ASSESSING THE CHANGING ROLES OF

THE BRAZILIAN DEVELOPMENT BANK

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Abstract: Since it was founded in 1952, the Brazilian National Bank for Economic and Social Development (BNDES) has been at the centre of Brazil's industrialization and development strategy. It played a key role in the evolution of policies from import substitution to market-opening and privatization to the 'new developmentalism'. The article evaluates and discusses whether BNDES fulfils the three typical functions expected of national development banks (financial sector development; business climate enhancement; and knowledge services).

Key Words: development bank; BNDES; Brazil; developmental state; development finance

Assessing the Changing Roles of the Brazilian Development Bank

In the aftermath of the global financial crisis of 2008-09, there has been growing interest in evaluating Brazil's National Bank for Economic and Social Development (BNDES) in its ambiguous and overlapping roles as prime development agency, weighty investment bank and minority shareholder in a wide range of companies and industries. Certainly, *The Economist's* (2012:8) evaluation of public banks in developing countries as 'Leviathan ... becoming a finance capitalist as well as a captain of industry' seems like an apt description of the Brazilian case. There is an extensive academic literature on state coordination of market and non-market relations in Brazil. This article only focuses on one aspect of the process: how the state's judicious use of control over investment financing (credit and equity) shaped Brazilian industrialisation and development, and the specific role of BNDES in these processes.

The article's main argument is that even as developmentalist strategies evolved, BNDES consistently responded to government policy preferences. Moreover, it was adaptable; it flexibly used its technical and financial capacity to support Brazil's changing development needs. It played a key role in the evolution and financing of policies from import substitution to market-opening and privatization to the competitiveness and innovation strategies at the heart of the current policies often labelled as 'new developmentalism'. Highly attention-grabbing is its ability to adapt to wide ranging challenges from domestic politics to international markets as well as respond to government direction without diluting its technical capacity. The article first examines current views on the role of national development banks more generally. Next, it considers the evolving goals, priorities and sources of BNDES funding. Third, it discusses five central roles of BNDES in domestic as well as international markets. Fourth, it presents an evaluation of BNDES' impact on Brazilian development in terms of achieving its goals (in absolute rather than comparative terms). The conclusion suggests some key lessons from Brazil's experience.

FUNCTIONS OF NATIONAL DEVELOPMENT BANKS

The United Nations Department for Economic and Social Affairs (UN-DESA, 2005) defines development banks as ‘financial instruments of national development policy whose performance is measured more in terms of social benefits generated than in terms of social (economic) and private (financial) returns. ... Development banks are organised to achieve the preparation, appraisal, financing, implementation, and evaluation of investment projects and programs’. Elsewhere, UN-DESA (2006) notes that development banks are ‘financial institutions primarily concerned with offering long term capital financing to projects generating positive externalities and hence underfinanced by private creditors’. Development banks can be international, regional, national and even sub-national. BNDES is a national development bank (NDB).

Thus, a NDB, such as BNDES, is a special type of investment bank. An investment bank helps create capital for other companies via underwriting new debt and equity securities, and advising on a range of capital raising activities from mergers and acquisitions (M&A) to trading on capital markets. It may also trade and invest on its own account. While NDBs might be involved in all these functions, their rationale and goals go beyond them to focus on providing finance for overall national economic and social development (often with an element of subsidised financing) and also building the capacity of government and capital market actors. It is also worth highlighting that NDBs can be found in both advanced and developing economies.

NDBs of the Global South were born from the growth theories and development models of development economists in the 1950s and 1960s. Their ideas of a ‘big push’ to accelerate economic growth implied some level of state intervention to make available long term financing to activate the development process. NDBs could be used to correct market and coordination failures and also address the many problems related to information asymmetries, technical barriers, and the high cost of credit in most developing economies. They were expected to play a crucial role in financing socially valuable projects, improving access to credit for all sectors and income groups in society, and funding projects where commercial financial institutions may be reluctant to lend. It should be noted that in some cases NDBs had mixed and/or private ownership structures. In the 1980s and early 1990s, in the heyday of the 'Washington Consensus', NDBs took on a number of additional functions such as providing venture capital, entrepreneurial development services, capital market development, and even micro-finance for the poor (most famously the Grameen Bank in Bangladesh).

Based on this accumulation of functions, the UN-DESA identified over 550 development banks around the world, 32 of which were international or regional. Hence, according to this calculation, there are about 520 NDBs, the largest number (approximately 150) to be found in the Latin America and Caribbean (LAC) region. Another study, carried out by a group of Brazilian researchers, used a stricter definition to identify 286 NDBs with 17.6 percent to be found in LAC (Lazzarini, Musacchio, Mello and Marcon, 2012). The Latin American Association of Development Banks (ALIDE by its Spanish acronym) argues that NDBs play a crucial role when addressing four problems often found in financial markets in developing economies. These problems relate to access to finance (especially for smaller firms), terms of finance (long term finance is scarce partly due to undersupply by commercial banks and partly due to the lack of developed equity markets), volatility (cyclical nature of credit availability) and other risks (especially currency, regulatory issues, and uncertainty over innovation outcomes). For a useful discussion on the impact of these issues, see notes from the ALIDE conference in Lima (ALIDE, 2006).

Both the academic and policy literature argue that NDB activities should focus on developing priority sectors, such as infrastructure, science and technology, education, environment, rural development, etc., where the private sector might be more reluctant to invest. In other words, NDBs should help create rather than simply replace markets. More specifically, NDBs are expected to fulfil three main functions: (i) filling gaps in financial sector development, especially the provision of long term finance; (ii) improving the business climate, especially mobilising capital markets and providing support to micro, small and medium enterprise (MSMEs); and (iii) capacity building, especially via technical services and policy advice to realise the economy's development potential. Some NDBs explicitly add a fourth function, which can be encapsulated in the idea of social inclusion and development.

The literature does not provide a consensus view on the role and benefits of NDBs. A good discussion in Yeyati, Micco and Panizza (2004) notes the theoretical support for and objections to NDBs. They note that analysts in favour see social and development benefits from state owned banks more generally. In the *social view*, NDBs can improve the working of the financial sector, mitigate market imperfections, and thus stimulate growth. In the *development view*, scarcity of capital, high risks, and investor uncertainty may mean that commercial banks do not provide sufficient funds to facilitate economic development. Those that criticise the role of NDBs often note two deficiencies – political and efficiency. In the *political view*, politicians grab rents by controlling the banks to ensure their preferences prevail. These are more than likely to be dictated by redistributive politics rather than social efficiency. A variation of this view, what might be called the *agency view*, is that it is improbable that NDBs remain immune from bureaucratic inefficiencies typically found in public sector institutions, thus neutralising any potential social gains. A recent addition to the literature, what could be called the *macro-economic view*, relates to the growing significance of counter-cyclical lending which some agree is better handled by state financial institutions in developing countries. In this view, NDBs are crucial vehicles for crisis resolution, since they can take actions that help to smooth credit cycles.

