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Institutions and Development From a Historical Perspective: the Case of the Brazilian Development Bank

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ABSTRACT

This paper analyzes the role played by the Brazilian Development Bank (BNDES) in different periods of Brazil's development process since its founding in 1952. The bank's history is nonlinear, varying with socio-economic and political changes over time. Four major periods in its history are: (i) from its creation to the debt crisis in the 1980s, a period known as 'developmentalism'; (ii) the neoliberal movement of the 1990s; (iii) the reintroduction of the BNDES as a relevant tool for development in the 2000s; and (iv) a new neoliberal movement that arose beginning in mid-2016. Each of these periods is characterized by certain development conventions that shape how institutions, such as the BNDES, operate, and at the same time are shaped by them. In contrast to mainstream economics, which focuses on a one-size-fits-all institution for development, this paper evaluates the interactions between development and institutions as historical processes, with an emphasis on the prevailing development conventions. The trajectory and different roles assumed by the BNDES over time exemplify this permanent relationship, rejecting the idea that particular types of institutions are related to development.

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1. Introduction

Mainstream economics sees institutions as one of the main reasons why growth trajectories have differed between countries. In particular, this literature regards market-oriented institutions as the basis of economic development (Acemoglu and Robinson 2010). Critical approaches, however, emphasize the historical process of different institutions and a mutual causality between institutions and development (Chang 2011).

This paper analyzes the trajectory of a key institution of long-term financing in Brazil, namely the National Development Bank (BNDES). Following an 'Old Institutionalist' approach, it takes into account the changes in the bank's orientation. It also highlights the interaction between the role assumed by the BNDES and the prevailing development conventions over time.

The bank's history is seen as nonlinear, varying according to the socio-economic and political context. Four major periods can be highlighted following each phase of Brazil's development process: (i) from the creation of the BNDES in 1952 to the debt crisis in

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the 1980s, a period known as 'developmentalism'; (ii) the neoliberal movement of the 1990s; (iii) the reintroduction of the BNDES as a relevant tool for development in the 2000s; and (iv) a new neoliberal movement since mid-2016. Each of these periods is marked by a certain political and socio-economic convention regarding development that shapes (and is shaped by) institutions, such as the BNDES.

Based on literature review and data analysis, this work sheds light on the role of the bank in the historical context of Brazilian development. The remainder of the paper is divided into three sections. The first section reviews the literature on economic development and institutions. In contrast to the mainstream economics that considers a one-size-fits-all institution for development, a critical approach is adopted by highlighting the interactions between development and institutions as historical processes, inspired by the 'Old Institutional Economics' approach. The second section analyzes the role played by the BNDES in the aforementioned periods, in order to show how it shapes and at the same time is conditioned by different historical contexts. The third section details BNDES policies since the 2000s, particularly its role as a countercyclical force in the face of the 2008 global financial crisis and the introduction of new directives in recent years. Concluding remarks follow.

2. Institutions and Economic Development: a Critical Approach

Mainstream economics evolved from analyzing physical capital accumulation to focusing on technology and human capital as possible explanations for economic development. In this context, the inherently institutional character of socio-economic relations was absent (Hodgson 2009).

This scenario has changed since the mid-1970s. Works on institutions and institutional change linked to neoclassical, Austrian and game-theoretic approaches, have become increasingly popular (Rutherford 1999). Covering a wide range of topics, this literature is known as the 'New Institutional Economics'.[1]

Since then, the introduction of institutions, together with cultural and geographical issues, into the development debate has been widespread in mainstream economics (North 1981, 1990, 1994; Rodrik, Subramanian, and Trebbi 2002; Acemoglu and Robinson 2010). As Acemoglu and Robinson (2010) point out, this broad set of works attempts to separate proximate causes of development (e.g., technology, human and physical capital) from fundamental causes of development (e.g., institutions).

The definition of what institutions are or what economists regard as institutions is a crucial matter. Van Arkadie (1990) stresses that economists interpret institutions in two different ways — namely 'the rules of the game' and organizations. In the first sense, institutions provide the context in which markets operate and, as such, define the terms under which different actors make decisions. In the second sense, institutions are systems of nonmarket relations, as organizations refer to nonmarket coordination arrangements that make production and transaction activities possible.

[1]The term 'New Institutional Economics' was coined by Williamson (1975) with the deliberate attempt of disassociating the newer approach from the 'Old Institutional Economics', based on the works of Thorstein Veblen, Wesley Mitchell, John R. Commons, and Clarence Ayres (Rutherford 1999; Hodgson 2009). For more on the 'New Institutional Economics', see Williamson (2000) and Jütting (2003).

One of the most widespread and well-known definitions of institutions has been put forward by Douglass North in many of his works. Acemoglu and Robinson (2010), for example, use North's first definition:

> Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction. In consequence they structure incentives in human exchange, whether political, social, or economic. Institutional change shapes the way societies evolve through time and hence is the key to understanding historical change. (North 1990, p. 3)

In this definition, Acemoglu and Robinson (2010) highlight three key points: (i) the human nature of institutions, contrasting with other possible fundamental causes of growth out of human control, such as geographical conditions; (ii) the fact that institutions can set constraints on human behavior, as 'rules of the game'; and (iii) the idea that institutions lie behind a series of incentives through which human interaction take place.

An extended definition of institutions is given in another passage from North:

> Institutions are the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights). Throughout history, institutions have been devised by human beings to create order and reduce uncertainty in exchange. […] Institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change toward growth, stagnation, or decline. (North 1991, p. 97)

North (1990, 1994, 2005) also highlights the difference between institutions and organizations. In several works, he identifies institutions as 'the rules of the game' and organizations as 'the players'. According to North (1990, p. 5), 'both what organizations come into existence and how they evolve are fundamentally influenced by the institutional framework. In turn they influence how the institutional framework evolves'.

