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Development banks in the financial-liberalization era: the case of BNDES in Brazil

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This article considers the potential repercussions of financial liberalization on the role played by development banks, particularly the National Bank for Economic and Social Development (BNDES), as the main source of funding for Brazil's economic development process. Although liberalization can foster financial development, the latter tends to respond incompletely to the needs of economic development in less developed countries, such as Brazil. Analysis of the Brazilian case seems to confirm this thesis and shows that BNDES not only preserved but actually expanded its position on the domestic market in 1990-2006, despite the financial-liberalization policy that was implemented in that period.

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I
Introduction

Development banks were originally created to promote national economic development in countries where the domestic financial system was unable to sustain a rapid expansion of aggregate investment. Most of these institutions were founded in the initial or intermediate phase of the industrialization process, to promote and, in particular, speed up the process. Nonetheless, the fact that development banks also exist in G-7 countries —for example, Germany's Kredintaltanlt fur Weidarufban (KfW), the Japan Development Bank and the Business Development Bank of Canada (BDC), all of which are wholly government owned— shows that they are not rendered obsolete by more advanced levels of economic and financial development, but they merely adapt.[1]

The National Bank for Economic and Social Development (BNDES) is no exception to this rule. Ever since it was founded in 1952, it has tailored its activities to suit differing political, macroeconomic and financial contexts. Until the 1980s, BNDES played a fundamental role in financing the Brazilian industrialization process, based largely on government investment and funding (supported by external financing). The 1990s brought a radical change when Brazil followed the example of various developed and developing countries by adopting the financial liberalization model as part of a new development policy. Under that model, economic development is supposed to be guided by private-sector (or market) initiatives and interests, rather than by actions directed or financed by the State. In the financial-policy domain specifically, the objective was to stimulate capital-market expansion and diversification with saving channelled through private-sector financial institutions. Consequently, the recommendation was to deregulate and open up the financial markets, and greatly scale back, or even eliminate, the mechanisms of direct State involvement, in the belief that they would be rendered unnecessary by the private-sector development that would result from the liberalization policy.

Regardless of the validity of the premises and technical analysis that inspired the financial-liberalization policy, discussion of which goes beyond the scope of this article, the financial- deregulation and government-downsizing measures implemented in the various countries that adopted this model changed their respective financial systems.[2] Among other things, the volume of financial transactions undertaken in banking and capital markets throughout the world expanded greatly from the 1990s onwards; and it is probably more than a coincidence that this has accompanied the financial liberalization process in many countries. The theoretical approach adopted in this article suggests that, although liberalization has fuelled an expansion of financial activity, the actions of development banks have not become superfluous, particularly in countries such as Brazil that still have a long way to go along this road. Nonetheless, the new setting in which these banks operate naturally calls into question the former role of the Government and development banks in the development process.

This article reviews the potential effects of financial liberalization on the role of development banks, and BNDES in particular, as the leading financier of the economic development process in Brazil. It is structured as follows: the second section makes a preliminary and speculative approach to the topic of development banks generally, while the subsequent sections deal with the specific case of Brazil. The third section summarizes the conditions under which BNDES operated in the period 1950-1989, before the financial-liberalization process in Brazil began. The fourth section analyses the post-liberalization phase, from 1990 to 2006, and the fifth sets forth the conclusions.

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[1] According to available online data (www.kfw.de; www.dbj.jp; www.dbc.ca), the respective federal governments own 100% of the equity of the Japan Development Bank and BDC and 80% of KfW, in which the remaining 20% is held by state governments.

[2] See Hermann (2010a) for a theoretical discussion of the role of development banks, and public banks generally, in industrialized and developing countries.

II

Financial liberalization and development banks

1. Functions and characteristics of development banks

Debate over the role and functions of development banks in the financial system has not yet been widely expounded and systemized.[3] In general, such discussion tends to arise as a, sometimes slightly forced, extension of conclusions regarding the role of the State in the financial market. In fact, this question logically precedes discussion of development banks, which are just one of the modes of State involvement in the financial system but clearly not the only one. While that debate will not be pursued in this article, it is useful to identify the positions that polarize it, to provide a theoretical backdrop for the empirical analysis on which this article is based.

The debate over the role and modes of State action in the financial market is polarized in two approaches: (i) the model proposed by Shaw and McKinnon, which defends the financial liberalization policies in question and consequently supports minimal noninterventionist State action in the sector; and (ii) Keynesian-type models, based on arguments propounded by neo-Keynesian and post-Keynesian schools of thought, which justify wide-ranging State action in the financial market, including through development banks.

The theoretical premise of the defenders of liberalization is the validity of the "efficient-markets" hypothesis, which assumes that, with full access to information, the asset market can generate correct incentives for efficient resource allocation —in other words in "fair" quantities and prices that correctly reflect the rates of return and risk of the assets being traded. Naturally, this approach does not justify the existence of development banks.[4] The Keynesian-type approaches on which this article is based, sustain the opposite: that the existence of inherent failures and uncertainties in the financial market invalidate the efficient-markets hypothesis. Consequently, financial markets tend to expand "incompletely" and do not adequately meet needs in relation to growth, and particularly, economic development. Under such conditions, regardless of how advanced the financial system is, State action through financial regulation and development banks is an effective way of making the sector more efficient.

According to the theoretical approach adopted in this article, the creation and regular action of a development bank is justified by conditions that are inherent to the economic development process and the way local financial markets typically function. Although the range of conditioning factors that leads to the creation of various development banks is quite broad and varies from one country to another, two basic conditions apply in all cases: (i) the development process is characterized by major uncertainties, generally linked to infrastructure investments (owing to the long gestation phase involved) and the emergence and spread of new sectors, products and productive processes; and (ii) savers (private individuals and financial institutions) tend to eschew risks that are perceived as very high and are harder to evaluate and incorporate into required rates of return —either because of the high level of uncertainty that makes it difficult or impossible to foresee and calculate the risks involved, or because of constraints in terms of demand for resources, when perceived high risks are factored in to rates of return.

