not have been the case if the banking system itself had been fragile.

Despite the solid banking structure, the BFS cannot be characterised as a *Private Credit System*. Even for multiple banks, credit operations represent less than half of total assets, although these loans have grown relatively rapidly in the last decade. Furthermore, analysis of the 1990–97 period shows evident signs that the 'short-termist' profile of savings persists, hence indicating the difficulties for developing long-term financing, that has always distinguished the Brazilian banking system. This pattern also explains the lack of significant capital market development, which, up to 1997, was a secondary source of investment financing in Brazil.

Under such conditions, the development perspectives of long-term financial mechanisms in the country – either through banking or the capital market – are tied to the implementation of a financial policy capable of breaking the vicious circle, which has developed in Brazil in recent years between financial restrictions and weak economic growth. The discussion about what such a policy ought to be is extensive and complex enough to deserve a separate study. Nevertheless, in light of theory and international experience, the Brazilian case provides some basic criteria. Section 5.2 presents some suggestions and comments on recent government measures in this area.

The role of financial policy

The main goal of any economic policy is to increase the efficiency of the sector in question. Given its functions and peculiar risks, the financial sector efficiency cannot be defined by microeconomic indicators alone (volume and costs of funds mobilised), but also, indeed principally, by the

[27] See F. J. Cardim de Carvalho, 'The Real Stabilization Plan and the Banking Sector in Brazil', *Banca Nazionale del Lavoro Quarterly Review*, No. 206, September 1998.

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macroeconomic effects of its functioning. The goal of financial policy is, therefore, to achieve a *first-* or *second-best* balance between degrees of resources mobility and the security of the financial system as a whole. The concept of *functionality* proposed by Studart clearly synthesises these criteria of macroeconomic efficiency:

> Functionality is defined as follows: a financial system is functional to the process of economic development when it *expands the use of existing resources* in the process of economic development *with the minimum possible increase in financial fragility* and other imbalances, that may halt the process of growth for purely financial reasons. (Italics added).[28]

In its recent evolution the BFS appears to have achieved the second condition stressed by Studart, operating 'with the minimum possible increase in financial fragility (...)'. Yet with respect to the first condition – '[expansion of] the use of existing resources' – there are noticeable limitations. As indicated, the main reason for the non-functionality of the BFS is the under-development of channels for private long-term financing, both in the credit and capital markets.

As for the capital market, international experience shows that a consistent expansion can only be achieved through institutional investors, whose (high) operation scales assure a rapid and sustainable jump in traded values. In the Brazilian case the inexperience and the lack of tradition of individual savers directly acquiring long-term assets, and especially floating-income securities, underlines such indications.

Today, the Brazilian capital market has six categories of potential institutional investors: investment banks, multiple banks, BNDES, and investment, pension and foreign funds. The first three categories, as noted above, do not constitute an important source of *final* demand in the capital market (Tables 5B and 5C). However, balance sheet data are not an accurate indicator of the role of banks in the capital market, since these data omit intermediation services, through which the banks operate merely as brokers. In this case, banks are only underwriters of securities; they do not hold them on their balance sheets. Given the international trend towards the 'universalisation' of banking systems and the securitisation of assets, this should become the typical role of banks in capital markets. Therefore, only the last three institutional investors mentioned above are significant as *final* demand for private securities.

The expansion of capital and credit markets based on foreign resources has recently been boosted by the government's policy of deregulating foreign investments. In 2000, CMN Resolution 2689 eliminated the 'Annexes' that had defined different market segments for foreign

[28] See Studart, *Investment Finance*, p. 64.

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investments in Brazil. The new regulation allows for free resources transfer among the different segments – from stock market to fixed-income funds, for instance. Moreover, CVM's overly bureaucratic procedures to authorise foreign investments were replaced by a simple document of investment statement. Foreign investment is now permitted within just two days, while the former procedure took up to two months to be completed.

Deepening the opening of the financial market, however, is a risky process that needs to be carefully managed in order to avoid high external fragility. The experience of currency crisis in Mexico (1994), Southeast Asia (1997) and Brazil (1998–99) are dramatic examples of such risk. External financing should therefore be seen as a complement to the potential expansion based on domestic savings. This source of financing, in turn, should preferably be channelled through investment and pension fund holdings of medium- and long-term assets. In more developed countries and financial systems, these financial instruments are the main means of expanding and supporting long-term banking credit and capital markets.