The above definitions and functions as well as the general discussion on the differing views on NDBs set the context for evaluating the roles and performance of Brazil's main NDB – the BNDES. The next two sections examine its evolving priorities, source of funds, roles and actions. The following sections evaluate the performance of BNDES in the eyes of its defenders and detractors, and also suggest some lessons from BNDES' experience.

BNDES FINANCING PRIORITIES AND SOURCE OF FUNDS

On his return to the presidency, one of the main steps that President Getulio Vargas (1950-55) took to kick-start post-war economic development was setting up the National Economic Development Bank (BNDE) in 1952. The 'S' for 'social' was only added in 1982, when the country was preparing for its transition to democracy, to become the well-known acronym BNDES. Until the early 1980s, the so-called *Sistema BNDES* included the main bank and four subsidiaries (FINAME, EMBRAMEC, FIBASE AND IBRASA). The bank provided long-term loans at below-market interest rates to the private sector, large public sector projects as well as low interest loans and grants to social projects (education, health, employment, culture, sport, social services, etc.). Initially the emphasis was on coordinating interaction of the state with public and private enterprise, although more recently the involvement of civil society and non-governmental organisations (NGOs) is increasingly important in the social policy areas.

Eleazar de Carvalho, BNDES president at the time of its fiftieth anniversary, could credibly claim that 'since the 1950s, no major enterprise funded by private capital has been launched in Brazil without support from BNDES' (BNDES, 2002:4). This included support for both domestic and foreign transnational corporations (TNCs) operating in Brazil. By

2010, it was approving loans three times the amount lent by the World Bank and some 20 percent more than the China Development Bank (Lazzarini *et. al*., 2012). In 2012, its total loan disbursements were 156 billion *reais*, its accumulated loan portfolio was about 10 percent of GDP, and its total assets stood at 4.14 trillion *reais* or about 15 percent of GDP. Thus, BNDES resources clearly appeared to be sufficiently extensive to contribute substantially to 'building development' in Brazil. What exactly did this entail?

To facilitate the exercise of its various roles, analysed in the next section, the bank was given operational autonomy in the sense that its personnel have autonomy over lending criteria and approval of specific loans. "The executive mandates *what* must be done, and the BNDES decides *how* it will be executed" (Colby, 2012:15). Thus, it receives its mandate from the president, although often in practice from the Ministry of Development, Industry and Foreign Trade (MDIC). As a public financial institution, it falls under the regulation of the Central Bank and National Monetary Council (CMN), and the audit of the Federal Court of Accounts (TCU) and the Office of the Comptroller General (CGU). It is specifically charged with developing the technical capabilities to (i) stimulate socio-economic development; (ii) alleviate infrastructure, logistical, financial and other bottlenecks to help boost national productive capacity; (iii) support national private enterprise and the development of a local capital market; (iv) reduce social and regional disparities; and even (v) reinforce macroeconomic policy goals such as reducing inflation, increasing exports, contributing to the balance of payments, boosting employment and alleviating poverty. Pursuing these activities obliges BNDES to balance the requirements of expertise with concomitant market and political imperatives (what Armijo (2013) calls the 'public bank trilemma'). Thus, the flow of information is expected to be two ways – it is a source of policy ideas for policy-makers given its expertise and experience, but it also acts as the practical arm implementing government policy via its technical advice to firms and investment financing to boost development.

Before assessing BNDES' main functions and roles, it is worth examining the gradual shift in its financing priorities as well as source of funds. In the past sixty years, the bank's lending priorities changed closely following and reflecting government industrial policy and economic development goals. Table 1 shows the sectoral and policy focus in BNDES activity in each decade, which was notably always in line with government industrial policy preferences. Under the banner of import substituting industrialisation (ISI), its early emphasis was on developing Brazil's basic industries and infrastructure. For example, in 1960, 38 percent of disbursements went to electric energy, 40 percent to basic industry, 19.8 percent to rail-roads and agriculture received 1percent. As industrial deepening gathered pace, it increasingly focused on a wider range of sectors, including consumer durables (such as cars) and capital goods. By the late 1960s, industry received almost 83percent, while infrastructure only about 14.7 percent. There was also a marked shift in regional allocation of resources from over 88% to the Southeast in the mid 1960s to only about 50% in the mid 1970s (Baer and Villela, 1980:432).

[Insert Table 1 here]

In the 1980s, the bank put much effort into export promotion (partly to help pay off the external debt), but also began to fund a number of social development projects under the auspices of the so-called Project Area IV – *Finsocial*, later renamed the Social Operations Division. In the 1980s, the combined impacts of the debt and fiscal crises triggered a spate of structural reforms. These reforms were rather modest at first, but gathered impetus in the 1990s, when President Fernando Collor de Mello (1990-1992) announced his plans for market liberalisation and privatisation of state assets. BNDES was given control over management of the National Privatisation Programme (PND) and also charged with making credit available for the restructuring and modernisation of Brazil's industrial park. However, Collor closed *Finsocial*, the main mechanism for social project funding by the bank. It was only after stabilisation in the mid 1990s that President Fernando Henrique Cardoso (1995-2002) re-introduced BNDES funding for social projects, creating the *Fundo Social* (Social Fund), which began operations in 1997. Between 1997 and 2002, the bank's Social and Regional Development Division provided grants for a variety of social areas including education (22 percent by value of disbursements), health (21 percent), modernisation of public management (20 percent), micro and small firms (27 percent), social services (6 percent), and other projects (4 percent) (Azeredo & Duncan, 2002). Also, see Neves & Leal (2010) for details about BNDES social projects, especially the *Fundo Social*, during the Cardoso and Lula governments.