These conditions explain the "incomplete" nature of the financial market in the segments that are most important for the economic development process, such as general funding for innovations, for long-term operations (particularly infrastructure investment) and activities whose main "attraction" for society —but not necessarily for financiers— is the expectation of high social returns. These include works to expand urban sanitation grids and the investments of small and medium-sized enterprises, which are major job creators.[5] This gap in the financial markets, which

[3] For a commented summary of that debate, see Panizza, Yeyati and Micco (2004) and also Hermann (2010a).

[4] This argument will be justified in greater detail below.

[5] A market is said to be incomplete when segment that is theoretically possible is non-existent in practice, owing to a lack of interest either on the supply side or on the demand side, owing to information asymmetries between the main potential participants, major uncertainty (lack of reliable information), or simply inadequate incentives. In the latter case, the incomplete nature of the market can easily be corrected through targeted economic policies. As will be argued below, this hypothesis underlies the proposal of financial liberalization policies.

exists even in countries that are at an advanced phase of economic and financial development, justifies the creation and survival of development banks, whose sphere of activity ideally complements that covered by the local private financial system.

In terms of the functions fulfilled by development banks, international experience and the literature on the subject —Diamond (1957); Aghion (1999); Bruck (2001 and 2002); Pena (2001); Panizza, Yeyati and Micco (2004); United Nations (2005), among others— distinguish two modes of action: a restricted one, where the development bank is viewed merely as a financial institution; and a broader one, where the development bank adopts a hybrid form and fulfils multiple roles in the development process.

Under the more restricted approach, the development bank adopts a relatively passive stance towards the development process and meets the demand for financing, generated spontaneously by ongoing investments, that has not been satisfactorily met by the existing financial system. This basically includes the activities most affected by the typical "market failures" of the financial system, which stem from asymmetric information, externalities, and returns that are hard to predict, including investments with long maturation periods and those in agriculture. Under this approach, the development bank's main function is to finance "repressed demand" for long-term credit; and that is why sector-specific banks tend to dominate (agriculture, housing, exports, and others).

Under the broader approach, development banks also participate more actively in the development process —anticipating demand; identifying new sectors, activities, strategic products and productive processes for national development; and promoting investment programmes in those areas. In addition to the typical activities of the financial system (accepting voluntary or compulsory saving and channelling it into selected investments), this form of action also involves research, technical support, and possibly the formulation of investment and financing programs (Bruck, 2002, p. 62).

Both types of development bank can serve economic development. Nonetheless, as this process is dynamic by nature, and both investment needs and the opportunities to be exploited change over time, the second approach is more appropriate. Under the narrower approach, the development bank ends up acting procyclically and, consequently (albeit with different asset-selection criteria), with the same macroeconomic dynamic as a private bank which, in principle, does not have a commitment to support economic development.

Although the lending function of a limited-scope development bank is clearly relevant in periods of economic growth, this is also true of all financial institutions (private or public) that are interested in meeting the demand for credit. It could also be argued that the development bank would be more useful if it also participated, albeit indirectly, in the decision-making process for new investments, indicating its development priorities and strategies. This could attract investments into important areas that are not spontaneously foreseen by the private sector.

In the downswing phase of the business cycle, the functionality of a development bank that merely responds passively to demand would be seriously compromised. The effective contraction of sales and profits tends to "contaminate" expectations of enterprise profitability and increase business pessimism. In that setting, the "perceived" risk of new investments increases, while the incentive for risk-taking declines: prediction errors are more likely, because future incomes and costs become even more uncertain than they are in economic growth periods; and, even if predictions are correct, the expected gain from a new undertaking tends to be lower than in times of stronger economic growth.

In such conditions, it is natural that the most innovative enterprises (involving new products, productive processes and markets), which are the engine of the economic development process, are disproportionately affected; and only investments to replace already existing capital are maintained, at best. Doubtless, the support of a development bank for such "spontaneous" investments helps to restrain the downswing; but in that setting, it would be desirable for a development institution also to play a countercyclical role —counteracting the loss of investment momentum instead of compounding it. Moreover, as noted by Gerschenkron (1962, p. 10), given the complementarity that exists between new and already established sectors, maintenance of a reasonable growth rate in the latter is a necessary (but not sufficient) condition for expansion of the former. This reinforces the recommendation that a development bank should act countercyclically and provide financial backing for certain already established sectors that have close links with those to be promoted as part of an economic development programme. To do so, the development bank needs to assume broader functions than those of a "common

bank", identifying and stimulating sectors that are capable of leading the economy out of stagnation or recessionary phases, through investment programmes and financial support.

The functions attributed to a given development bank indirectly define two of its key institutional characteristics. In general, the broader and more diversified the role expected from the development bank, the closer should its political and financial links be with the Government; and probably, the greater will be the latter's participation in the bank's capital. It is no coincidence that wholly government-owned institutions predominate among the development banks created since the Second World War in developing countries (Aghion, 1999, p. 87). This is largely explained by the scale of the challenge posed by industrial development in those countries at that time, which had advanced industrialization countries as both "models" and competitors (Gerschenkron, 1962). In that context, development banks were responsible not only for meeting pre-existing demand for long-term funds (which was not being satisfied by the financial system in that period), but also to promote new demand by implementing programmes to stimulate investments in sectors that were seen as strategic (Diamond, 1957).