As for pension funds, there is little room for increasing their contribution to Brazilian capital markets in the short-term. In 1997 the closed funds already allocated 43 per cent of their resources in shares and debentures (32 per cent directly and 11 per cent through investment funds – Table 12). This is very close to the maximum of 50 per cent allowed for these types of securities by CMN Resolution 2324/1996, which regulates pension funds investments in its technical reserves. In the same year investments in fixed-income securities represented 31 per cent of the funds portfolio, for a maximum permitted limit of 80 per cent. However, as fixed-income assets in Brazil still have short maturities, the expansion of this permitted limit will not necessarily imply an increase in the *functionality* of pension funds.

The pension funds associations claim that changes in legislation are needed in order to increase their contribution to the process of economic development. Their main demand is for the loosening or abolition of the limits for investment of the technical reserves in specific financial instruments. However, considering the risks that could affect both pension funds and their investors, this measure would not seem to be the best strategy. Indeed, Resolution 2324/1996 was a government reaction to the financial losses incurred by several private pension funds in the stock market in 1995 because of the Mexican currency crisis.[29] Moreover, as for any investor, the demand of pension funds for floating-income assets is

[29] See F. Pereira, R. B. Miranda and M. M. Silva, 'Os fundos de pensão como geradores de poupança interna', *Texto para discussão Ipea*, No. 480, May 1997.

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guided by their expectations of profits and risks of the issuing companies, a factor which will not be affected by eventual changes in the legislation. Lastly, the fact that their investments in these assets are *below* the permitted limit indicates that the legal limit has not been an obstacle to the performance of these institutions in the Brazilian capital market.

The expansion of the aggregate portfolio of private security institutions in Brazil is therefore the preferred option for raising their functionality in the BFS. Despite significant expansion of the sector in the 1990s, in terms of the number of institutions and the amount of resources mobilised, the number of contributors has remained the same since 1991 (around 1,700). The growth of the sector's aggregate portfolio during this period has only been due to the profitability of their assets – indicating an uncertain situation in the future. Moreover, the amount of beneficiaries and fixed expenditures of the institutions has been growing since the beginning of the decade. A policy to encourage the admission of new contributors is therefore increasingly required for the financial and actuarial equilibrium of the Brazilian pension funds in the medium-term.

It is possible that the ongoing social security reform, signalling the reduction of benefits for future retired generations, will stimulate the demand for private security. However, given the inexperience of Brazilian savers in long-term saving, in the absence of conditions to facilitate, or even stimulate, the allocation of savings to this channel, such opportunities will be lost. A policy for the private security sector in Brazil should therefore include the following measures: (a) tax-exemption on contributions for private pension funds; (b) accounting regulation, in order to make the financial strategies and the risks assumed by the managers institutions clear to savers; (c) improvement in the mechanisms for risk control in the management of technical reserves by the pension funds; (d) the establishment of clear penalties for administrators who commit irregularities; (e) greater flexibility and freer choice for pension funds contributors, assuring them some protection and the transfer of their rights when they shift resources from one organisation to another. In addition to minimising risks for the contributor, this last measure would increase competition within the sector, stimulating professional skills and increasing its efficiency. In general terms, these conditions are contemplated in the Complementary Law of Social Security (PLC 10/99), sent to the National Congress in 1999, and still under discussion.

As for the investment funds, the concentration of their portfolios on assets characterised by high liquidity does not enable them to sustain a capital market that could be *functional* for economic development. In Brazil, in contrast to developed countries, investment funds are still viewed by savers and managing institutions as a short-term market

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alternative – perhaps due to the inflationary environment within which these funds were developed and became popular.[30]

