Institutions and development in historical perspective: the case of the Brazilian Development Bank

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Abstract

The aim of this paper is to analyze the role played by the Brazilian Development Bank (BNDES) in different periods of Brazil's development process since its foundation in 1952. Three major periods can be distinguished: (i) from its creation to the debt crisis in the 1980s, a period known as "developmentalism"; (ii) the neoliberal turn of the 1990s; and (iii) the rehabilitation of BNDES as a relevant tool for development in the 2000s. In addition, a fourth phase seems already discernible since mid-2016, marked by a new neoliberal turn It is possible to observe that each of these periods is marked by a certain development convention that shape the way in which other institutions operate, such as BNDES, and, at the same time, from the socioeconomic outcome of this interaction, are shaped by it. The paper is divided into three sections. The first section revisits the literature on economic development and institutions. Differently from conventional view that considers one-size-fits-all institutions for development, a critical approach is adopted in this work by highlighting the interactions between development and institutions as historical processes, with emphasis on development conventions. The second section analyzes the role played by BNDES in the aforementioned three main periods, in order to show how it shapes and at the same time is conditioned by different historical contexts. The third section discusses BNDES guidelines and policies, clearly working as countercyclical forces, in face of the 2008 global crisis – a process that has ended in recent years, with the beginning of a new neoliberal phase.
Keywords: institutions; economic development; BNDES; Brazil.
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Resumo

O objetivo deste artigo é analisar o papel do Banco Nacional de Desenvolvimento Econômico e Social (BNDES), desde sua fundação em 1952, em diferentes períodos do processo de desenvolvimento do Brasil. Três grandes períodos podem ser distinguidos: (i) desde sua criação até a crise da dívida nos anos 1980, período conhecido como "desenvolvimentista"; (ii) a virada neoliberal dos anos 1990; e (iii) a reabilitação do BNDES como ferramenta relevante para o desenvolvimento nos anos 2000. Ademais, uma quarta fase parece se delinear a partir de meados de 2016, marcada por uma nova onda neoliberal. É possível observar que cada um desses períodos é caracterizado por uma certa convenção de desenvolvimento que molda a maneira pela qual outras instituições operam, como o BNDES, e, ao mesmo tempo, a partir do resultado socioeconômico dessa interação, é por ele moldada. Nesse sentido, o artigo encontra-se dividido em três seções. A primeira seção revisita a literatura sobre desenvolvimento econômico e instituições. Ao contrário da visão convencional, a abordagem aqui adotada inspira-se na Velha Economia Institucional, destacando as interações entre desenvolvimento e instituições como processos históricos, com ênfase nas convenções de desenvolvimento. A segunda seção analisa o papel desempenhado pelo BNDES nos três períodos acima mencionados, a fim de mostrar como ele é condicionado por diferentes contextos históricos e, ao mesmo tempo, os molda. A terceira seção examina as diretrizes e políticas do BNDES diante da crise financeira global de 2008, com particular destaque ao seu papel anticíclico – movimento que se encerrou nos últimos anos, com início de uma nova fase neoliberal.
Palavras-chave: instituições; desenvolvimento econômico; BNDES; Brasil.

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1. Institutions and economic development: a critical introduction

Mainstream economic literature has initially evolved from the analysis of physical capital accumulation to technology and human capital as possible explanations of economic development of countries over time. In this context, the inherently institutional character of socioeconomic relations is absent. As Hodgson (2009, p. 3) points out:

> "Explanations of economic growth and development used to focus on inputs, production functions and outputs, often neglecting the institutional structures that constrain or empower individuals, and frame their incentives and disincentives."

This scenario has changed radically since the mid-1970s. In fact, a new broad set of works on institutions and institutional change linked to neoclassical, Austrian and game-theoretic approaches, gained increasing importance in the last few decades (Rutherford, 1999). Covering a wide range of topics through empirical analyses and theoretical discussions, this literature became known as the "New Institutional Economics"[3], which by incorporating institutions into economics have been modifying and extending mainstream economics, mainly neoclassical theory.