In such cases, the development bank acts simultaneously as a lender and as a development promotion agency, while also fulfilling macroeconomic functions (planning, formulation or execution of national policies). As it is difficult, if not impossible, for wholly privately owned financial institutions to fulfil those functions, since their interests are naturally microeconomic, the predominance of government capital is virtually unavoidable.

In short, it is not only the focus on providing long-term finance, or funding for sectors which are important for economic development in a given period, that distinguishes a development bank from other types of financial institution. Privately owned institutions can also operate in those areas and contribute positively to national economic development; but this does not make them development banks unless this type of action is specified in their articles of association as a key institutional objective. It is the commitment to funding the national economic development process that distinguishes a development bank from other institutions that may also play this financing role on an occasional or casual basis. This type of commitment is not in the nature of private financial institutions, whose activities are primarily profit-seeking. Thus, the predominance of the public sector in the capital structure and, consequently, the management of development banks created in the post-war period, is not a mere historical detail, but should be viewed as one of defining features of this type of institution.

2. The challenges of financial liberalization for development banks

There is a wide ranging and polemical debate on the effects of liberalization on financial-market development.[6] While that debate goes beyond the scope of this article, it is useful to summarize the main polarizing arguments, to infer its repercussions on the role of development banks.

For supporters of liberalization, the incomplete nature of the financial market is the result of financial repression policies, widely practised in the 1950s-1970s in various developed and developing countries.[7] The "repression" stemmed from the maintenance of a number of regulatory barriers whose main objective was to guarantee security for the financial system and its users, and the presence of the State as a fund provider. There was also a macroeconomic dimension to the financial-repression policy, involving a combination of systematic public deficits and high levels of taxation, public debt and inflation, reflecting high and frequent State expenditure (not only in the financial sector).

Economies that emerged from a long period of "financial repression" believed that a "complete" liberalization policy required two permanent lines of economic policy: (i) financial deregulation and openness; and (ii) macroeconomic adjustment to stabilize prices and reduce the Government's participation in the economy (not only in the financial sector) through privatizations and balanced budgets.

[6] See, for example, the selection of articles compiled by Dixon (1997) and Levine (1997 and 2004). For arguments in favour of the model (albeit not without criticism) see World Bank (1989); McKinnon (1993); Fry (1995 and 1997); Agènor and Montiel (1999), among others. For critical opinions, see Kregel (1992); Sachs and Radelet (1998); UNCTAD (1998); Batista Jr. (2001); Hermann (2002a) and Stiglitz (2002), for example.

[7] A country with a well-known practice of financial repression at that time was the United States, where a wide-ranging programme of financial liberalization was implemented as from 1980. The main radical exponents of the financial liberalization policy were E. Shaw (1973) and R. McKinnon (1973). More synthetic expositions of the Shaw and McKinnon model can be found in Fry (1995, chapters 2 and 14) and Agénor and Montiel (1999, chapters 6, 14 and 17).

Under those hypotheses, State action in the financial sector should be limited to two functions: supervision of the market to guarantee transparency (maximum information) and legal certainty for businesses; and the maintenance of a "healthy" macroeconomic environment, meaning systematic monetary and fiscal balance. According to this approach, development banks would have their days numbered: the financial liberalization and macroeconomic adjustment policies of the 1990s-2000s were expected to promote the development and "completion" of financial markets and thus gradually render development banks unnecessary.

As noted above, the critics of liberalization consider that financial markets are intrinsically "inefficient" at the macroeconomic level. Guided by individual profit-seeking motives and expectations of return and risk that are necessarily uncertain (and therefore error-prone), financial institutions tend to behave display in a procyclical and destabilizing manner: they restrict credit in periods of weak economic growth (when, in fact, the risks are greater), and they tend to expand it imprudently at times of greater optimism. In both cases they aggravate the trend towards recession or overborrowing and make the economy more financially fragile. In addition, they tend to ration credit to sectors that are important for economic growth, in which the risks are assumed to be greater. Under this approach, free markets and policies of fiscal and monetary balance are not a panacea for the maturity of the financial system or for solving problems in financing economic development. On the contrary, while they recognize that liberalization may expand and diversify financing sources and thus stimulate economic growth, not necessarily through sectors that are crucial for development, the critics of this policy believe that it also creates new risks by aggravating the tendency towards financial fragility and inefficient allocation of resources in the economy.

The new risks would arise from the typical features of deregulated markets, including: (i) more volatile interest rates, exchange rates and asset prices; (ii) greater competition between financial institutions, which could foster more aggressive strategies to capture funds (raising liability costs and risks) and expand (or defend) market share (thereby increasing balance-sheet risks); (iii) an increase in the risks financial institutions take on when they enter as yet unexplored market segments; (iv) greater market risk linked to the expansion of capital markets which normally lack "institutional bailout" mechanisms; (v) greater liquidity risk associated with operations in futures markets; and (vi) an increase in domestic and external borrowing by firms and financial institutions (and also by families domestically) resulting from the exploitation of new market opportunities, which increase the credit and exchange-rate risks to which lenders and borrowers, and, indirectly, the economy as a whole, are exposed.

As all of those changes became permanent features of financial markets following liberalization, greater risk exposure and uncertainty cannot be seen as transitional. The financial crises that occurred between 1997 and 2002 in various developing countries in which the liberalization model was adopted, and also in United States and other developed nations in 2008-2009, seem to suggest that pessimism as to the capacity of liberalization to increase the macroeconomic efficiency of national and international financial markets was correct.[8]

Although many of those crises also went hand-in-hand with major macroeconomic imbalances (current-account deficit, public deficit and inflation), the partial responsibility of liberalization policy is clear, considering that periodic macroeconomic imbalances are an integral part of the "normal" *modus operandi* of market economies, which have historically experienced periods of instability. The long period of "financial repression" saw high rates of economic growth accompanied by intermittent periods of macroeconomic imbalance, but no systemic financial crises such as those that occurred in the 1990s. Consequently, it seems undeniable that financial liberalization facilitated and expanded the extent of "contagion" from those financial market imbalances, by enabling economic agents to take excessive risks.