Several critiques of the 'New Institutional Economics' have come from heterodox economists. As Rutherford (1999, p. 4) points out, authors inspired by the 'Old Institutional Economics' argue that the new approach is too formal, abstract, 'individualist, reductionist, orientated toward rational choice and economizing models, and generally anti-interventionist'.[2]

Regarding the role of institutions in economic development in mainstream economics, two main proposals are discussed in greater depth, as follows. First, a good deal of this literature has tried to identify institutions as the ultimate, or fundamental, cause of development. This implies a one-way causality from institutions to development (Shirley 2008; Acemoglu and Robinson 2010). Multilateral organizations began to spread the idea that development requires the prevalence of certain institutions, arguing that nations fail to catch-up with advanced economies since they lack these institutions (Evans 2003; Chang 2006, 2011). As Blankenburg and Palma (2012, p. 142) put it, 'neoclassical theory has shifted its argument from "getting prices right" to "getting institutions right"'.

[2]It is important to note that, like any general characterization of a diverse literature, these labels apply more to some authors and works than others. Williamson and North, although representatives of the neoclassical approach to institutions, explicitly recognize its limitations (Rutherford 1999). North's contributions, in particular, can be likened to the 'Old Institutional Economics' in his later works as he began to emphasize the importance of path dependence, bounded rationality and shared mental models in the understanding of institutions and institutional change (Hodgson 2009).

Normative guidelines for poorer economies would lie in adopting the 'right' institutions and governance-related reforms. This 'institutional monocropping', as Evans (2003) calls it, usually refers to the Western neoliberal institutions that underlie free-market reforms, such as contract laws, property rights and law enforcement (Shirley 2008; Chang 2011; Blankenburg and Palma 2012). In this regard, development is reliant on the implementation of such 'rules of the game'. As Shirley (2008, p. 3) emphasizes, 'the vast majority of humans today live in countries that failed to create or sustain strong institutions to foster exchange and protect property'. Therefore, institutions are understood from a supply-side economics approach (Vernengo and Caldentey 2017).

From a critical perspective, Chang (2011) highlights a two-way causality between institutions and development. Historical evidence shows that many of today's developed economies only adopted market-friendly institutions after achieving a certain level of development. This shows that developed countries today did not necessarily adopt market-friendly institutions initially.

In this regard, there is a clear chicken-and-egg problem, as a two-way causality between institutions and development leads to a high level of indeterminacy (Paldam and Gundlach 2007). Institutions can help to promote development, but development can also be a condition for institutions to arise and become stronger (or weaker) in a way that development can be reinforced (or hindered). Many institutions arise (or adapt) after certain levels of development are achieved, thus reflecting political, economic and social arrangements. Additionally, institutions are important for economic development if they are able to expand demand in a Keynesian fashion, as highlighted by Vernengo and Caldentey (2017).

Second, the political nature of institutions is recognized, even in more recent mainstream works (North 1994, 2005; Acemoglu, Johnson, and Robinson 2005; Acemoglu and Robinson 2010). For instance, Acemoglu, Johnson, and Robinson (2005) and Acemoglu and Robinson (2010) argue that development depends on certain economic institutions that are highly influenced by political institutions. In turn, these institutions face conflicts of interest among various groups and individuals over the choice of economic institution to be adopted, with the political power being the deciding factor. So, particular interests can capture political institutions and consequently economic institutions. Rent-seeking behavior can lead institutions to work inefficiently, with a possible adverse effect on economic growth. In this regard, a close link to the previous discussion is established, in which a governance-related agenda should be implemented in less developed economies as reforms to prevent such behavior from occurring.

Institutions, if considered as an organization or a set of formal and informal rules or norms that constrain or enable individuals' actions, present a structure that is dynamic rather than static (North 2005). The political nature of institutions acts as a force to frame institutions and institutional changes, but this does not necessarily mean that institutions are permanently subject to the control of rent-seeking groups. However, conflicts of interest and political power can lie behind decisions and orientation taken over time.

In order to properly deal with these issues, a conception of institutions inspired by the 'Old Institutional Economics' seems more theoretically consistent and empirically relevant to the purpose at hand. Hodgson (2006, p. 6), for example, broadly defines institutions as 'systems of established and prevalent social rules that structure social interactions' or alternatively as a 'socially embedded system of rules' (Hodgson 2006, p. 8). Therefore, institutions not only constrain, but also enable behavior (Hodgson 2006, 2009). In this framework, organizations, such as the BNDES, are a kind of institution with the following particular features: '(a) criteria to establish their boundaries and to distinguish their members from nonmembers, (b) principles of sovereignty concerning who is in charge, and (c) chains of command delineating responsibilities within the organization' (Hodgson 2006, p. 8).

Similarly, institutions can be regarded 'as socially shared systems of rules of behavior or of thought that have some recurrence' (Dequech 2013, p. 85). Social reality can be seen as a set of interrelated institutions. For this reason, it is important to consider the dominant development conventions that, at each point in time, shape other institutions, while simultaneously being shaped by them and by the socio-economic outcomes of these interactions.

> Development conventions can be broadly defined as socially shared systems of rules of thought or behavior regarding development, with the properties of conformity with conformity and arbitrariness. Development conventions involve issues that are relevant in both developing and developed countries. Among these issues are: growth, inequality, poverty, inflation, technological change, sustainability, the role of the state in the economy, the exchange rate regime, fiscal policy, monetary policy, international trade policy, industrial policy, social policy, environmental policy, etc.[3] (Dequech 2017, p. 290)

Therefore, class interests, struggles and alliances, political and economic power, resources and capacities of coordination and legitimation of social actors are crucial to understanding the surge and diffusion of a particular development convention as well as how it becomes embedded into other institutions, particularly organizations. In the following section, we argue that different guidelines followed by the BNDES over time can be understood under prevailing development conventions.

3. A Historical Overview of the Role of the BNDES in the Brazilian Economy

Founded in 1952, the BNDES[4] was created according to a development convention based on heavy state intervention in the economy. This development convention could be observed in several Latin American countries between 1950 and 1980[5], and was known as 'developmentalism'.