The introduction of institutions together with cultural and geographical issues into long-term development debate has been increasingly popular in economics (North, 1981, 1990, 1994; Rodrik et al., 2002; Acemoglu & Robinson, 2010). As Acemoglu & Robinson (2010) point out, that is an attempt to separate proximate – e.g. technology, human and physical capital – from fundamental – e.g. institutions – causes of development.

A first matter of discussion refers to the definition of what institutions are or what economists call as institutions, especially if they are considered into the analysis of long-run economic growth. Van Arkadie (1990) stresses that economists interpret institutions usually in two different ways, namely, "the rules of the game" and organizations. From the first meaning, institutions provide the context in which markets operate and, as such, define the terms under which different actors in the society decide. From the second meaning, institutions are typically systems of nonmarket relations, as organizations refer to nonmarket coordination arrangements that make, for instance, production and transaction activities possible.

One of the most widespread and well-known definition of institutions has been put forward by Douglass North in many of his works. Acemoglu and Robinson (2010) use the first statement of the following North's (1990) 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).

[3] The term "New Institutional Economics" was coined by Williamson (1975) with the deliberate attempt of disassociate 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).

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

An extended definition of institutions is given by the following passage from another North's writings:

> "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. Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity. They evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story. 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).

In this regard, there is a wide recognition that institutions shape production, exchange and any other economic decision that is made in a society in a given time. Institutions can also be created or evolving (North, 1990). In other words, they involve historical time and are dynamic rather than static structures.

North (1990; 1994; 2005) also highlight the difference between institutions and organizations, although closely intertwined. In several works, the author 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 have been drawn to the New Institutional Economics from heterodox economists, in particular to its neoclassical core. As Rutherford (1999, p. 4) points out, authors inspired by the Old Institutional Economics argued that the newer approach is generally too formal, abstract, "individualist, reductionist, orientated toward rational choice and economizing models, and generally anti-interventionist"[4].

Institutions and their role in economic development have been a recurrent subject in this framework, about which several considerations could be made. *Two* main proposals following from conventional literature are discussed deeper, considering the critical perspective adopted in this paper that focuses on the analysis of the role of BNDES – a key financing public organization framing and being framed by the institutional arrangement of each time – in the trajectory of Brazilian economic development since its foundation in 1952.

First, many works in mainstream literature have tried to identify institutions as ultimate – or fundamental – causes of development, commonly establishing a one-way causality from institutions to development (Acemoglu & Robinson, 2010; Shirley, 2008). In such understanding, conventional literature and – embedded

[4] It is important to note that, like any general characterization of a diverse literature, these labels apply more to some authors than others. Williamson and North, for example, even though main representatives of the neoclassical approach to institutions explicitly recognize its limitations (Rutherford, 1999). North, in particular, got closer 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).

by this view – multilateral organizations started to spread the idea that development requires *certain institutions*, arguing that nations fail to catch-up with advanced economies because of the lack of those institutions (Evans, 2003; Chang, 2006; 2011). As Blankenburg & Palma (2012, p. 142) put it, "neoclassical theory has shifted its argument from 'getting prices right' to 'getting institutions right'".

Normative guidelines for poorer economies would lie in the adoption of such "right" institutions and governance-related reforms, what is called by Evans (2003) "institutional monocropping". These are usually attached to the Western neoliberal type of institutions that serves as the basis for the functioning of free markets, such as contract laws, property rights and law enforcement (Shirley, 2008; Chang, 2011; Blankenburg & Palma, 2012). 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".

From a critical perspective, Chang (2011) discusses further this matter, pointing to a two-way causality between institutions and development. It is generally hard to identify the way of causality as historical evidence also shows that many today's developed economies only adopted some market-friendly institutions after achieving a certain level of economic development, given the political and social changes deriving from previous economic transformations. In other words, there is empirical support that today's developed economies have not necessarily adopted market-friendly institutions at first place. If we consider the multiplicity of institutions that can prevail in different places over time, the issue becomes even more complex.