The next shift came in the early years of the new millennium, when globalisation increased awareness of business weaknesses as well as the vulnerabilities of certain regions and sections of society. Given the increasing competitiveness pressures faced by business, BNDES priorities first turned to boosting innovation and competitiveness and later to the internationalisation of Brazilian firms. Although initiated under Cardoso these priorities were emphatically extended by President Luiz Inácio Lula da Silva (2003-2010). The new priorities also partly fed into Lula's emphasis on South-South economic and diplomatic links, and Brazil's growing international status as one of the BRICs. Lula's various industrial policy programmes, such as the *Política Industrial, Tecnológica e de Comércio Exterior* (PITCE), *Política de Desenvolvimento Produtivo* (PDP) and *Progama de Aceleração do Cresicmento* (PAC) relied on BNDES loans and equity participation for funding. Export financing sharply rose after the global financial crisis in 2008 (it was an important aspect of counter-cyclical lending/support). It was US$ 8.3 billion in 2009 and US$ 11.3 billion in 2010, and then returned to its previous levels (around US$ 6 billion) in 2011. Lula also revamped the social area, renaming it the Social Inclusion Division in 2003. Subsequently, BNDES reinforced and created a number of mechanisms to support social development. See its website for an extensive list of loans and grants available for social projects including BNDES *Finem*, the *Fundo Social*, and a variety of Social Financing programmes (BNDES, 2013).

President Dilma Rousseff (2011-) indicated a strong preference to support innovation as well as MSMEs via programmes such as the BNDES Investment Maintenance Program (BNDES-PSI), the joint BNDES-CNI Business Mobilisation for Innovation (MEI) initiative, and the '*Cartão-BNDES'* (a credit card like credit line for micro and small businesses with some 510 thousand active cards issued by 2011). These trends were sealed with the government's '*Voices of the New Middle Class'* report, published in April 2013, which noted that 40 percent of the15 million new jobs created between 2001 and 2011 were in small firms. Research into BNDES loan disbursements (see Figure 1) and the share allocated to each sector shows how its activities were central to orchestrating each of the above shifts in national development policy (see Hochstetler and Montero, 2013 for more details).

[Insert Figure 1 here]

Next, it is important to understand the main types and sources of BNDES funds, given its broad impact on economic activity (see Figure 2). Compulsory savings mechanisms, such as the payroll taxes PIS/PASEP and the Workers' Support Fund (FAT), had been the main source of funds for BNDES in the past. Although the total amounts from FAT went up, its share as a source of BNDES funding fell from 46.3 percent in 2008 to 34.1 percent in 2009. In 2009, there was a sudden shift towards other sources (see Figure 2). The bank more actively issued bonds in security markets and also increasingly relied on government transfers. Since 2008, the National Treasury provided massive transfers, both in the form of debt and capital injections, including 130 billion *reais* in 2009, over 80 billion *reais* in 2010, and another cash injection of some 45 billion *reais* in 2012 (*Agencia Brasil,* 2012). These financial transfers sharply increased the government's share in BNDES capital from 6 percent in 2008 to 40 percent in 2009. In 2010, it raised capital from a diversified range of sources to support its lending and investor activities, including 26 percent from government contributions/tax allocations, 7 percent from the money markets, and 56 percent from its own loan operations (Shapiro, 2010).

[Insert Figure 2 here]

BNDES normally lends at a two percentage point spread over the government's Long Term Interest Rate (TJLP), which is usually around 5-6 percent *per annum*. The CMN of the Central Bank sets the TJLP, which typically was considerably below the overnight rate/SELIC. As such, BNDES loans come at an appreciable discount/subsidy on interest payments. BNDES also charges a risk premium and an additional fee for the financial intermediation it provides (this fee varies according to the type of sector and firm receiving the loan). In most years in the past decade, between 54-60 percent of BNDES financing was handled via indirect operations, although there were two exceptions: 43 percent in 2009 and 66 percent in 2011. When BNDES loans are provided indirectly, as is the case with most loans below 10 million *reais*, then the intermediary bank also charges its own additional fees.

BNDES' MULTIPLE ROLES

At first glance, BNDES fulfils each of three key functions expected of NDBs. It is credit provider, equity investor, and advisor to both the public and private sectors. Typically, the Brazilian government sets the economic policy agenda and expects BNDES to allocate financing as appropriate. Although specific sectoral lending priorities changed over time, its overall functions remained unchanged: it provided long-term credit and venture capital for industrial and infrastructure investments, and subsidised loans and grants for social projects.

So, why has BNDES been so vital for Brazilian development? BNDES exercises three main roles and two complementary ones. Its main roles include: creditor (directly and indirectly via on-lending activities of commercial banks), equity investor (shareholder and venture capitalist), and privatisation manager (no longer a central role). Its complementary roles, both relatively new ones, relate to supporting macro-economic stability (via counter-cyclical lending) and financing the internationalisation of Brazilian firms. The analysis demonstrates how these roles collectively contribute to fulfilling the main functions expected of NDBs.

Creditor

BNDES' main role is to provide long term credit to private firms as well as public investment projects. It provides about 73 percent of long term financing (loans over three years) in Brazil. According to the Brazilian Central Bank, in early 2012, BNDES' loan-book was composed of 416.23 billion *reais*, i.e. 20.5 percent of total credit, the equivalent of 9.98 percent of GDP. The role of creditor has been crucial to support long-term and large investments in a macro-economic context where the state's debt needs raised interest rates, and often crowded out the private sector's demand for credit. Sectoral priorities shifted over time as did the size of firms receiving financing (see Table 2). In 2012, the bank disbursed 156 billion r*eais* (approximately US$ 84 billion) as follows: 65 percent to industry and infrastructure, 28 percent to trade and services, and 7 percent to agriculture. Higher priority given to funding MSMEs was evident from the record disbursements of 50.1 billion *reais*, 32 percent of the total, handled via some 990 thousand operations (BNDES, 2012). The *Cartão-BNDES* alone provided 9.5 billion *reais* to micro and small firms. It does not seem farfetched for the government to claim that this signified a genuine democratisation of credit on an unprecedented scale in Brazil.

[Insert Table 2 here]

Equity Investor

BNDES is one of the largest institutional investors and active player in Brazilian equity markets. In 2012, the bank's equity portfolio had a market value of over US$ 66.8 billion. The role of equity investor was handled initially via its four subsidiaries in the *Sistema BNDES*. They provided venture capital via temporarily holding shares in private firms to sustain investment, encourage innovation, support the capitalisation of national firms, and increase liquidity in the local capital market (Carvalho Pereira, 2007/1980). In 1982, the four subsidiaries were merged into a single entity, *BNDES Participações* (known as BNDES-Par). In addition, two departments within the main bank were involved in share holding: the Capital Market Division and the Venture Capital Division. As occasion arose, BNDES-Par sold off some of its shareholdings, thus developing experience in 'privatising' them. For example, in 1979, it sold its shares in seven companies where it had the controlling block.
[Insert Figure 3 here]

In 2011, BNDES was one of the largest holders of Brazilian equities with direct or indirect interests in 75 companies. It held shares in 25 of the 65 companies in the share index (IBOVESPA). However, although there is little evidence that the main bank and/or BNDES-Par had greater influence on firm behaviour than the market overall, it was likely to take advantage of its position when it had a big enough stake in a company to nominate directors to the company's Board. Anecdotal evidence and market perception certainly suggests that BNDES-Par often took a more activist stance on company direction and management than was typical of international investment banks and funds (Landers, 2012). BNDES could demand improvements in corporate governance and use its considerable financial clout to push for government policy preferences (e.g. encouraging innovation and internationalisation of firms).