According to Fonseca (2014, p. 59; authors' translation), 'developmentalism' can be understood as:

> the economic policy formulated and/or deliberately implemented by governments (national or subnational) to transform society, notably to overcome economic and social problems,

[3]'Conventions are socially shared systems of rules of thought or behavior (i.e., institutions) with two defining properties: conformity with conformity – or the conformity of one with the (actual or expected) conformity of others – and arbitrariness. Conformity with conformity means that the fact that other agents have adopted a convention, or are expected to adopt it, plays a role in leading someone else to also adopt it, at least when behaving or thinking consciously. Arbitrariness means that a non-inferior alternative to the prevailing rule or system of rules exists or is conceivable. These two properties imply that not every kind of socially shared system of rules or mental construct qualifies as a convention' (Dequech 2017, p. 290).

[4]Originally created as the BNDE, the 'S' referring to social was added to the bank's name 30 years later, in 1982, in the wake of Brazil's redemocratization process and increasing pressures to improve social conditions after a military dictatorship (1964–1985).

[5]It is also important to note that this historical context and its dominant development convention are closely related to the emergence of several development theories, such as Latin American Structuralism, as a way of dealing with the poverty and inequality of post-war peripheral economies (Bracarense 2012).

> through the growth of production and productivity in the industrial sector, within the institutional frameworks of the capitalist system.

Historically, this model of economic development comprises a broad set of instruments managed by the state, such as credit subsidies, tax incentives, favorable exchange rates and interest rates, as a way to stimulate capital accumulation. These incentives aimed to boost import-substitution industrialization.

In order to deal with the lack of long-term private finance, many underdeveloped countries have established development banks, like the BNDES.[6] The Brazilian Development Bank was founded during Vargas' second term (1951–1954), following suggestions from the Brazil-United States Joint Commission (1951–1953). The Commission sought to identify the main bottlenecks within the Brazilian economy and set forth projects to overcome them, particularly in the energy and transportation infrastructure sectors (Ferreira and Rosa 2017). These projects envisaged financial support from the United States through the Export-Import Bank and the International Bank for Reconstruction and Development, which would account for half of the required funds. The other half would be raised within Brazil, in the national currency. In order to finance and manage the resources of these projects, the BNDES was founded. Over time, the BNDES has become the main source of long-term finance in Brazil, and one of the largest and most profitable development banks in the world (Musacchio and Lazzarini 2014; Gallagher and Kring 2017).

However, its history is nonlinear, reflecting changes in development conventions that materialized in changes in economic policy and even in the political-economic orientation of the bank's selected presidents (Torres Filho and Costa 2012). These changes can be seen in the bank's financing priorities and sources of funding over time (Doctor 2015). Four major phases can be highlighted: (i) from the bank's foundation to the debt crisis in the 1980s, a period marked by 'developmentalism'; (ii) the neoliberal movement during the 1980s and 1990s; (iii) the reintroduction of the BNDES as a relevant tool for development in the 2000s; and (iv) a new neoliberal movement, discernible since mid-2016. The bank's disbursements illustrate this movement (Figure 1).

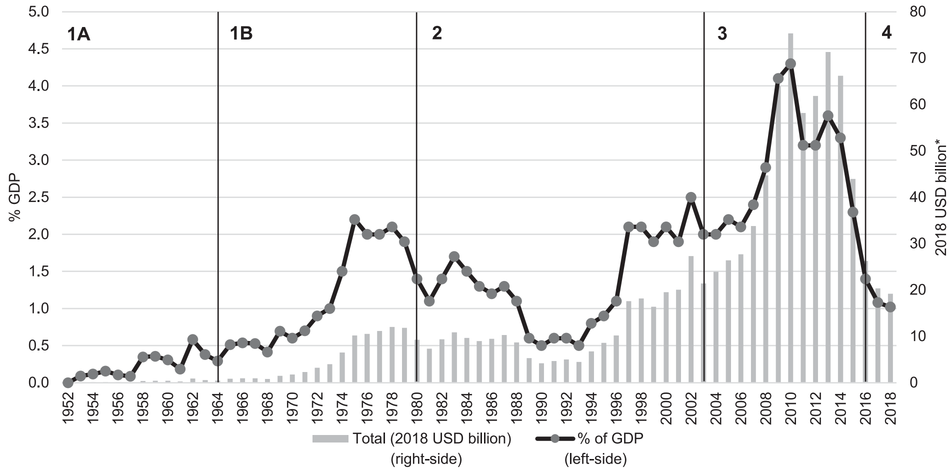
The first phase can be subdivided into two periods: a democratic period from 1952 to the mid-1960s and a military regime period from the mid-1960s to the early 1980s. The first period was characterized by relatively low BNDES disbursements, as a result of a lack of funding from the bank at that time (Cavalcante 2018). In the following period, disbursements rose at an accelerated rate, accompanied by an increase in its sources of funding.

The bank's main sources of funding were relatively unstable and based on income tax transfers and government deposits from the so-called 'monetary reserves' up until 1974 (Prochnik 1995). In addition to these sources, part of the funding between 1952 and 1966 came from sector-specific funds, such as the Federal Fund for Electrification and the National Paving Fund. In the same period, the BNDES also began to manage the resources of the Railways Renewal and Improvement Fund, the Merchant Navy Fund and the National Port Fund (Ferreira and Rosa 2017).

During the 1950s, loans were mainly directed toward the public sector itself in the wake of the projects implemented by Kubitschek's Government (1956–1960), known as the 'Goals Plan' (Figure 1, Part 1A). In the face of the main bottlenecks in transportation

[6]See World Bank (2018) for a survey of national development banks.

Figure 1. BNDES total disbursements and as a percentage of GDP, 1952–2018.