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 & Gundlach, 2007). This paper does not aim to solve this problem but considers a critical view that treats institutions as endogenous forces in a historical process of development. Institutions – not as of any predetermined particular type – can cause – or help promoting – development but also development can be a condition for institutions to arise and get stronger (weaker) in a way that development can be reinforced (blocked). For instance, many institutions can arise only after certain levels of development be achieved and under new demands of a society. This two-way mutually dependent and self-reinforcing causality is considered in the following historical study about the interaction between BNDES and Brazil's development.

Second, there is a recognition even within mainstream later works about the political nature of institutions (North, 1994; 2005; Acemoglu et al., 2005; Acemoglu & Robinson, 2010). Indeed, from the perspective that institutions determine development, there is an attempt to build a theoretical framework to analyze institutions. For instance, Acemoglu et al. (2005) and Acemoglu & Robinson (2010) argue that development depends on certain economic institutions, which, in turn, are highly susceptible to political institutions. Political institutions largely face a conflict of interests among various groups and individuals over the choice of economic institutions, being the political power of the different groups the deciding factor. Hence, particular interests can capture political institutions. Under a rent seeking behavior, institutions may not work properly and, consequently, economic growth may be adversely affected. In this regard, a close link to the previous discussion is established, in which governance-related agenda should be carried on in less developed economies as reforms to prevent that misleading behavior from occurring.

Not only institutions can be captured or guided by vested interests but also these interests and, consequently, the institutions themselves, change over time. In other words, there is a dynamic and path dependent character of institutions, as clear in North (2005, p. 25):

> "The dominant beliefs – those of political and economic entrepreneurs in a position to make policies – produce over time an elaborate structure of institutions – both formal rules and informal norms – that determines economic/political performance. The resultant institutional matrix imposes severe constraints on the choice set of entrepreneurs when they seek to introduce new or modified institutions in order to improve their economic or political positions. The resultant path dependence typically makes change incremental. But change is continually occurring [...] as entrepreneurs enact policies to improve their competitive position – policies that result in alterations of the institutional matrix [...]. The process of change is never ending [... and] overwhelmingly it is humans themselves who are incrementally altering the human landscape".

Institutions, if considered as an organization or a set of formal rules and informal norms that constrain and/or enable individuals' actions, present a structure that is not static but dynamic. From such understanding, the political nature of institutions matter as a force to frame institutions since their beginning or to change them over time. That does not necessarily mean that institutions are permanently captured by groups that through their political power may exert more influence in each time, inhibiting from a rent seeking perspective the proper functioning of institutions toward development. Although this reasoning about conflict of interests and political power can lie behind certain decisions and orientation taken, this paper focuses on the orientation assumed by institutions in different historical periods, framing and framed by economic, political and social conditions.

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 in hand. Hodgson (2006, p. 6), for example, broadly defines institutions as "systems of established and prevalent social rules that structure social interactions" or as a "socially embedded system of rules" (Hodgson, 2006, p. 8). In this way, institutions not only constrain, but also enable behavior (Hodgson 2006; 2009). Organizations, like BNDES, in this framework, 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).

In the same direction, following Dequech (2013, p. 85), institutions can be regarded "as socially shared systems of rules of behavior or of thought that have some recurrence". In this way, it is possible to argue that social reality can be conceived as a set of interrelated institutions, in which different types of institutions assume certain roles in deep connection with other institutions.

With respect to the two-way relationship between institutions and development and, in particular, the role of organizations such as BNDES, it seems relevant to pay attention to the socially shared development model that is prevalent in each time. In other words, it should be considered the development conventions that, at each point of time, shape other institutions, while simultaneously being shaped by them and by socioeconomic outcomes of these interactions.

As Dequech (2017, p. 290) suggests:

> "Development conventions[5] 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. These matters are also discussed in academia, and development conventions exist among different communities within the discipline of economics (and other disciplines), having a complex two-way relationship with development conventions in the outside world".