Privatisation Manager

Based on BNDES' experience in disposing of shares, President Collor created the Directorate for Privatisation within BNDES. Its privatisation activities included: (i) planning and holding the privatisation; (ii) providing acquiring firms with loans; and (iii) purchasing minority stakes in some of the newly privatised firms (Lazzarini, *et. al.*, 2012). Ironically, market oriented reforms increased demand for BNDES resources, and the bank was active in creating financial capacity among potential buyers and facilitating access to credit for post-privatisation restructuring of companies (Montero, 1999; Lazzarini & Musacchio, 2011). By end 1996, the bank had overseen the privatisation of 47 firms. In 1997, it sold off the state's crown-jewels, the profitable mining SOE *Companhia Vale do Rio Doce* (CVRD) and the giant telecom holding *Sistema Telebrás*. By 2001, BNDES had managed the largest privatisation programme in the world, raising US$105.3 billion under the PND, and transferring 120 companies to full private sector ownership.

In addition, BNDES' capital market activities related to state owned oil company PETROBRAS are noteworthy. In 2000, it coordinated a public offering of PETROBRAS ordinary shares (28.3 percent of voting rights) raising US$ 4.02 billion. PETROBRAS employees were allowed to acquire shares by using the official workers' severance fund (FGTS), which tripled the company's shareholder base (313 thousand workers bought stock at the time). Again, in 2010, it participated in the massive capitalisation of PETROBRAS, which raised US$70 billion in international capital markets, increasing the bank's stake in the company from 7.7 percent to 13.5 percent. BNDES loans contributed 24.7 billion *reais* (approximately US$12 billion) to the latter operation. The 2000 offering was the largest public offering in Latin America until then, and the 2010 capitalisation was the largest such operation ever worldwide. The latter operation ironically rather than increasing private sector participation in a mixed ownership enterprise actually raised the public sector's share (a 're-nationalisation' that reversed BNDES's supposed role as privatisation agent).

Other Roles

Two other aspects of BNDES activities – counter-cyclical lending and supporting internationalisation of Brazilian firms – merit attention. Firstly, BNDES has played a significant role as an economic stabiliser by providing counter-cyclical credit and financing. This aspect became very evident in the global financial crisis of 2008-2009, when it quickly responded to recession by increasing its disbursements some 46 percent between 2008 and 2009. At a time when private sector banks were withdrawing from the market, Brazil's publically owned banks (BNDES, *Banco do Brasil* and *Caixa Economica Federal*) stepped up lending and were responsible for 68 per cent of the net variation in credit operations in the fourth quarter of 2008 (following from the collapse of Lehman Brothers in September). BNDES alone amassed a third of the entire increase in credit (Sant'Anna *et. al*., 2009). Between 2008 and 2012, the National Treasury transferred over 300 billion *reais* to BNDES, and Brazilian firms were spared the credit crunch experienced by many firms elsewhere in the world.

Secondly, BNDES also played a prominent role in the internationalisation of Brazilian firms. It first provided export finance to back the competitiveness of national production in the late 1970s, gradually extending Ex-Im bank services in the following decades (Figure 4). In 2001, a change in its statutes allowed it to also fund operations abroad, amidst much criticism about it 'exporting' jobs and savings. However, it was only under the Lula government that BNDES adopted explicit policies to stimulate local firms to invest abroad. In April 2013, the bank even created a new division for Latin America and Africa. Thus, the impetus for many internationalisation moves came directly from the government eager to boost Brazil's prominence as a global player.

[Insert Figure 4 here]

Since BNDES' first international operation in 2005, the bank's external activities have mainly focused on supporting Brazilian firms in taking part in M&As abroad. The creation of Brazilian TNCs was clearly supported by BNDES loan and equity financing, allowing firms to participate in foreign M&As in resource intensive sectors as well as to bid for concessions and contracts in the infrastructure and energy sectors abroad (Baumann, 2010). Moreover, the bank holds minority shares in many of the top Brazilian TNCs, such as Fibria, Klabin, JBS-Friboi, Marfrig, Gerdau, and America Latina Logística.

One of the best examples of BNDES action in this area was the growth of JBS-Friboi, the meat-packing firm owned by the Batista family, which emerged from being an obscure meat packer in the interior of Goias into the largest integrated meat producer in the world in less than a decade. This was partly accomplished via BNDES shareholding and loans that helped finance JBS acquisitions around the world. There has been heavy criticism of this type of government support for the creation of 'national champions' as discussed below. However, the government does not seem daunted. Instead, the idea behind the creation of the new Latin America and Africa Division appears to suggest more support for so called 'international champions' (in the words of its newly appointed head, Joao Carlos Ferraz).

To summarise, the above analysis shows how BNDES' roles were re-interpreted rather than re-placed, and how the state re-positioned itself rather than retreated from economic intervention in Brazil. By actively contributing to these re-imagined roles, BNDES was more often than not successful in fulfilling the main functions expected of NDBs, as discussed in the next section.

ASSESSING BNDES EFFECTIVENESS AS AN NDB

The article's evaluation of BNDES is based on how well it fulfilled the functions expected of a NDB. It is not based on a comparative analysis with other similar financial institutions (whether national, regional or international). This approach is better suited to assessing how the bank adapted to changing economic conditions and development strategies, which is the focus of the article. However, this does require some assessment of whether the bank used its resources in the best possible way. Were BNDES loans seen as additional and complementary in the investment financing decision-making process of firms? Or were they a simple substitute for alternative sources? Did the bank use appropriate criteria when making loan or equity related decisions? Were its non-economic, i.e. political/policy criteria defensible?