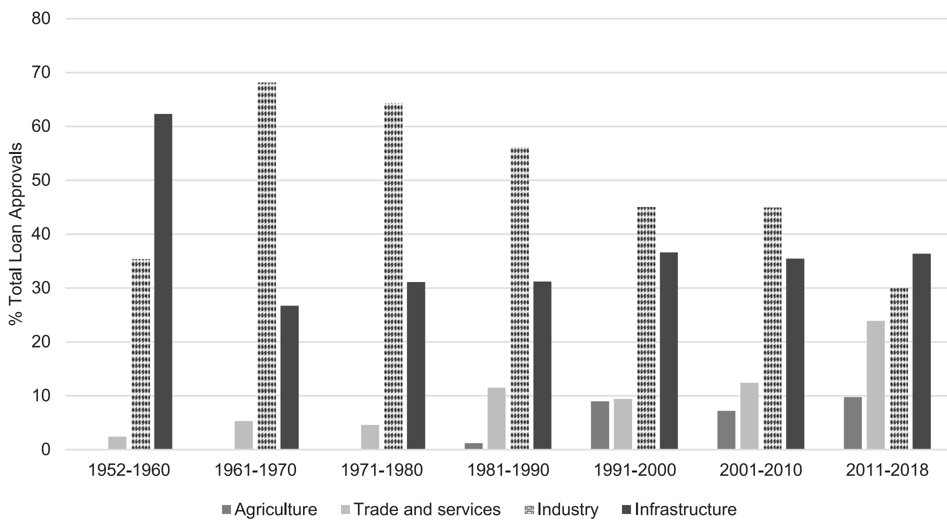


Source: From 1952 to 1969, own elaboration based on BNDES (1992); from 1970 to 2016, Além (1997) and BNDES (2017, pp. 50–51); from 2017 to 2018, BNDES (2019). * BRL at constant terms of 2018, converted into USD using the average exchange rate of 2018 (BRL/USD = 0.2737).

and energy, loans approved during the 1950s focused on the infrastructure sector (Figure 2). Railways and electric power were prioritized (BNDES 1992).

The elaboration of the 'Goals Plan' also counted on technical support provided by the bank's staff, thus revealing another important dimension of the BNDES activity: to provide technical support and policy advice to private and public sectors for the elaboration of

Figure 2. Loan approvals by sector as a percentage of total, BNDES, 1952–2018.



Note: As Barboza, Furtado, and Gabrielli (2019) highlight, this classification should be interpreted with caution. For example, various activities that were carried out within the industrial firm in the 1960s began to be outsourced and often classified in the services sector instead of the industrial sector. Source: Own elaboration based on BNDES data — https://www.bndes.gov.br/wps/portal/site/home/transparencia/centraldedownloads.

investment projects, including those aimed at attracting external funding (Doctor 2015; Cavalcante 2018).

Due to the deepening of the industrialization process throughout the 1960s, the industry began to account for a significant part of the bank's loans. The steel and metallurgy sectors received an expressive share of the bank's loans in this period. The BNDES even became informally known as the 'Steel Bank' (Schneider 2015). From the mid-1960s, during the military government (1964–1985), BNDES loans were largely directed to the private sector. According to Cavalcante (2018), BNDES disbursements to the public sector, which corresponded to approximately 90 per cent of the total between 1952 and 1964, declined thereafter, stabilizing at around 20 per cent in the 1970s. Loans approved during this period were concentrated in the industrial sector (Figure 2) and BNDES disbursements grew at a higher rate (Figure 1, Part 1B).

An important initiative to boost the import-substitution industrialization was the creation of the Financing Fund for the Acquisition of Industrial Machinery and Equipment (FINAME).[7] Founded in 1964, FINAME became an autarchy in 1966 and has been one of the bank's main subsidiaries since then. The aim was to stimulate national machinery and equipment sectors by requiring a minimum level of local content to obtain a BNDES loan (BNDES 2002).

In the 1970s, the BNDES sources of funding underwent major changes, allowing the bank to expand its financial activities, particularly to support the new round of planned investments under the so-called II National Development Plan (1975–1979) (II PND). In 1974, the BNDES began managing resources from workers' compulsory savings systems: the Social Integration Program and the Patrimony of the Public Servant (PIS and Pasep, respectively, both created in the early 1970s).[8] As a result, the bank not only had a more stable source of funds, but also a larger pool of resources for its operations. In addition, the bank's operations have become more flexible as funds linked to specific investment projects have their share reduced in the bank's total funding (Prochnik and Pereira 2008). Also in 1974, three new subsidiaries were created for capital market operations, mainly equity participation: Mecânica Brasileira SA (Embramec), Insumos Básicos SA Financiamentos e Participações (Fibase) and Investimentos Brasileiros SA (Ibrasa). In 1982, these three subsidiaries were merged into BNDES Participações SA (BNDESPar), one of the bank's main branches.

Between the end of the 1970s and beginning of the 1980s, the Brazilian economy entered a new phase in which the BNDES activities changed. At the international level, the fall of the Bretton Woods system and increased international competition contributed to the rise of political and economic forces pushing for market deregulation and liberalization (Helleiner 1994; Belluzzo 1995; Glyn 2006). Due to Volcker's interest rate shock in 1979, the oil shock in the same year and the Latin American debt crisis that followed in the early 1980s, the Brazilian economy experienced a decade of low economic growth, high inflation and external constraints. In the context of intense international transformations and under pressure from the International Monetary Fund and international creditors, new development conventions based on a neoliberal reconfiguration of the role of the

[7]A number of other funds were created under the BNDES during this period, although their relative importance was lower than that of the FINAME (BNDES 2002).

[8]The 1988 Federal Constitution, already in a democratic regime, established that PIS-Pasep funds became integrated into the Workers' Assistance Fund (FAT), 40% of which was managed by the BNDES.

state in the economy were formed. The Washington Consensus and its policy guidelines for economic liberalization seemed to be the building blocks of the development model adopted by several developing countries (Williamson 1990; Lapavitsas 2005; Wylde 2017).

This broad neoliberal orientation also characterized the governmental policies in Brazil. In the 1980s, the level of BNDES disbursements stagnated (Figure 1, Part 2) and the bank began supporting a process of privatization of state-owned enterprises (BNDES 2002). The successful privatization operations at that time led the BNDES to manage the National Privatization Fund in the 1990s. Due to growing privatization-related operations that marked Brazil's economic liberalization and deregulation in the 1990s, BNDES disbursements increased again from 1993 onward. In fact, the BNDES became the main financial coordinator of the Brazilian privatization process, particularly during the presidency of Fernando Henrique Cardoso (1995–2002) (Doctor 2015; Lazzarini et al. 2015; Cavalcante 2018).