The restrictions on the lengthening of the investment funds portfolio in Brazil are essentially the same as those limiting the investment and multiple banks' interest in long-term operations – even because, in Brazil, the majority of these funds are managed by financial conglomerates.[31] Despite the success of the Real Plan in the field of price stabilisation,[32] several factors in recent years have contributed to keeping the BFS concentrated in short-term assets, and particularly in public securities: (a) the growth of budget deficits (Table 3); (b) the Central Bank's need to sell federal debt to 'sterilise' the increased international reserves in order to control monetary supply in phases of high capital inflow (between 1995 and 1997); (c) the policy of high interest rates, particularly in the period 1997–99, which was aimed at controlling aggregate demand, inflation and, above all, to finance the current account deficits, in a situation of global economic slowdown; (d) weak GDP growth since 1996, due to interest rate policy and, from 1997, additionally to foreign restriction; (e) the increase in the risk level of banking system and investment funds. The credit risk tends to increase in this context because of high interest rates and the weakness of economic activity; the interest risk also rises, since interest rates could be changed suddenly to adjust the economy; finally, since 1999, the currency risk has widened with the establishment of the flexible exchange regime.

Under such conditions, savers, banks and funds managers tend to adopt a 'credit rationing' policy (either formally or informally). The rationing is characterised when higher (real) interest rates are no longer able to stimulate the demand for assets, because, they expand more than proportionally the (expected) asset risk.[33] In the Brazilian case, in addition to the risks related to high interest rates, credit rationing also reflects the typical high degree of risk-aversion of savers and financial institutions produced by the long history of macroeconomic instability – particularly persisting fiscal disequilibrium and external vulnerability.

[30] On the role of investment funds in developed countries, see R. Studart, 'Securitização, derivativos e investidores institucionais: um novo padrão de financiamento de longo prazo?', in A. Oliveira and H. Q. Pinto Júnior, *Financiamento do setor elétrico brasileiro: inovações financeiras e novo modo de organização industrial* (Rio de Janeiro, 1998).

[31] See J. Hermann and R. Studart, 'Estrutura e operação dos sistemas financeiros no Mercosul: perspectivas a partir das reformas institucionais dos anos 1990', *Relatório de Pesquisa: Projeto Mercosul – CEPAL-IPEA-IE/UFRJ*, July 1999.

[32] Associação Nacional das Instituições de Mercado Aberto (Andima), 'Quatro anos de plano real', in *Andima Sinopse Mensal*, June 1998.

[33] See J. Stiglitz and A. Weiss, 'Credit Rationing in Markets with Imperfect Information', *American Economic Review*, 71, June 1981, pp. 353–76.

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Within this context, the task of building an environment of trust capable of stimulating demand for long-term assets requires government action in three areas. The first relates to the *macroeconomic policy*: interest rates need to be lowered to levels which would allow for the reduction of public and private sectors' credit risk, so indirectly stimulating investment recovery. The second area is *financial policy*, where the main tasks are the revision and strengthening of prudent regulation, aimed at controlling bank and capital market risks. This is important because these risks have increased in all countries undergoing financial liberalisation and particularly in those, such as Brazil, where liberalisation has been coupled with a price stabilisation plan.[34]

Prudential regulation assures a gradual reduction of the financial system's risk, but not rising expected returns, especially for long-term assets. This will only happen if real income experiences sustained growth. This in turn will depend on the availability of long-term financing. Financial restraint therefore creates a vicious circle that will be very difficult to break without the support of *public credit* – at least, for jump-starting the process of economic growth. Such a policy is also required for the construction of a *functional* financial market, as evidenced by the experiences of the more industrialised economies.

The required interest rate policy involves two levels of government action: on the basic (primary) interest rate (here represented by the SELIC rate) and on the banking spread. As for the first step, Central Bank freedom to act is constrained by the macroeconomic goals of price stability and external equilibrium. These goals restrict the scope for lowering interest rates in any country and even more in those submitted to an exchange-anchor regime, as Brazil was between 1994–98.[35] After 1999, the exchange-anchor was replaced by a flexible exchange regime, which, in theory (according to the Mundell-Fleming model), gives more freedom to BACEN in the management of monetary policy. However, the international experience has shown that, in fact, this freedom is really achieved only when the exchange rate has been stabilised, thus lifting pressure on the inflation rate. More important than this, what is needed is a solid exchange-rate stabilisation, based, essentially, on the country's capacity to generate positive trade balances and not on foreign debt. BACEN has been using its limited degree of freedom as far as possible, having reduced the SELIC rate from 45 per cent to 16.5 per cent a year between the first quarter of 1999 and the middle of 2000. This was

[34] See Carvalho, 'The Real Stabilization Plan'.
[35] See J. Hermann, 'Ancoragem cambial em ambiente de elevada mobilidade de capital: alcance, limites e soluções', *Revista Estudos Econômicos*, vol. 29, No. 4, 1999.