As noted above, in situations of major uncertainty, the key sectors for economic development also tend to be the hardest hit. Moreover, financial-liberalization policy lacks elements to promote funding for innovations or long-term investments, so the argument that the implementation of liberalization policies rendered development banks unnecessary is implausible to say the least. On the contrary, although those policies encouraged financial-market expansion and diversification, development banks

[8] The "Asian tigers" (South Korea, Philippines, Indonesia, Malaysia and Thailand) in mid-1997, Russia in 1998, Brazil and Chile in 1999, Ecuador in 2000 and Argentina in 2001-2002.

have a well-defined function in the "liberalization era", which consists specifically of filling the gaps in that expansion.

Depending on the specific results of liberalization in each country, the development bank in question may have to change its mode of operation to remain functionally relevant to the development process. For example, if the capital market or long-term bank credit displays significant structural growth, then the development bank may perceive a contraction in the demand for credit from larger firms and those with a good reputation on the market, which private institutions start to serve. Thus, in cases where liberalization policy has been successful, the role of development banks, and their mode of operation, may shift towards a higher concentration of assets in sectors where risk is harder to evaluate (through not necessarily higher), which are more constrained by the private financial system even in countries with a reasonable level of financial development. Although this could represent a change in the sector-composition of development banks' balance sheets, the concentration on those sectors is not a new situation for such banks but in fact justifies their existence. The group of sectors on which the development bank concentrates merely tends to change through time.

Nonetheless, liberalization may require a review of risk management models to broaden protection against the risks of open markets. Capital-market expansion, normally associated with the liberalization process, tends to create new forms of risk mitigation, for example by facilitating the organization of debt securitization operations and project financing, among others. However, as happens in the case of private banks, development banks find it harder to operate in the new context, because the "liberalization era" is undoubtedly more subject to the volatility of domestic and international financial markets than was the "age of financial repression". Moreover, the financial crises of the 1990s-2000s showed that, no matter how sophisticated the markets, there are no perfect hedging instruments that guarantee "financial armour" for investors in all circumstances, because ultimately only contexts that are foreseen can guide operations. Lastly, even wholly publicly owned development banks, which have funds and hedging instruments outside the market, are not immune from market conditions that affect private financial institutions —nor for that matter is the National Treasury.

These difficulties are unrelated to the specifics of development banks and affect all financial institutions. Like their private-sector counterparts, development banks can remain financially viable in the "liberalization era", provided they make prudent use of new financing instruments and the hedging generated by the financial liberalization process itself.

III

Before liberalization: BNDES in the 1950s-1980s

Throughout the 1950s-1980s, and despite a number of attempts to create a private structure of long-term financing, the progress of industrialization in Brazil was based on a combination of self-financing, external capital (bank loans and direct investments) and government credit. The latter was provided basically by Banco do Brasil, particularly in the agricultural sector; the federal savings bank, *Caixa Econômica Federal* (CEF), which mainly targeted the real estate sector; and BNDE, which focused on industry (Monteiro Filha, 1994; Guth, 2006).[9] Although the importance of these three sources varied, they provided the financing structure for the "Goals Plan" of the government of J. Kubitscheck (1956-1961), the "Economic Miracle" (1968-1973) of the government of G. Médici, and the Second National Development Plan (II PND) of the administration led by E. Geisel (1974-1978).

The first institutional attempt to encourage the formation of a private system of long-term financing in Brazil consisted of the financial reforms introduced in 1964-1967 during the Castelo Branco government. Taking the model that underpinned the North American industrialization process as an example, an attempt was made to create a segmented financial system largely supported by the capital market. This plan was a dismal failure, as is well known (Studart, 1995; Hermann, 2002b).

[9] When it was created in 1952, it was known as the National Economic Development Bank (BNDE). It became the National Economic and Social Development Bank (BNDES) only in 1982.

During the 1960s and 1970s, BNDE was not only the only domestic source of long-term financing for industry, but its contribution to gross fixed capital formation (GFCF) grew in each new phase of the industrialization process. On average, the bank's disbursements accounted for 3.2% of Brazilian GFCF in the low-growth period of 1964-1967, rising to 5% in the period 1970-1973, and to 8.9% in 1975-1979, both of which were characterized by a sharp increase in overall investment, led by industry.[10] The relative positions of the public and private sectors in BNDE loans also reversed in that period: the former, to which on average 90% of the bank's disbursements were channelled until the mid-1960s, saw its share shrink to nearly 20% in 1976-1980, while the difference was directed to large private-sector firms (Guth, 2006, p. 98). In that period, BNDE thus occupied a position in the Brazilian financial market, which otherwise —in a more developed market— would be held at least partly by private institutions.

There was no other sustained expansionary cycle in Brazil in the 1980s. As it is well known, that decade was characterized by monetary instability and economic stagnation in this country and elsewhere in Latin America, for which reason it has been dubbed the "lost decade". This backdrop alone would have been sufficient to inhibit financial development in Brazil and to obstruct or prevent the success of any financial policy to stimulate long-term operations. The actual situation was even worse, however, because the external and fiscal constraints caused the failure of the current financing model, since the supply of public credit declined sharply, and foreign capital flows into the country dried up completely. In that context, although BNDES maintained its field of action, as there was no private competition of any kind in its traditional market segments, its level of operations declined drastically: disbursements shrank by 64% in real terms between 1979 and 1990 (from 17.7 billion real to 6.3 billion real at 2001 prices) and, in relation to GFCF, dropped from 10.6% to 3.3% over the same period (Guth, 2006, pp. 174-175).