In 1995, a constitutional amendment that blurred the legal distinction between national and foreign companies favored privatization-related operations by granting foreign companies access to government credit agencies, including the BNDES (Costa, Melo, and Araujo 2016). Another institutional change in the same period that was important to the BNDES activities was the introduction of the Long-Term Interest Rate (TJLP) as the benchmark interest rate for BNDES loans.[9] From the mid-1990s, BNDES disbursements — with no clear sector-specific development strategy — increased not only due to privatizations but also to promote exports in general (Torres Filho and Costa 2012; Ferreira and Rosa 2017).

From 2003, with the rise of the Workers' Party to government (2003–2016), the BNDES entered a third phase. While it is true that traces of 'developmentalism' never disappeared completely during the neoliberal period, it is also possible to identify the 2000s as a turning point in the prevailing development conventions, especially during Lula's second term (2007–2010). A kind of renewed 'developmentalism' came to dominate the government's strategies (Cavalcante 2018). As Hochstetler and Montero (2013) argue, the period was marked by a combination of the strengthening of certain market-oriented macroeconomic policies[10], inherited from the previous period, and an attempt to form global players focused on increasing industrial competitiveness and innovation policies. Small and medium-sized enterprises (SMEs) were also an important part of the bank's operations (BNDES 2017). This process led to a strong increase in BNDES disbursements (Figure 1, Part 3), as well as greater diversity in the sectors it supported (Figure 2). The bank's increasing size also reflected the role it played in the government's countercyclical policies in the face of the global financial crisis, as discussed further in the following section.

4. The BNDES in the 2000s Under Changing Development Conventions

National development banks can play important roles in the economy. These roles include: filling the gap of domestic financial systems by offering loans with longer maturities; promoting industrial policies and directing loans to firms that can boost

[9]Initially, the TJLP calculation was based on the average interest rate of external and internal public debt securities. However, due to its high volatility, from 1999 the TJLP has been calculated based on two components: (i) the target inflation rate for the following 12 months; and (ii) an institutionally fixed risk premium. In the absence of private long-term financing, the TJLP was systematically set below the market interest rate, albeit at a relatively high level during the 1990s.

[10]In this regard, it is worth mentioning the Brazilian macroeconomic 'tripod' based on (i) inflation targeting, (ii) managed floating exchange rate regime, and (iii) primary surplus targets.

productivity, technological progress and exports (in this latter case, generating foreign currency revenues); producing positive externalities by financing infrastructure and 'green' technologies; smoothing out the business cycle by acting quickly in recession periods; and promoting social inclusion through credit to agents that would otherwise not have access (Guadagno 2016; Scherrer 2017).

Ferraz and Coutinho (2019, p. 87, authors' emphasis) summarize these multiple roles according to three main features of development banks over the business cycle:

> […] as investment is a pro-cycle phenomenon, in upswings and complementary to the private industry, *development banks are pro-cyclical*; in times of finance retrenchment from other sources (see last financial crisis), *development banks act countercyclically* and, *development banks play a pre-cycle role*, when supporting investments (especially where investment uncertainty is strong) that may bear fruits in an upcoming cycle.

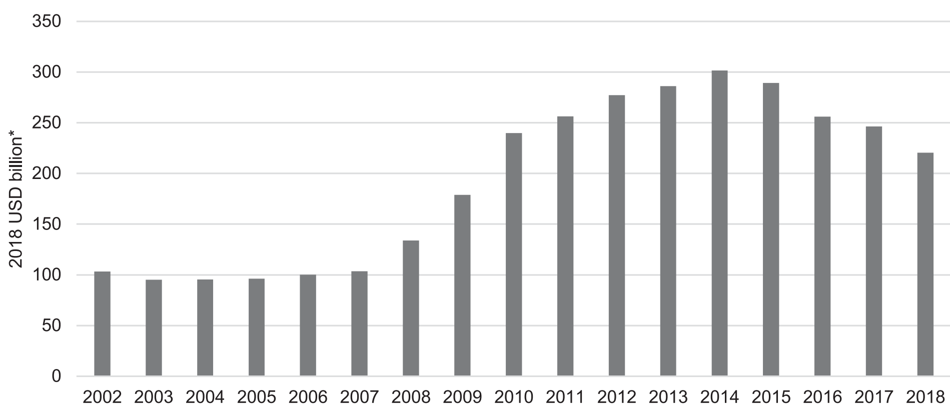
It is possible to observe these different roles performed by the BNDES during the 2000s. The bank has assumed unprecedented importance, especially since the outbreak of the global financial crisis (Figure 1, Part 3). Its assets nearly tripled between 2007 and 2014 (Figure 3), indicating the high growth rate of its financing operations since 2008.

The bank has been key to public policy considering both the diversity of financed activities and the government's restored capacity to channel funds to priority areas. The orientation of the BNDES during this period can be considered from two complementary analytical perspectives: a *structural* and a *conjunctural* perspective.

A broader scope of action can be defined under the *structural* dimension, given the diversification of the bank's loans, the bank's focus on investments in infrastructure, and the support for the consolidation of big businesses and SMEs, with a particular focus on innovation (Mazzucato and Penna 2015). Part of this orientation, however, was redefined — or even intensified — under the *conjuncture* of the widespread effects of the global crisis on the Brazilian economy, when BNDES financial operations worked countercyclically, as detailed below.

From the *structural* perspective, the BNDES had been following a strategic position in Brazilian investment financing before the crisis. Due to the expansion of available

Figure 3. Total assets, BNDES, 2002–2018.



Source: Own elaboration based on BNDES data — https://www.bndes.gov.br/wps/portal/site/home/transparencia/centraldedownloads. * BRL at constant rate of 2018, converted into USD using the 2018 average exchange rate (BRL/USD = 0.2737).