First it is important to clarify that the literature shows that BNDES' loan-book and share portfolio does not exhibit poor management, high default rates, reckless disbursements or neglected attention to firm share value (Shapiro, 2010). For example, the Central Bank reported that BNDES default rates were a low 0.14 percent in 2011, when compared to 3.6 percent for the national financial system as a whole. All the same, BNDES loans have been the subject of much criticism from commentators on the Left as well as the Right in Brazil. Criticisms of what is referred to as the '*Bolsa Empresário'* or '*Bolsa BNDES'* comes from across the political spectrum. For example, both more liberal economists such as Claudio Haddad (interview in *Folha de São Paulo*, 2011) and left-wing labour unions such as the United Socialist Workers' Party (PSTU) (see its website at http://pstu.org.br) voiced opposition to this type of investment 'subsidy'. Equally, there have been many to strongly defend it, both in the private and public sectors. Whatever the opinions voiced, it was clear that BNDES action in its various roles, as discussed in the article, brought to the fore the central role of a state agency in shaping Brazilian development. So, how effective was it in responding to Brazil's shifting development needs?

Among the main functions of a NDB is its role as creditor and investor to support financial sector development, especially the provision of long term finance. In the past decade, BNDES typically financed about 40 percent of gross fixed capital formation (the investment rate) in Brazil. The previous section also noted the crucial importance of BNDES providing counter-cyclical lending to smoothen credit and business cycles. Some would argue that it does a good job ensuring firms get the financing they need as well as providing project finance for urgently required infrastructure. However, the critics often note that BNDES domination of long term finance actually crowds out commercial banks as well as capital/equity market development. Critics like former BNDES President Persio Arida (interview in *Folha de São Paulo*, 2012) unequivocally stated that those 'with access to capital markets should not use BNDES resources'. Certainly, evidence continues to show that fund raising in the stock market (debt and equity) remains below the disbursements (loan and security transactions) of the public sector banks in Brazil (Shapiro, 2010). It is also noteworthy that for all the increase in BNDES disbursements in recent years, Brazil's overall investment rate has been stagnant and rarely above 20 percent of GDP.

So, how do firms approach funding their investments? Is BNDES viewed as a relatively cheap and easy alternative to commercial lending or equity financing? Is it simply a substitute rather than a booster of total investment? A number of critics point out that for all BNDES' efforts at deepening capital markets in Brazil it ultimately negates them via its steady supply of cheap funds to large companies. These critics, including Arida cited above, believe that many recipients of funds could have borrowed elsewhere (many of BNDES largest borrowers are listed on stock markets abroad and/or are TNCs). Ironically and unsurprisingly, evidence suggests that many private sector firms actually prefer to borrow from BNDES for a number of reasons. Many firms avoided approaching private financial institutions or equity markets, since these were seen as rather limited and/or unduly expensive sources of funds. In addition, interviews with market analysts demonstrated that some firms avoided going to capital markets to evade closer scrutiny of their balance sheets and investment strategies.

As already mentioned, a point of particular criticism refers to BNDES 'subsidised loans'. Here critics note two aspects: first, there was growing resentment that the largest firms (including many TNCs) get the best rates and conditions, while smaller firms are forced to rely on much more expensive credit from private financial institutions. These critics often referred to BNDES loans pejoratively as the '*Bolsa-Empresário'* or '*Bolsa-BNDES*' made at the taxpayers' expense to what were seen as elite firms well able to borrow from domestic and international markets. Second, there was concern that the subsidised interest rate allowed BNDES to operate what in effect was a 'parallel budget', whose potential fiscal impacts are unclear, especially if there should be a sudden deterioration in macro-economic conditions (e.g. a large devaluation). The government's manipulation of BNDES decisions, such as the record dividend payments made by the bank in 2012, might have helped meet government fiscal targets, but at the expense of the bank's cash reserves and financial health. In early 2013, the credit rating agency, Moody's, cited these very issues as the reason for its downgrade of BNDES to that of Brazilian sovereign debt (Financial Times, 2013).

NDBs are also expected to help improve the general business climate, providing support to MSMEs, mobilising capital markets, encouraging wider share holding and better corporate governance. First, in terms of improving conditions for the smallest firms, BNDES credit operations have played an increasingly important role complementing other government initiatives (such as the SIMPLES tax regime for micro firms). Although historically BNDES' remit did not include supporting MSMEs (this area was supposed to be dealt with via its co-financing and indirect financing arrangements as well as by the other public sector banks), under Presidents Lula and Dilma Rousseff, this area has received a higher profile. Lending to MSMEs has increased at a faster rate than other areas, via programmes such as the *Cartão-BNDES* and the '*Crescer*' credit programme, which provides micro credits to micro and small firms. In May 2013, Rousseff announced that the interest rate on state credits for small business will be cut from 8 percent to 5 percent *per annum* (on a par with the TJLP, thus removing criticism related to special favours for larger borrowers).

In its capacity as privatisation manager, BNDES oversaw the transfer of ownership of some of Brazil's largest corporations from state to private sector, thus changing the face of Brazilian capitalism within a decade. However, privatisation was also in many ways a deliberate strategy employed by a developmental state to hold on to its economic influence and to get the support necessary to implement its industrial policy, as well argued by Montero (1999). All the same, privatisations helped develop the significance of two relatively new actors in the market – the individual investor and the institutional investor – with strong interest in shareholder-based corporate governance. Thus, at first glance, the bank's role as privatisation manager contributed to fortifying Brazilian capital markets and the advance of capitalist development in Brazil. Yet, at the same time, privatisation also often led to indirect state ownership (via equity holdings of public banks and public sector pension funds) in many privatised companies, what Musacchio and Lazzarini (2012) call 'Leviathan as minority investor'. BNDES was a central actor in this process.

There is also much evidence to show that BNDES-Par used its equity holdings to encourage better corporate governance and to educate firms on using stock markets. Over the decades, discretion over its equity and loan operations saw it 'pick winners' and 'national champions'. While this created some notable success stories, such as aircraft manufacturer Embraer, it also raised concerns among critics uncomfortable with such heavy state intervention in companies. There is much evidence to show that the bank appeared willing to intervene directly in firm ownership as well as management structures. For example, it was willing to convert its debt to equity when strategically necessary, as it did in August 2011, when it increased its shareholding from 17 percent to over 30 percent in meat producer, JBS, after the firm reported large losses earlier in the year. In terms of intervening in management, government and other public sector nominees have often been activist Board members. They were even ready to remove chief executives that 'displeased' them. An excellent example was the pressure put on Vale's former CEO Roger Agnelli to resign from the Board in 2011 after both Presidents Lula and Rousseff openly voiced criticism of the CEO's decisions (Bloomberg News, 2011; Armijo, 2013).