Nonetheless, the reduction in the ratio between disbursements and GFCF did not occur continuously over that period. Up to 1987, the ratio remained steady around 8%, before dropping to 5.7% in 1988 and to an average of 3.2% in the 1989-1990 biennium. Maintenance of the level and regularity of disbursements up to 1987 is basically explained by three factors: (i) the actions of BNDE in the energy sector (the bank started to support the National Alcohol Programme in 1979), where it played a leading role in its credit policy; (ii) the attempt, not always successful, to implement investments approved at the start of the decade (in fact some were interrupted); (iii) extension or strengthening of the bank's action in new areas: basically agriculture (and above all with a view to increasing exports), small and medium-sized enterprises (with a view to job creation), and social programmes, which added the "S" to the bank's initials as from 1982 (Guth, 2006, pp.104-105). In that year, BNDES Participações S.A. (BNDESPAR) was also created, which institutionalized the bank's action by taking direct equity holdings in firms and capital markets.

That effort to adapt to the new conditions and challenges facing the Brazilian economy in the 1980s was based on creating new sources of funds for the bank through compulsory saving mechanisms: (i) the Social Investment Fund in 1982; (ii) the Merchant Navy Fund, which already existed but came under BNDES management as from 1983; (iii) the Workers' Protection Fund (FAT, created in the 1988 Constitution of the Federative Republic of Brazil, to replace the Social Integration Program), which channelled 40% of its resources (obtained from business sales and from the revenue earned by the three spheres of government) to the bank, as a sinking fund —in other words without the obligation to repay principle, and with a fixed interest rate of 6% per year. The Workers' Protection Fund became the main source of BNDES funding (accounting for roughly 35% to 40% of its total liability) since its creation.

Thus, although its activities shrank in the 1980s, BNDES preserved its traditional functions as a nucleus of compulsory saving and financing for strategic investments in Brazil during that period. Although this firstly reflects government efforts in that direction, the result is also substantially due to the total failure of private competition in the new and old areas of the bank's action. Nonetheless, unlike what might be expected and actually happened in other Latin American countries affected by the debt crisis (such as Argentina, Chile and Mexico), the shortage of private credit in Brazil in the 1980s did not reflect the financial strangulation of private banks. This

[10] Period averages calculated from annual data contained in Guth (2006, pp. 89 and 100). With regard to GFCF in industry, which was the engine of economic development in that period, BNDE outlays rose from 15% in 1974 to 35% in 1978 (Guth, 2006, p. 100).

sector not only survived without problems but also obtained high profits throughout the economic crisis period (FUNDAP, 1993; Hermann, 2002b).

As part of the financial liberalization policy, a new attempt was made in 1988 to set up a long-term private financing system in Brazil, through a banking reform that authorized the formation of multi-service (or universal) banks. The new rules allowed commercial and investment banks to merge with each other or join other financial institutions and saving and loan associations to form a multiservice bank. The reform formalized the expansion of banks and non-bank institutions into new areas; eliminated nearly all the old links between sources of funding and investment for multiple-service banks; and allowed those set up by October 1989 through the merger of pre-existing institutions, to attain just 50% of the minimum capital required at the time of their formation and leave the remaining 50% to be paid in over a five-year period.[11] The 1988 reforms thus stimulated bank concentration and represented a radical break with the financing model idealized in the 1960s, and an approach to the German model based on private bank lending. Nonetheless, as shown below, that attempt also was unsuccessful, so the traditional field of action of BNDES remained intact.

IV

BNDES in the 1990s and 2000s

1. The new context of the Brazilian financial market[12]

As noted above, the financial liberalization model is based on two economic-policy pillars: a financial policy aimed at deregulating and opening up the financial system; and a "supporting" macroeconomic policy, with fiscal adjustment and price stability as its permanent short-term objectives. In Brazil, that model was implemented in three stages: the first began in the late 1980s when the financial policy was first put into practice, before being gradually intensified; the second, as from 1995, when the monetary stabilization "phase" was implemented and fiscal adjustment began; and the third, from 1999 onwards, which consolidated the previous phase in a new model.

Bank deregulation was implemented alongside the 1988 reform. The first financial openness measures date from 1987 (during the J. Sarney administration), when National Monetary Council Resolution 1289 authorized foreign investors to participate in the Brazilian capital market provided they set up specific institutions for that purpose (annexes I, II and III of the resolution). Nonetheless, the key step in that direction occurred under President F. Collor (1990-1992), with the publication of annex IV to Resolution 1289 (in 1991) authorizing the direct participation of foreign investors in the Brazilian capital market (in the primary and secondary segments) without the need to create a specific legal entity.

Financial openness gathered pace under the government of Itamar Franco (1992-1994), when a policy of high real interest rates was implemented to attract foreign capital, and capital-market liberalization was extended to fixed-income securities (annex VI to Resolution 1289). In 1994, two other factors completed the country's effort to reintegrate into the international financial market: the conclusion of the long process of renegotiating Brazil's external debt, based on the Brady Plan; and Brazil's affiliation to the Basel Agreement, coordinated by the Bank for International Settlements (BIS). This accord instituted international rules on prudent banking, based on a minimum capital requirement as a proportion of bank's assets, according to a risk scale defined by BIS.[13]

[11] The multiple-service bank model created in Brazil virtually reproduced the structure of financial conglomerates formed in the 1970s. The 1988 reform did not cause a significant structural change in the sector. On this point, see Hermann (2002b).