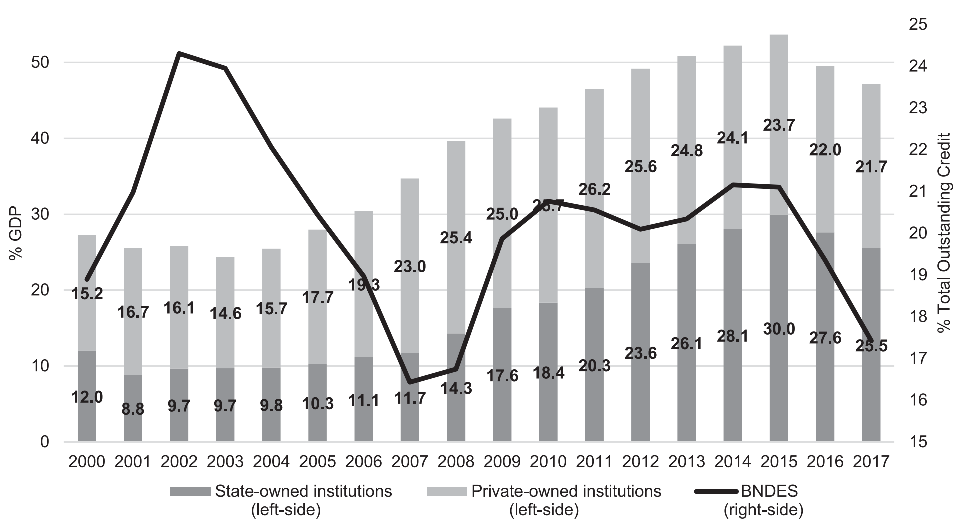
instruments for private financing, the BNDES share in total credit stock fell in the 2003–2007 period from 24 per cent to 16.4 per cent. Despite this decline, which resulted from a large increase in credit from private institutions (Figure 4), the BNDES continued as the main supplier of long-term financing in Brazil (Oliveira 2015). As Hanley et al. (2016, p. 844) emphasize:

> Before 2008, greater involvement of private capital markets in long-term finance allowed BNDES to reduce its participation in total credit operations in the economy. However, by 2007, funding and support for the Growth Acceleration Programme (PAC) and Programme for Productive Development (PDP) came to be part of BNDES operational policies. In this way, the bank became the central actor in the country's policies of development and investment support.

The bank's disbursements increased significantly over the period, thus contributing to the credit expansion observed during the Brazilian economic boom. As a proportion of GDP, total credit reached almost 40 per cent by 2008 and would rise even more after the global financial crisis, especially through credit from state-owned institutions, the BNDES included (Figure 4). The pre-crisis movement followed a strong decline in the basic interest rate and better loan conditions, including BNDES subsidized credit policy, expansion of formal employment and rising income in Brazil.

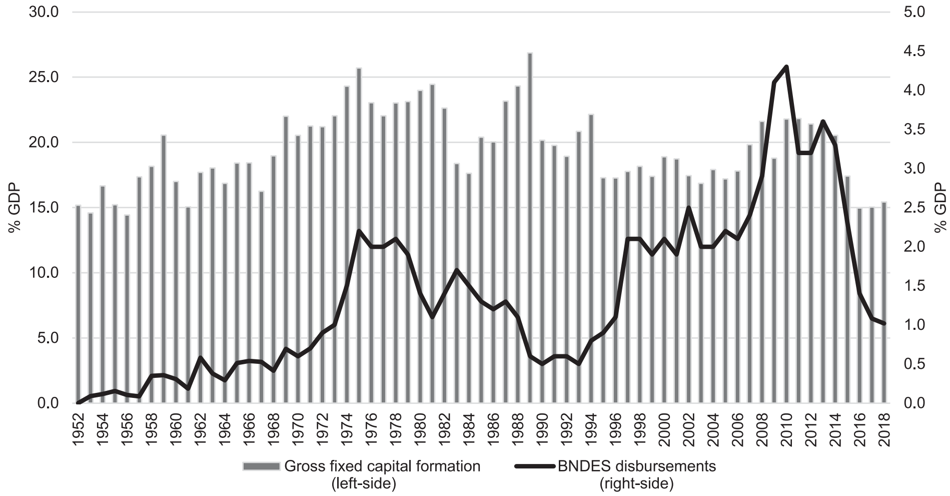
BNDES disbursements have presented a clear positive correlation with Brazilian gross fixed capital formation over time, as shown in Figure 5. However, there is a heated debate about the bank's possible crowding-in or crowding-out effects on domestic investment and output. According to Albuquerque et al. (2018), empirical studies show mixed results of the impact of BNDES disbursements on gross fixed capital formation depending on the specification of the econometric model used. On the one hand, Salvador (2017) stresses that BNDES activities between 2002 and 2015 only caused a change in the sources of funding in private companies. Firms replaced their obligations to the private

Figure 4. Outstanding credit as a percentage of GDP by institution, Brazil, 2000–2017.



Source: Own elaboration based on Brazilian Central Bank data — https://www.bcb.gov.br/.

Figure 5. BNDES disbursements and Gross Fixed Capital Formation as a percentage of GDP, 1952–2018.



Source: BNDES disbursements — from 1952 to 1969, own elaboration based on BNDES data (1992); from 1970 to 2016, Além (1997) and BNDES (2017, pp. 50–51); from 2017 to 2018, BNDES (2019); Gross fixed capital formation — own elaboration based on Ipeadata — https://www.ipeadata.gov.br/.

financial market with subsidized BNDES loans, which did not necessarily result in an increase in investments.

On the other hand, Rezende (2015) emphasizes the role of the BNDES as a public bank that contributes to attenuating the endogenous instability of private financial markets and to providing long-term financing, given the high short-termism of the private financial system in Brazil. This role became evident in the face of the 2008 global economic crisis. Countercyclical performance of public banks is also highlighted in Scherrer (2017).[11] Far from blocking private credit during the growth period in Brazil before the financial crisis, the BNDES helped to support long-term financing. It also clearly expanded its operations during the economic downturn. At that time, while Brazilian private commercial banks curbed the rate of expansion of their loans, shortening terms and increasing guarantees, the countercyclical role of the BNDES helped to prevent the economy from entering into a deeper downturn and liquidity crisis.