Accusations of cronyism and politicisation of what should be technical decisions are frequently voiced, most often about BNDES financing for PETROBRAS (e.g. the question of whether it should be lending to build the controversial new refineries in the Northeast). Thus, there is much evidence that BNDES loan-making decisions were not solely guided by financial criteria, but also still strongly influenced by industrial policy preferences and government political agendas. As Shapiro (2010:39-40) rather gently notes: 'In financial governance, state agents are still players, but (they) play by the (rules of the) market... State agents act according to industrial policy guidelines, selecting strategic sectors while respecting the rationality of the market and private initiative'.

The third function expected of NDBs related to their knowledge activities. Interestingly, BNDES research activities and capacity for analysis developed by default in the 1950s, while its staff awaited the promised funds from government and international agencies (Baer and Villela, 1980:426). Currently, BNDES still provides numerous services that come under the broad label of capacity building. More specifically, it provides technical services and policy advice to both government and enterprises to enhance the economy's development outcomes. BNDES' technical staff is recognised as one of the 'islands of excellence' in the Brazilian civil service. They are highly qualified and enter via competitive public exams. Moreover, there are strong links between its technical staff and the government. The market reforms of the 1990s changed the institutional dynamics and behaviour of BNDES, initially making it act more like an investment bank than a government development agency. However, the Workers' Party (PT) governments in place since 2003 have returned to the strong developmentalist tradition of the Brazilian state. Hochstetler and Montero (2013) present a useful analysis of 'renewed developmentalism' in Brazil.

Currently, the bank provides extensive policy advice, research outputs, and consultancy-like services to the private sector. Much of its knowledge output is publically available via the internet and other more specialist advice is provided within the context of its other roles. This function is the one area where critics have little to say and where its defenders can make their strongest case. In recent years, BNDES has generated much international attention as the scale of its operations increased and its activities helped create internationalised Brazilian firms. Equally important was the growing interest in understanding Brazil's heavily statist tradition in the context of post-global crisis debates on the role of the state in industrialisation and development processes. Any lessons to be learnt from BNDES' past actions indirectly touch on this last point – that is, the evolving role of the state in the economy. These lessons should be seen to equally apply to Brazil as elsewhere.

CONCLUSION

BNDES provides a number of lessons for NDBs. One of the most important overall lessons is the importance of building technical, policy and financial capacity as well as ensuring political willingness on the part of the state to act consistently as the engine of development. This is especially relevant in an economy maintaining a statist approach to development even as it undertakes market-oriented reform (see Hochstetler and Montero, 2013 and Doctor, 2007 for a discussion and examples of this approach). The combined equity holding and financial influence of BNDES, BNDES-Par and the state company pension funds continue to give the Brazilian government an extensive share in and influence over Brazil's private sector. The bank has done very well to flexibly adjust its priorities to evolving development challenges and business needs of the time, as discussed above.

The analysis demonstrated how BNDES tracked government policy priorities, but made its loan and investment decisions in an autonomous (and often technically justifiable) manner. This does not imply that it can afford to ignore the democratically elected government's preferences. By supporting specific types of business ventures and specific sectors, BNDES financing is an important tool of the government in executing its industrial policy goals and in shaping the competitiveness of private enterprise (Lazzarini, 2012). However, as a NDB, its goal should be to add to the overall pool of investment financing. Thus, BNDES adds greatest value when its actions focus on higher risk activities (e.g. venture capital for start-ups and innovative products) and where the private sector is less interested (e.g. infrastructure, social projects). However, this is not always the case. Where its resources are used counter-cyclically (not undesirable as such), there should be emphasis on transparency, especially of fiscal impacts, so that society can make informed choices about whether it supports the bank's actions and use of taxpayers' money (albeit indirectly).

Although BNDES remains the main source of long term finance, a key function of NDBs, the analysis exposed some weaknesses on this front. It also clearly showed the importance of maintaining a good balance between large and small firm lending. Moreover, even if MSMEs contribute greatly to job creation (and they are an important part of the rising middle class story in Brazil), it equally cannot be ignored that large firms still play a key role in boosting overall investment rates and productivity. The bank also needs to sensitively manage its role as equity investor so as to boost rather than subvert corporate governance standards.

Finally, there is the significant issue of capacity building and knowledge creation. Additionally, lessons can be learned from how BNDES works to avoid diluting the value of its expertise, but at the same time remains aware that it must respond to the government's mandate. The above analysis provides some grounds to believe that BNDES is in a position to responsibly and transparently manage its future actions to continue supplying the essential public goods of long term investment funds and technical expertise to further Brazil's development. However, this is by no means a guaranteed outcome. Much will depend on how future governments utilise the bank's resources.

REFERENCES

Agência Brasil (2012) 'Até o fim do ano, BNDES deverá desembolsar R$32 bilhões para infraestrutura', 9 October

ALIDE (2006) 'First Regional Consultation on the Challenges of the National Development Banks in Latin America' Conference in Lima, Peru, 12-13 June; URL: http://www.alide.org.pe

Armijo, L. (2013) '*Brazil's New Developmentalism: The BNDES and the Public Bank Trilemma*' Paper prepared for International Studies Association Conference, San Francisco

Azeredo, B. and P.G. Duncan (eds) (2002) *BNDES Social*, no 7, Rio de Janeiro: BNDES Press

Baer, W. and A. Villela (1980) 'The changing nature of development banking in Brazil', *Journal of Interamerican Studies and World Affairs,* 22(4): 423-440

Bloomberg News (2011) 'Vale's main shareholders' group seeking replacement for CEO Roger Agnelli', 1 April; URL: http://www.bloomberg.com/news

BNDES (2013) 'Mechanismos de Apoio', *Areas de Atuação – Desenvolvimento Social e Urbano,* URL: http://www.bndes.gov.br

BNDES (2012) *Relatório Anual 2012,* URL: http://www.bndes.gov.br

BNDES (2011) *Relatório Anual 2011,* URL: http://www.bndes.gov.br

BNDES (2002) *Fifty Years of Development,* Rio de Janeiro: BNDES Press

BNDES (1969) *Exposicao sobre o Programa de Reaparelhamento Economico,* Rio de Janeiro: BNDES Press

Baumann, R. (2010) 'Brazilian external sector so far in the 21st century', *Revista Brasileira de Politica Internaçional,* 53 (special edition): 33-53

Carvalho Pereira, J.E. de (2007/1980) 'A política econômica brasileira e a contribuição do Sistema BNDE: Reapresentação em Novembro de 2007', *Revista do BNDES*, 14(28): 459-80