[12] This subsection does not aim to provide a detailed description of the financial-liberalization process and its effects on Brazil, but to merely "list" the main events and trends that characterized it, to provide a backdrop for the subsequent analysis of BNDES actions. Detailed descriptions and analyses on the topic can be found in Freitas (1999); Hermann (2005); Ferrari Filho and Paula (2006); Sicsú (2006); Hermann (2010b), among others.

[13] The minimum ratio adopted in Brazil in 1994 was that defined by the Bank for International Settlements: 8%. As from 1997, this was raised to 11% by the National Monetary Council.

The “macroeconomic stage” of the liberalization policy began during the first term of President Fernando Henrique Cardoso (1995-1998); and the monetary stabilization process that had started under the Real Plan of 1994 was consolidated from 1995 onwards. As this stabilization plan was based on an exchange-rate anchor, it was supported by new trade and financial liberalization measures (Hermann, 1999). The Cardoso government also implemented a wide-ranging programme of privatization of State banks and enterprises (basically infrastructure).

The Brazilian economy’s adaptation to the liberalization model was only completed under the second administration led by Fernando Henrique Cardoso (1999-2002). The exchange-rate crisis that hit the country in 1999 was followed by adjustments to the macroeconomic policy model, in which the exchange-rate anchor was replaced by a flexible exchange-rate system; monetary policy was made subject to an inflation-targeting model, and fiscal policy was subordinated to a scheme to of primary surplus targets, and also by the Fiscal Responsibility Act as from mid-2000.[14]

The exchange-rate crisis, however, did not produce qualitative changes or reversals in financial policy. In the second Cardoso government and the first administration led by Luiz Inácio Lula da Silva (2003-2006), financial liberalization proceeded alongside a strengthening of prudential regulation and a number of measures that increased the openness of the Brazilian market by reducing bureaucratic obstacles and costs (basically taxation) that affected capital inflows and outflows. The model was thus implemented gradually in the country, and it has continued to be applied for nearly two decades —long enough to produce results. Nonetheless, the reaction of the credit and capital markets was quite modest during the period analyzed.

Table 1 shows selected data from those markets between 1990 and 2006, divided into sub-periods in which major changes occurred in the Brazilian economy with potential repercussions on the financial market: 1989 (or 1990 in the case of the capital market) as an initial framework; the years 1990-1994, now under the liberalization policy but still characterized by high inflation; 1995-1998, when price stability was consolidated; the 1999-2003 period, marked by major instability on domestic and international financial markets, owing to the Brazilian currency crisis and fragile world economic growth (including in Brazil); and the 2004-2006 triennium, characterized by low inflation, financial stability and the resumption of

[14] The Fiscal Responsibility Act institutionalized a number of rules of conduct for budget formulation and execution in all three spheres of government, with the main objective of controlling public-sector borrowing.

TABLE 1

Selected indicators of the Brazilian financial market, 1989-2006

(Annual period averages)

Period	Credit market *(Percentages)*										Capital market *(Millions of dollars)*			
	Credit/	Origin *(Percentages)*		Total *(%)*	Destination *(%)*						Primary issuance[a]		Secondary market	
	GDP *(%)*	Public credit	Private credit		Industry	Commerce	Housing	Natural persons	Public sector	Others	Millions of dollars	Percentage of GFCF[b]	Business volume	Percentage of foreign investment
1989	24.1	69.3	30.7	100.0	16.4	4.3	35.8	2.5	27.8	13.2	...	...	...	...
1990-1994	28.5	61.8	38.2	100.0	21.8	7.9	24.1	4.1	22.4	19.6	11 098	14.3	31 637	16.9
1995-1998	28.9	54.1	45.9	100.0	24.8	11.1	19.4	10.7	12.4	21.6	16 633	11.6	139 589	23.5
1999-2003	24.4	41.2	58.8	100.0	28.6	10.3	11.0	20.9	4.2	25.2	8 036	8.6	75 722	23.0
2004-2006	27.7	37.2	62.8	100.0	23.5	10.8	4.9	30.2	3.3	27.3	27 857	17.9	181 950	33.3

Source: Prepared by the author on the basis of data from the Central Bank of Brazil, *Boletim mensal (Monthly Bulletin)*, various issues, and the Security and Exchange Commission (CVM), *Informativo mensal (Monthly Report)*, various issues; São Paulo Stock Exchange (Bovespa) for the last column.

[a] Includes securities of all types (shares, bonds and others).

[b] GFCF = Gross fixed capital formation.

economic growth in nearly all developed and developing countries (including Brazil).[15]

The fundamental tenets of the liberalization model would predict a positive reaction by the Brazilian banking and capital markets throughout the period, particularly from 1995 onwards (owing to stabilization); then a reversal or stagnation in the period 1999-2003, followed by a recovery as from 2004 in response to more favourable conditions. Although the indicators do seem to confirm this pattern, the two markets clearly also display the weakness (or failure) of the liberalization policy as an engine of financial development.

In the credit market, the ratio between credit and GDP remained below 30%, even in the upswing phases (1995-1998 and 2004-2006), whereas the figure fluctuates between 60% and 100% in financially developed countries. In terms of distribution by destination, the only sector whose share of total credit grew continuously and rapidly was lending to private individuals, but, as is well known, maturities in this segment are generally short (one or two years, except for automobiles) and its dynamic is not decisive for economic development. Although participation by public-sector banks in the sector did shrink as expected, the foregoing indicators clearly show that this was not matched by a greater commitment among private banks to finance development, since this would imply a substantial increase in the ratio between credit and GDP, driven by long-term lending to industry, services and housing.

On the capital market, foreign investors have a very significant participation on the secondary market segment, which affects volumes traded, liquidity and asset prices —perhaps excessively— even on the primary market which is affected by these conditions. Lastly, despite the recent expansion, primary issues have fluctuated sharply since the early 1990s, a characteristic that is uncommon on well established markets, precisely because this type of behaviour inhibits market development.