From the *conjunctural* perspective, the BNDES has played a key role in dealing with the international crisis and its transmission to the Brazilian economy. In 2009, the Brazilian government launched the Investment Maintenance Program (PSI) in order to revert the fall in the investment rate. The program sought to stimulate gross fixed capital formation through a temporary reduction of BNDES interest rates on credit lines to capital goods sectors (Machado, Grimaldi, and Albuquerque 2018; Ferraz and Coutinho 2019). The PSI was in force until 2015, after nine renewals.

According to Barboza et al. (2017), the PSI — while in effect — was the main reason for the rapid growth in BNDES operations. In the wake of international economic turmoil, the

[11] Several works show the positive impact of BNDES disbursements on investment. See, for instance, Barboza and Vasconcelos (2019), Cavalcanti and Vaz (2017), Grimaldi et al. (2018), Machado, Grimaldi, and Albuquerque (2018), Machado and Roitman (2015), and Oliveira (2014).

PSI played a crucial role in preventing the decline in investment rates, especially in its early years[12] (Machado and Roitman 2015; Barboza et al. 2017; Machado, Grimaldi, and Albuquerque 2018). Under the program, BNDES disbursements accounted for 18 per cent of sources of financing for investments in 2009 and more than 13 per cent from 2010 to 2014 in Brazil. By contrast, they stood at around 8 per cent between 2004 and 2006, and were lower than 6 per cent after 2016 (CEMEC 2018).

One should remark that many similar countercyclical initiatives were also performed by other development banks in advanced and emerging economies, such as in Germany, China, South Korea, India and Ethiopia, as highlighted by Griffith-Jones (2016) and UNCTAD (2016). In addition, Guadagno (2016) shows that non-performing loans represented a small and declining share of BNDES loans from 2010 to 2014. According to the author, the BNDES non-performing loans were much lower than the average of Brazilian banks and when compared to development banks from China and Turkey.

It is also worth mentioning that the bank has diversified business financing through an increasing share of SMEs in total disbursements. Although in absolute terms large corporations still correspond to a substantial share of BNDES disbursements, SMEs have assumed a position of great relevance in the bank's operations, especially since the global financial crisis. For example, between 2009 and 2014, the share of BNDES disbursements to SMEs increased to nearly 30 per cent while between 2003 and 2008 it oscillated at around 25 per cent. The BNDES financial support for SMEs is particularly important given the evidence that the direct impact of the BNDES on SMEs' capital accumulation and productivity is usually greater than on large corporations, which have lower financial constraints (Oliveira 2014; Cavalcanti and Vaz 2017).

Nonetheless, a policy to consolidate large players at the international level has also remained at the core of BNDES directives, with the bank supporting the internationalization of large Brazilian conglomerates. In fact, the international crisis opened up the opportunity for the acquisition of cheaper assets abroad. Table 1 illustrates the main credit borrowers from the bank over the 2000s, including not only Brazilian public and private internationalized groups, but also subsidiaries of large foreign companies of different sectors. Ten companies accounted for 49.3 per cent of the total credit taken by the bank's 50 largest clients from 2004 to 2018, which together accounted for approximately 20 per cent of the bank's loans in the period.

The key role assumed by the BNDES was largely a consequence of political decisions taken under the prevailing development conventions and changing economic conditions at the time, including the decision to expand its sources of funding. In this regard, it is worth highlighting the position assumed by the National Treasury as the main funding provider of the BNDES, a position that would later be criticized by Brazilian mainstream economists[13] (Figure 6). The implicit fiscal cost involved in this operation, given the difference in interest rates between the Treasury and the BNDES, is frequently debated. However, some authors, such as Pereira, Simões, and Carvalhal (2011), highlight that, if the fiscal revenues resulting from the bank's operations are considered, the net balance would positively contribute to public accounts.

[12]Barboza et al. (2017) and Machado, Grimaldi, and Albuquerque (2018) argue that over the years the deterioration of public accounts and the adoption of a more restrictive monetary policy have raised the cost of the PSI and reduced its impact on the economy.

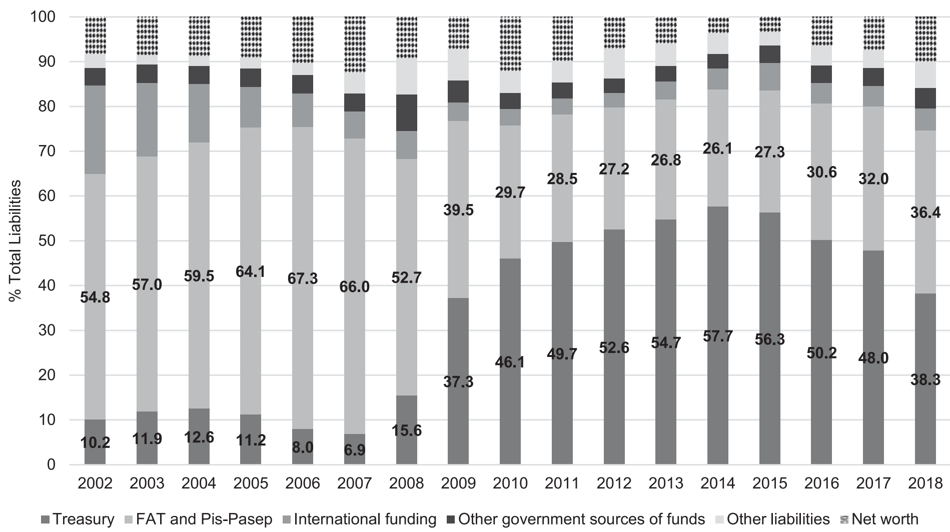
[13]See, for instance, Bolle (2015).

Table 1. Ten largest borrowers of BNDES, 2004–2018 (USD billion*).