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equivalent to nearly 8.8 per cent in real terms, for an annual expected inflation of around 7 per cent (by CPI).

As for the banking spread, this reflects three components: (a) the risk rate attributed to each specific asset; (b) the macroeconomic risk associated with GDP growth rates and some indicators of monetary and credit markets (basically, inflation, exchange and interest rates and bankruptcy indicators); c) regulatory features, such as taxes, compulsory reserves and other requirements that imply costs for financial institutions. The first component is not under the direct control of macroeconomic and financial policies; the second reflects the conditionings and limitations of macroeconomic policy; and only the latter is liable to direct intervention by government.

Based on a recent study by the Central Bank,[36] the government has adopted an incentives policy aiming at the reduction of banking spreads, by reducing taxes and compulsory reserves imposed on banking operations: (a) the IOF (financial operations tax) over credit operations fell from 6 per cent to 1.5 per cent; (b) reserve requirements over sight deposits were reduced from 75 per cent to 45 per cent; (c) reserve requirements were eliminated for banking time deposits and for investment funds operations. In addition, the government has been trying to stimulate competition in the banking sector by disclosing information about the interest rates charged by individual banks, and through a policy of increasing foreign participation in the Brazilian banking market, by supplying credit and fiscal incentives to foreign banks interested in acquiring ailing national banks.[37] As the operation of foreign banks in Brazil has yet to be regulated, such a policy currently rests on a Presidential decree.

Since 1996 the market share of foreign banks in Brazil has been growing at a faster rate.[38] These banks enter the Brazilian market with better access to foreign funds because their reputation and investment rating in the international financial market are generally higher than those of national banks. In addition, foreign banks have easy access to local bank's customers and low (fixed) initial costs because in most cases they enter the Brazilian market through mergers or acquisitions of already

[36] Banco Central do Brasil (BACEN), *Juros e spread bancário no Brasil*, Departamento de Estudos e Pesquisas (Depep), Brasília, October 1999.

[37] See R. M. de Barros and M. F. Almeida Jr., *Análise do ajuste do sistema financeiro no Brasil* (Brasília, 1997).

[38] See Associação Nacional das Instituições de Mercado Aberto (Andima), 'Reestruturação do SFN (Sistema Financeiro Nacional): uma análise do período 1994/1997', in *Retrospectiva* 1997, Rio de Janeiro, 1997; see also F. J. Cardim de Carvalho, 'New Competitive Strategies of Foreign Banks in Large Emerging Economies: The Case of Brazil', *Banca Nazionale del Lavoro Quarterly Review*, No. 213, June 2000.

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established institutions. Foreign institutions are thus able to charge lower rates for loans, and can force domestic rates down through competition.

In addition to this favourable 'competition-effect', the growth of foreign participation within the Brazilian banking system will surely affect the sector market structure, although it is not yet clear precisely how. Foreign banks will probably take up a significant share of the credit market, especially in the medium- and long-term segments. In addition to the low operational costs of foreign banks, the inexperience of Brazilian banks in these segments – which require a more technical and rigorous process of risk evaluation than short-term operations – is another advantage for foreign banks. Financial opening has therefore forced the banking system towards a new round of market concentration. This process has been headed by foreign banks and national financial conglomerates – the same institutions that led the mergers and acquisitions operations following the banking liquidity problems of 1995. In the short-term, competition among these strong financial institutions will probably lead to lower interest rates for borrowers. In the medium and long-term, however, the consequences of this process are still difficult to judge. The new market structure will certainly be more concentrated than the present one, paving the way for the return of the practice of high banking spreads.

Concerning the risks of the banking system, several control measures were implemented in recent years.[39] Brazil adhered to the 'Basle Agreement' in 1994, establishing a minimum capital requirement ratio of 11 per cent (Central Bank Resolution 2099/1994) – in excess of the agreed floor of 8 per cent. In 1995, the FGC (Credit Guarantor Fund), an insurance deposit fund, and the aforementioned PROER were created. These two measures were taken following the threat of a banking crisis and the monetary restrictions imposed to control the aggregate demand and the effects of the Mexican exchange crisis.[40] In 1997, PROES was launched – a programme similar to PROER, aiming at restructuring and, subsequently, privatising state banks.