Colby, S. (2012) 'Explaining the BNDES: what it is, what it does and how it works' *CEBRI Artigos* vol 3, Ano VII; Rio de Janeiro: CEBRI

Doctor, M. (2007) ‘Boosting investment and growth: the role of social pacts in the Brazilian automotive industry’ *Oxford Development Studies*, 35(1):105-130

Financial Times (2013) ‘Brazil’s BNDES and Caixa hit by downgrades’, *Financial Times*, 21 March

Folha de São Paulo (2012) ‘País tem pacto antiliberal entre elites e governo, diz Persio Arida’, *Folha de São Paulo*, 16 January

Folha de São Paulo (2011) ‘BNDES é Bolsa Família para acionistas’, *Folha de São Paulo*, 17 July

Hochstetler, K and A.P. Montero (2013 online), ‘The Renewed Developmental State: The National Development Bank and the Brazil Model’ *Journal of Development Studies*

Landers, W. (2012), ‘*Interview on BNDES and BOVESPA’*, Personal correspondence, 3 April

Lazzarini, S. (2012) ‘Strategizing by Government: Industrial Policy and Sustainable Comparative Advantage.’ Mimeo.

Lazzarini, S. and A. Musacchio (2011) ‘Leviathan as minority shareholder: a study of equity purchases by BNDES 1995-2003’, *Harvard Business School Working Paper 11-073*

Lazzarini, S., A. Musacchio, R. Bandeira de Mello, and R. Marcon (2012) ‘What do development banks do? Evidence from Brazil 2002-2009’ available: www.ssrn.com

Montero, A.P. (1999) ‘State interests and the new industrial policy in Brazil: the privatization of steel, 1990-1994’ *Journal of Inter-American Studies and World Affairs*, 40(3): 27-62

Musacchio, A. and S. Lazzarini (2012) ‘Leviathan in Business: Varieties of state capitalism and their implications for economic performance’, *Harvard Business School Working Paper 12-208*

Neves, R.O. and R.M. Leal (2010) 'Investimento social não reembolsável do BNDES: a trajetória do Fundo Social até 2008', *BNDES Setorial*, no: 33, pp 225-260

Oxford Analytica (2010) 'BNDES risks greater role as a political tool', *Latin America Daily Brief*, 30 September

Power, T. and M. Doctor (2004) 'Beyond the Century of Corporatism?: Continuity and Change in Brazil', in Howard J. Wiarda (ed), *Authoritarianism and Corporatism in Latin America, Revisited,* University of Florida Press: Gainesville

Sant'Anna, A.A., G. R. Borça Junior, and P. Quaresma de Araujo (2009) 'State-owned banks sustain Brazilian bank credit over 2008', BNDES *Brazilian Economic Insights,* no. 63

Shapiro, M. (2010) 'Administrative Governance, Institutional Dynamics and Industrial Financing in Brazil: New Parameters, Old Problems.' Paper delivered at Harvard Law School and Stanford Law 3rd International Junior Faculty Forum

The Economist (2012) 'State Capitalism: the visible hand', *The Economist Special Report*, 21 January.

UN-DESA (2005) '*Future role of national development banks in the twenty-first century'*, Background Paper (prepared by Nicholas Bruck)

UN-DESA (2006) '*Rethinking the role of national development banks'*, Revised Background Document for the Ad Hoc Expert Group Meeting on National Development Banks

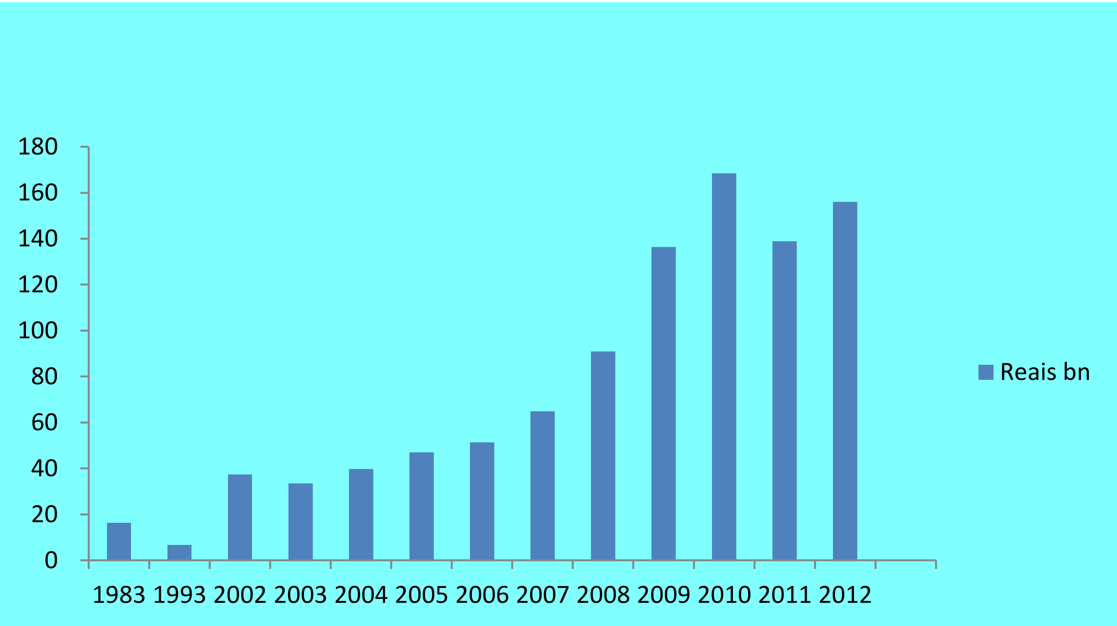
Yeyati, E.L, A. Micco, and U. Panizza (2004) 'Should the government be in the banking business?: The role of state-owned and development banks', *IDB Working Paper* no. 517

Table 1: Industrial Policy Focus and Sectoral Emphasis of BNDES Loans

Year	**Policy Focus**	**Sectors**
1950s	Import Substitution	Basic industry; electricity; railroads
1960s	Private Sector Development	Consumer goods; industrial inputs; infrastructure
1970s	Industrial Deepening	Capital goods; heavy industry; infrastructure
1980s	Export Promotion	Exports; social investments; capital markets development
1990s	Privatisation; Market Opening; Competitiveness	Modernisation/Restructuring firms; export finance; community/social
2000s	Internationalisation; Counter-Cyclical Lending)	Mergers and acquisitions; Brazilian investment abroad; social inclusion
2010s	Innovation; MSMEs	Technology/knowledge intensive sectors; MSMEs & Cartão BNDES