2. Indicators of BNDES action in the 1990s and 2000s

Table 2 shows selected data on BNDES activities in the 1989-2006 period. As the aim of this article is to evaluate the BNDES sphere of action in the Brazilian financial system as a financial institution alone —thus ignoring its other functions as executing agency of development policies— only aggregate data on the bank's disbursement were used as indicators of its actual supply of credit. These data were compared with three other macroeconomic indicators: total credit extended by the Brazilian financial system, gross fixed capital formation (GFCF), and the real GDP growth rate. Those indicators were selected for their key role in the economic development process that guides BNDES actions.

Although the rise in the bank's annual average disbursements as from 1999 is clear,[16] indicators tracking this process suggest that it began in 1995-1998. While BNDES disbursements accounted for an average of 3% of outstanding credit in the Brazilian financial system between 1989 and 1994, they rose to 5% between 1995 and 1998 and to nearly 8% in the two subsequent periods (between 1999 and 2006). The trend showed banking operations recovering slowly after their sharp contraction in the late 1980s —at the height of the external and fiscal crisis that buffeted the Brazilian economy in that decade. Nonetheless, the recovery did not occur in the same areas as in the 1970s and 1980s. As Guth summarizes:

> *Following the completion of investment projects that began under the second national development plan (II PND) [...], heavy industry began to lose importance while the domestic economy started to engage more competitively in the international economy. Consistently with the rationale of the new development model, the bank is thus prioritizing the privatization process and export sectors, along with small and medium-sized enterprises and social projects* (Guth, 2006, p. 131).

In the long-term credit segment, the engine of the recovery of BNDES operations in the 1990s was the privatization programme, officially inaugurated in 1990. While privatizations began as early as 1991, they were mostly concentrated in the period 1996-2000 (84% of sales between 1991 and 2001) and, in particular, in 1996 and 1997 (63% of sales up to 2001).[17]

[15] The brief analysis that follows summarizes the author's recent work. See Hermann (2010b).

[16] As table 2 shows, lack of data expressed in millions of real for 1990-1994 makes it hard to compare monetary disbursements in this period with the first year of our series (1989) and the subsequent period (1995-1998).

[17] The cumulative value of privatizations between 1991 and 2001 was US$103.3 billion (BNDES, 2001).

TABLE 2

Indicators of disbursements from the BNDES system[a] 1989-2006

(Annual period averages[b])

Period	BNDES disbursements		(A)/GFCF *(Percentages)*	(A)/ Total credit in the Brazilian financial system *(Percentages)*	GFCF[c]/GDP *(Percentages)*	Real GDP growth *(Annual percentages)*
	Total *(Million real)*	Exim/Total *(Percentages)*				
	(A)	(B)	(C)	(D)	(E)	(F)
1989	...[d]	...	3.1	2.9	26.9	3.2
1990-94	...[d]	2.6[e]	4.1	3.0	19.4	1.2
1995-98	13 414	7.2	8.7	5.2	17.4	2.5
1999-03	27 453	27.4	12.4	8.2	16.2	1.9
2004-06	46 044	28.2	13.3	8.3	16.2	4.3

Source: Prepared by the author on the basis of data from the National Economic and Social Development Bank (BNDES), *Estatísticas operacionais* and *Relatórios anuais (Operational Statistics* and *Annual Reports*), various issues (columns A and B). Felipe Guth, *O BNDES nos anos 1990: uma análise keynesiana (The BNDES in the 1990s: a Keynesian analysis)*, Rio de Janeiro, Institute of Economics/ Federal University of Rio de Janeiro (UFRJ), 2006; Central Bank of Brazil, *Relatórios anuais (Annual Reports)*, various issues, for total credit of the Brazilian financial system; and IpeaData (columns E-F).

[a] Includes acquisitions by BNDESPAR on the capital market.
[b] Geometric mean for column F, and simple arithmetic mean for the other columns.
[c] GFCF = Gross fixed capital formation.
[d] Original data in millions of real at current prices. Owing to a lack of data expressed in real for column A, it was decided to show them as unavailable in this table.
[e] Average 1991-1994
Note: Exim is the BNDES export-import support program.

The bank managed the programme and served as one of the financiers in the acquisition and pre- and post-sale phases, in other words in the preparation (financial cleanup) of firms for privatization, and then in financing investments by the new owners. This explains the apparently paradoxical increase in the bank's disbursements to the public sector when the "liberalization era" was at its peak. Although government GFCF declined in the second half of the decade at all three levels —from an average of 2.6% of GDP in 1990-1994 to 1.9% between 1995 and 1998— the public-sector share of BNDES disbursements rose sharply —from 4% in 1995 to 12% in 1998— before returning to a level of 3% the following year (Plattek, 2001, p.108).[18]

Like long-term credit for heavy industry and infrastructure, the newer areas of BNDES action in the 1990s aroused little interest in the private financial system. This is explained not only by the maturity terms (which are generally shorter than those required for financing industry and infrastructure), but because of the higher credit risks normally attributed (but not necessarily confirmed) to social projects and operations with small and medium-sized enterprises. In the case of the export sector and domestic industry itself, the perceived risks clearly rose in the 1990s, as a result of the implementation of the trade liberalization policy and the exchange-rate anchor and the high-interest-rate policy that accompanied it. Between them, those policies penalized the expected return from exports and national production generally, thus indirectly helping to maintain the position of BNDES in the Brazilian financial system.