Since the adoption of the floating exchange rate regime in January 1999, another round of measures has begun: (a) the requirements of reserve provisions for non-performing loans were reinforced (Central Bank Resolution 2682/1999), and are now based on a complex methodology that defines nine risk categories according to various debtors' financial conditions; (b) a capital requirement to cover exchange and interest rate risks was established (Central Bank Resolutions

[39] See Hermann and Studart, 'Estrutura e Operação'.
[40] See Carvalho, 'The Real Stabilization Plan'.

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2606/1999 and 2692/2000); (c) a schedule was introduced for reduction of the banks' participation in non-financial institutions, from the existing level of 80 per cent to 50 per cent of the net asset value by 2002.

In the capital market, in addition to the private security reform, BACEN has standardised financial reporting by the investment funds. It has begun to require written information about the risks on such operations and has established sanctions for fund managers in case of irregularities. These measures were introduced in order to improve the disclosure to individual savers of the return and risk conditions of pension and investment funds. A new Corporation Law has also been sent to Congress, focusing on the guarantees of similar rights for controllers and minority shareholders (who were underprivileged in the 1976 law). This law is intended to stimulate their participation in the market.[41]

Finally, in the public credit area BNDES is the key institution in the structure of the BFS. It is the only national bank with recognised know-how in the provision of long-term financing for the industrial and infrastructure sectors. However, between 1997 and 1999 the bank's loans budget was maintained at R$18 billion per year. This policy represents a shrinkage of the budget in real terms, since in the same period the accumulated inflation was 28.96 per cent. Such a policy largely reflects BNDES' adjustment to the external restraints imposed on all financial and non-financial companies in the country, due to the recent Asian, Russian and Brazilian currency crises. Moreover, it also reflects the liberal 'minimum state' approach followed by President Fernando Henrique Cardoso. This even after external restraints had been removed, it cannot therefore be expected that BNDES will make a significant contribution to long-term financing in Brazil.

In the first semester of 2000, President Cardoso signalled a shift in government policy, in favour of economic development. With this model GDP growth and employment will be prioritised, gaining a status equivalent to that of price stabilisation within macroeconomic goals. This new government vision was reflected in BNDES' loans budget, which jumped to R$24 billion in 2000. However, it is well known that such an agenda has met with some resistance in the president's team, especially from the minister of finance, who has strongly influenced President Cardoso since his first mandate. Thus, it would be premature to interpret this recent announcement as 'the' new public credit policy of the Brazilian government.

[41] Comissão de Valores Mobiliários (CVM), 'Por Dentro Da Lei', *Informativo CVM*, Notícias, July 2000.

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Summary and Conclusions

This article has analysed the organisation and financing experience of the BFS from the reform of the 1960s to the 1990s. It has also evaluated the perspectives of development of a (new) financing model in Brazil, led by national savings and private financial institutions.

Firstly, it was shown that the 1964–67 financial reform was successful in expanding and diversifying the BFS. However, given inadequate institutional (regulatory) and macroeconomic conditions, only short-term operations and the demand for public bonds were, in fact, stimulated. Therefore, the reform failed to meet its main goal of creating a private system of long-term financing in Brazil.

Until the end of the 1980s the Brazilian financing model did not resemble any other known *private* system – the capital market or the private credit system. During this period the state remained the only domestic supplier of long-term credit, through BNDES and also from other less conventional budget sources.[42] Nonetheless, it would be incorrect to define the BFS of the 1970–80s as a public credit system, given the importance of external credit and self-financing in this period and to date. Albeit significant as part of overall economic development policy, BNDES' contribution to capital formation in Brazil was relatively modest in quantitative terms: according to BNDES' own estimations, even during the II PND period, which represented the peak of the bank's activities in investment financing, this contribution only reached 8.7 per cent.[43]

In terms of public credit policy, the endowment of non-monetary and non-budgeting sources of funds for BNDES was an important improvement on the pre-1960s financing model. The bank gradually gained more autonomy in the administration of its financial policy, which was sustained by several special funds and compulsory savings mechanisms.[44]

By the end of the 1980s the country had begun a process of financial liberalisation led by a gradual deregulation of the banking system – defined in the 1988 banking reform – and by the opening of capital markets. Coupled with this process, increased liquidity in the international

[42] For more details see Lees, Botts and Cysne, *Banking*, chapter 11, and Studart, *Investment Finance*, pp. 150–4.