Company	Sector	Amount	%**
Petrobras***	Oil	17.1	12.9
Embraer	Aviation	13.5	10.2
Norte Energia	Energy	6.9	5.3
Vale****	Mining	6.2	4.7
Odebrecht	Construction	5.0	3.8
State of São Paulo	Government	4.0	3.0
TAG	Gas transportation	3.6	2.8
TIM	Telecommunications	3.3	2.5
Telefonica	Telecommunications	2.8	2.1
FCA Fiat Chrysler	Automotive	2.7	2.1

* Current BRL converted into USD using the average exchange rate of 2018 (BRL/USD = 0.2737).
** In relation to the total amount of USD 132.1 billion borrowed by the 50 largest borrowers of the BNDES.
*** 60.3% of the total amount refers to loans and 39.7% to variable income.
**** 90.2% of the total amount refers to loans and 9.8% to variable income.
Source: Own elaboration based on BNDES data — https://www.bndes.gov.br/wps/portal/site/home/transparencia/consulta-operacoes-bndes/maiores-clientes.

Figure 6. Liabilities by source, BNDES, 2002–2018.



Source: Own elaboration based on BNDES data — https://www.bndes.gov.br/wps/portal/site/home/relacoes-com-investidores/informacoes-financeiras.

Therefore, the position assumed by the Treasury as a source of funding should be understood within the context of the global financial crisis and the government's responses, particularly to smooth out the business cycle, assure quick demand recovery and restore companies' liquidity. At that time, Treasury transfers were seen the easiest way in the short run to expand the bank's lending capacity considering a drastic and sudden reduction in credit from private financial institutions.

Another matter of debate regarding the bank's operations is related to the limitation that government-driven credit supposedly imposes on monetary policy, thereby reducing its effectiveness and preventing the basic interest rate in Brazil from falling (Bonomo and Martins 2016). In contrast, Vieira and Modenesi (2019) compare monetary policy power, defined as the sensitivity of inflation to changes in the basic interest rate, in periods of loose and tight credit and do not find evidence that monetary policy is less powerful when public banks expand their credit.

Since 2016, the BNDES has assumed a new orientation aligned with the renewed neoliberal development convention shared by recent Brazilian governments. The bank shrunk in size (Figure 1, Part 4) under the perception that its previous guidelines were flawed. Large amounts of resources have already been paid back to the Treasury. From 2016 to 2019, the amount totaled USD 116.6 billion.[14] In this scenario, investment and growth fell. Additionally, in 2018, the TJLP was replaced by the Long-Term Rate (TLP), which aimed to reduce the implicit subsidy on BNDES financial operations and bring the benchmark interest rate closer to market levels. The TLP is pegged to the inflation target rate and the interest rate of a government five-year bond.

Therefore, a wave of market-oriented policies is underway and the role of the BNDES is already changing accordingly. The renewed dominant neoliberal development convention includes new rounds of privatization of public-owned enterprises, in which the BNDES can play a key role (Campos 2019). Finally, discussions on reducing the bank's sources of funding, including FAT funds (Vasconcelos 2019), show that part of its historical operations in financing long-term investments in Brazil and its key role in supporting development could be at risk.

5. Concluding Remarks

The role of institutions in promoting socio-economic development is a recurring theme in contemporary economic theory. However, the dominant approach to this issue in mainstream economics, based on the 'New Institutional Economics', seems insufficient to deal with the complex relationship between development and institutions in a world of qualitatively diverse economies. In fact, from an approach inspired by the 'Old Institutional Economics', it is possible to observe that certain development conventions shape how institutions operate and, at the same time, from the socio-economic outcome of this interaction, are shaped by it. Different roles played by the BNDES throughout Brazilian history present an emblematic illustration of this process. This endogenous interplay between the organization itself and prevailing development conventions, contradicts the idea of predetermined types of institutions for development and reinforces a two-way mutually dependent and self-reinforcing causality between institutions and development.

From the analysis of the role played by the BNDES over time, the importance of its main activities regarding long-term financing in Brazil, its sources of funding and the economic sectors supported, four major phases were identified: (i) from its creation in 1952 to the debt crisis in the 1980s, a period known as 'developmentalism'; (ii) the neoliberal movement of the 1990s; (iii) the reintroduction of the BNDES as a relevant tool for development in the 2000s, especially in the face of the global crisis; and (iv) a new neoliberal movement in place since mid-2016.

Each of these periods corresponds to dominant development conventions and, to some extent, can be also associated with the contribution of the BNDES to Brazilian growth; more positively during the first and third 'developmental' periods, since crowding-in

[14]Current BRL converted into USD at the average exchange rate of 2018 (BRL/USD = 0.2737). Available at: https://www.bndes.gov.br/wps/portal/site/home/transparencia/recursos-do-tesouro-nacional.

effects were generated, and more negatively during the second and fourth neoliberal periods, when the role of the BNDES was refocused toward privatization. During the first phase, permeated by a 'developmental' convention, the bank began to finance important infrastructure projects and basic industries, contributing to the consolidation of the Brazilian productive structure. The second phase, which began with the 1980s debt crisis and gained momentum during the 1990s economic liberalization, was marked by a relative decline in the bank's credit operations and its central role in the privatization process during that time. Although the bank still supported long-term financing operations, its role has changed under the prevailing context of a neoliberal development convention.

In the 2000s, the BNDES entered a new phase, when its operations expanded significantly. A kind of renewed 'developmental' convention came to dominate the government's strategies. A combination of certain market-oriented macroeconomic policies and active social and industrial policies prevailed. In this context, the BNDES reinforced its role in financing infrastructure but also redirected efforts to support Brazilian global players focused on increasing industrial competitiveness and innovation policies. Small and medium-sized enterprises were also an important part of the bank's operations. This intensified after the widespread consequences of the international crisis on the Brazilian economy. BNDES financial operations worked countercyclically in the aftermath of the global crisis. In fact, the crisis allowed for accelerated internationalization of Brazilian business groups in sectors in which they already had competitive advantages.

In the wake of recent market-oriented policies, the role of the BNDES changed after 2016 due to a deliberate reduction in its financial activities and sources of funding. The renewed dominant neoliberal development convention is likely to lead to new rounds of privatization of public-owned enterprises and the BNDES may once again be one of the main pillars of this process.

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