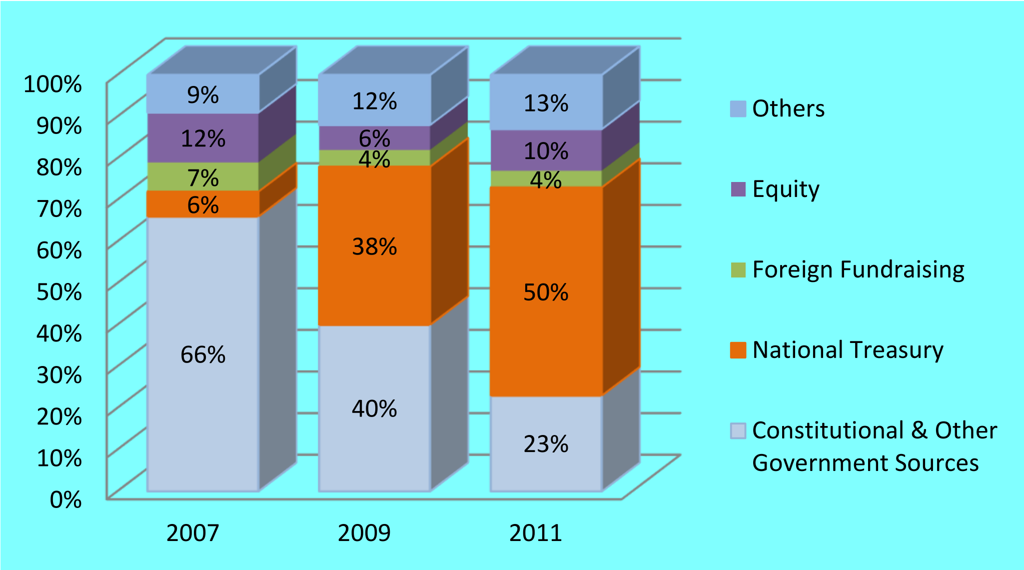
Source: Author

Figure 1: BNDES Disbursements



Source: BNDES, 2012 (NB: 1983-1993 in 2001 *Reais* corrected by IGP-DI)

Figure 2: Sources of BNDES Funding



Source: BNDES, 2012

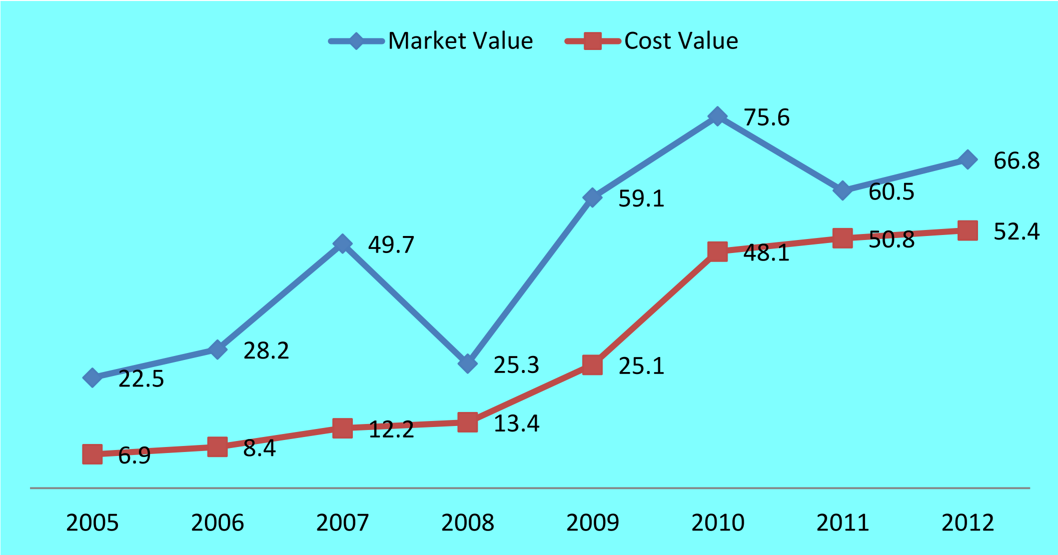
Table 2: BNDES Disbursements by Company Size

Year	**Large Firms (Billion Reais)**	**MSMEs (Billion Reais)**	**MSME Share of Total (percent)**
2008	69.0	21.8	24%
2009	112.4	23.9	17.5%
2010	122.8	45.7	27.1%
2011	89.1	49.8	35.9%
2012	105.9	50.1	32.1%

Source: BNDES, 2012. Author calculations

Figure 3: BNDES Equity Portfolio

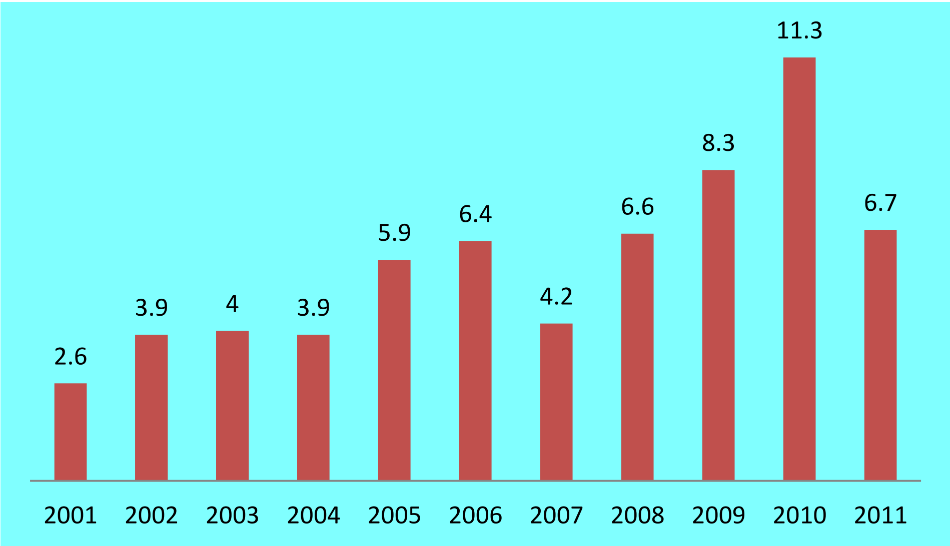
(US$ million)



Source: BNDES, 2012

Figure 4: BNDES Export Financing

(US$ billion)



Source: BNDES, 2012