[43] For data on BNDES' contribution to investment financing in Brazil, see D. C. Monteiro Filha, 'A contribuição do BNDES para a formação da estrutura setorial da indústria brasileira no período 1952/89', *Revista do BNDES*, vol. 2, No. 3, June 1995, p. 155.

[44] See M. Prochnik, 'Fontes de recursos do BNDES', *Revista do BNDES*, vol. 2, No. 4, December 1995, pp. 143–80.

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market resumed voluntary capital flows into the country in the first half of the 1990s, providing the BFS with an important source of funds absent in the previous decade. After 1994 monetary stabilisation also contributed to widening business opportunities in the BFS, recovering credit demand, which was stagnant during the long period of high inflation.

The 1988 banking reform meant a radical break with the financial model idealised in the 1960s – a segmented system, based on the capital market – and a move towards the German model – a private credit system led by 'universal banks'. The relative financial equilibrium demonstrated by the large Brazilian banks – which have weathered the long period of high inflation and, more recently, the currency crisis – reinforces the view of financial developments in this direction. However, it would be premature to classify the BFS of the 1990s as a private credit system. The viability of this financing model, as well as of the other two models mentioned here, not only requires compatible institutional and structural conditions, but also return and risk conditions favourable to long-term operations. The weakness of the Brazilian economy in this respect continues to limit the formation of a solid long-term segment in the BFS, either in the banking sector or in the capital market. Despite the positive trends of the 1990s what has happened in this decade is a movement of credit expansion that was still concentrated in short-term operations for the private sector and, since 1997, for the public sector.

Analysis of the 1990s suggests that the weak interest of banks and investment funds in long-term financial operations cannot be attributed to regulatory restrictions. The 1995 legislation for the funds, as well as the 1988 reform of the banks, are very liberal relative to their resources allocation rules. In fact, the recent Asian and Russian crises and their effects on the Brazilian financial market indicated that the liberalisation policy had gone too far, signalling the need for better regulation to limit the exposure of financial institutions – and, hence, of individual savers – to the risks of a liberalised market. The drafting of such regulations was the main focus of President Cardoso's financial policy in the late 1990s.

In short, the main obstacle to the development of long-term financing mechanisms in Brazil is not financial regulations, but rather the environment of uncertainty and risk aversion that still dominates the Brazilian asset market. Price stabilisation and financial liberalisation policies were clearly insufficient to overturn this situation, changing only the set of conditions underpinning it. Until the 1980s these comprised high inflation, high short-term public debt and external restraint. Today these conditions include: (a) the weakness of economic activity as it restricts aggregate income, keeping the credit risk high; (b) the latent external restraint imposed by the financial liberalisation model: by

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combining a flexible exchange rate regime with high capital mobility, the economy remains under permanent risk (although to variable degrees) of unstable exchange rates and, consequently of rising inflation. Moreover, this environment tends to increase the risk of changes in interest rates and, consequently, the liquidity risk of the banking system overall.

The breaking of this vicious circle requires a combination of macroeconomic and financial policies involving three lines of action: (a) a consistent reduction in interest rates; (b) the reinforcement of mechanisms to control and regulate financial risk; (c) public credit support in order to make new investment plans (supposedly stimulated by the other measures) viable in an environment traditionally characterised by low expected returns and high risk in long-term financial operations. As indicated here, the Brazilian government's strategy in recent years has been oriented towards the two first alternatives, and particularly the second. By contrast, public credit policy until 2000 followed the tendency of shrinkage, initiated in the 1980s.

If the liberal vision prevails then the role of public credit will tend to shrink still more in coming years. In this case, a new investment cycle will have to be sustained by a combination of private domestic credit (as far as possible), foreign funds and self-financing. The eventual concentration of investment financing in foreign funds implies the risk of financial and exchange fragility for Brazil. Concentration in self-financing tends to increase the 'mark ups' and, hence, the prices and inflation associated with GDP growth. If current policies do not succeed in building a private credit system in Brazil, financial stability and/or investment and growth rates will therefore be threatened.

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