This backdrop began to change in 1999, following the introduction of a flexible exchange-rate regime, which gradually promoted the export sector and helped towards a substantial recovery in the country's external accounts during the 2000s. Nonetheless, this did not mean that the bank withdrew from the sector

[18] Figures for average government GFCF as a proportion of GDP were calculated on the basis of annual data provided by the Brazilian Institute of Geography and Statistics (IBGE, 2002, table 2). In the case of data on the public-sector share of total BNDES disbursements, it was decided not to use the averages for the analytical periods, because the annual data displayed high levels of dispersion, varying between 5.7% and 17.0% in the period 1990-1994, and between 3.9% and 12.2% in 1995-1998.

in favour of private institutions. On the contrary, the operations of BNDES Exim (the export-import support program created in 1997 as an expansion of another pre-existing programme) were broadened substantially as from 1999, not only in value terms but also as a proportion of the bank's total disbursements, which rose from an average of 7% in 1995-1998, to 27% between 1999 and 2003 and 28% in 2004-2006.

In 2004-2006, in addition to greater support for exports, another important factor that preserved and even expanded the BNDES field of action in the Brazilian financial system stemmed from a change, albeit incipient, in the Government's attitude towards economic development policy. As from 2004, the government led by Luiz Inácio Lula da Silva succeeded in reconciling the basic principles of the "liberalization model" with a return to the type of industrial policy that had been abandoned in the early 1990s. In March 2004, the administration introduced an Industrial, Technological, and Foreign Trade Policy (PITCE) (MDIC, 2007), under which government export-promotion programmes were integrated into industrial development programmes, targeting sectors with high innovation capacity and with a view to increasing competitiveness (Carvalho Jr., 2005).[19]

In conjunction with other government bodies, BNDES participated directly in formulating the PITCE and is one of its main public funders. The central role played by the bank in implementing this policy largely explains the recent increase in its disbursements as a proportion of GFCF, and the maintenance of its share of total lending at a time when the credit-GDP ratio has been rising (2004-2006). In reality, as these indicators are not mutually independent —since BNDES disbursements are part of total lending— and the 2004-2006 triennium was a period of major BNDES credit expansion, it is reasonable to argue not only that the bank maintained its share but that this also largely explains the increase in the ratio between credit and GDP during the period.

In relation to GFCF, BNDES lending grew continuously throughout the period of analysis: from 3% in 1989 (its lowest level since 1964) (Guth, 2006, p. 175) to just over 4% in the first half of 1990s, before doubling in the following period (1995-1999) to reach a level of 13% in 2004-2006.

Paradoxically, the increase in the ratio between BNDES disbursements and GFCF in the period 1990-2006 was contrary to the trend of fixed investment in the economy, which fell continuously (from nearly 27% in 1989 to 16% between 1999-2006), and in a context of quite modest economic growth until 2003. In principle, this gap between the three indicators might suggest a reduction in the relevance of BNDES for economic development; ultimately, the proportionately larger volume of bank credit was not accompanied or followed by higher rates of investment or GDP growth. Similarly, from a broader perspective of the functions of development banks, it can be seen that the countercyclical role —no less important for the bank— predominated in this period, and it averted an even steeper fall in the ratio between credit and GDP, and probably also in rates of investment and economic growth themselves (Torres Filho, 2006). This hypothesis seems to be confirmed by the behaviour of the ratio between BNDES lending and total credit in the Brazilian financial system, which holds steady or rises modestly in the strongest economic-growth phases (1995-1998 and 2004-2006) but climbs more steeply in the slowdown phases (1999-2003).

V

Summary and conclusions

Development banks are hybrid institutions that act simultaneously as government institutions —with functions in the formulation and implementation of development policies— and financial institutions in the strict sense, with the typical functions of a bank. As such, their mode of operation is defined politically and historically by the profile of ongoing government development policies and by the trend of the national financial system. In relation to this second aspect, a development bank's field of action complements that of local private financial institutions. More specifically, the *raison d'être* of development banks stems from the "incomplete" nature of financial markets in segments

[19] The priority sectors chosen in the PITCE framework were pharmaceuticals, semiconductors, computer programs and capital goods.

that are extremely important for economic growth, namely long-term investments, and innovations and activities for which the estimated social return is greater than the private return. In theory, as those markets develop, the scope for development banks tends to become restricted.

The financial liberalization policies implemented in most of the world since the 1980s sought to reduce the incomplete nature of financial markets to innocuous proportions. The premise was that markets freed from regulatory barriers and direct State action would tend to develop more efficiently, thereby making resource allocation more flexible and expanding investor access to the financing of all types.

The critics of liberalization claimed that free financial markets tended to increase the exposure of creditors and debtors to new risks, which in the medium term could cause major difficulties of access to financing generally, and particularly in relation to the activities that were most important for economic development. Moreover, even in the boom phases of financial markets, there was no reason to expect that resource allocation guided merely by private evaluations of risk and return would systematically ensure adequate conditions for financing activities that were strategic for economic development at each of its stages. Under these conditions, despite promoting financial expansion and diversification, liberalization policy probably did not remove the need for development banks, particularly in the least developed countries, where considerable challenges still remain, given the need for investments in innovation, the incorporation of new technologies and social projects. The case of BNDES seems to confirm this hypothesis.

In Brazil, the liberalization model was adopted in the late 1980s and progressed gradually until the first half of the decade of 2000. Nonetheless, the reaction of the banking system and the capital market was quite modest during the period analyzed (1990-2006), so the BNDES field of action was maintained. Furthermore, in the period 1990-2006, there was a clear relative increase in the bank's lending, both in nominal terms and as a proportion of total credit in the Brazilian financial system and the country's GFCF. Two sets of factors basically explain these trends: (i) development challenges after trade and financial liberalization, which now depended more on increasing competitiveness and hence the capacity of local enterprises to innovate and incorporate new technologies; and (ii) the insufficient scale of operations on the domestic capital and credit markets in providing financing for the firms in question.

(Original: Portuguese)

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