Class interests, struggles and alliances, political and economic power, resources and capacities of coordination and legitimation of social actors involved are crucial to understand the surge and diffusion of a particular development convention as well as the way in which it becomes (or not) embedded into other institutions, particularly organizations. In what follows, it is argued that different guidelines followed by BNDES over decades of existence can be understood under prevailing development conventions.

Such perspective seems compatible with Fonseca (2014), who considers the prevalence of a certain view and policies in a particular time and place as a historical construction of the economic, political and social conditions at play. That helps explaining concepts such as "developmentalism", "neoliberalism" and others, usually attached to particular periods during which a dominant development convention prevails. This is a key consideration to what follows, in order to characterize the role played by BNDES in different phases of the Brazilian development process over time.

If previous considerations are valid, institutions cannot be considered in a one-size-fits-all model nor studies about them be aimed to search for the "right" institutions for development, as frequently suggested by works in mainstream economic literature. Different types of institutions – framed by current development conventions – will prevail in different places and times and be important to further economic development. In this regard, institutions – exemplified by the analysis of BNDES in Brazil – are treated as endogenous to development and as part of a historical process shaped by certain development conventions, which is discussed in the following sections.

2. A historical overview of the role of BNDES in the Brazilian economy

The post-World War II geopolitical and socioeconomic context has elevated the role of the state in the economy to a key position in most capitalist countries. The Great Depression of the 1930s, the need to rebuild the international economic order, the European and Asian rapid reconstruction with American support after the war, the Soviet threat under a bipolar world order, social tensions related to the underdevelopment and the

[5] "Conventions are socially shared systems of rules of thought or behavior (i.e. institutions) with two defining properties: conformity with conformity – or, in a longer expression, 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. On the other hand, this broad concept encompasses different concepts or examples of convention found in the literature" (Dequech, 2017, p. 290).

peripheral position of the so-called "Third World", as well as the vivid memory of political and social struggles unleashed by the 19th century laissez-faire capitalism[6] are some of the major historical events that have called for a "stronger" state in many capitalist economies.

In fact, the increasing scope of the state's role in the economy can be considered a stylized fact of the period. Specific forms of state action, however, are context-related and reflect interests, power, resources and capacities of coordination and legitimation of social actors involved. During the so-called "Golden Age" of capitalism, economic growth and development have come to be widely conceived as inseparable from the strategic state economic intervention toward structural change related to industrial expansion[7].

In several Latin American countries, this particular development convention between the 1950s and 1980s resulted in a state-led model of economic development known as "developmentalism". Following Fonseca (2014, p. 59, our translation), "developmentalism" can be understood as:

> "[…] the economic policy formulated and/or implemented by governments (national or subnational) deliberately to transform society towards desirable ends, notably the overcoming of its economic and social issues, through the growth of production and productivity, under the leadership of 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 as a way to stimulate capital accumulation, such as credit subsidies, tax incentives, favorable exchange rates and interest rates, among others. Those incentives aimed at boosting the process of import substitution industrialization, in order to strengthen and complete the fragile links of production chains by peripheral countries, especially in heavy industries.

As a way of dealing with the lack of long-term private finance, mobilizing capital and directing resources to priority sectors, many underdeveloped countries have established state-owned development banks[8]. These organizations are important to the extent they embed, reinforce and shape the development convention from which they originate. At the same time, the changing dynamics of social reality shapes development conventions and other institutions related to them, including organizations such as development banks.

The historical analysis of the role played by the Bank for Economic and Social Development in Brazil (BNDES, in its acronym in Portuguese) illustrates this process, as resulting from the interplay between the organization itself and prevailing development conventions.

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[6] See Polanyi (1944).

[7] Post-war historical evidence seems to support this notion. As observed by Hobsbawm (1995, p. 269, emphasis added): "The great post-war economic success stories of capitalist countries, with the rarest exceptions (Hong Kong), are *stories of industrialization backed, supervised, steered, and sometimes planned and managed by governments* […]". It is also important to note that this historical context and its dominant development convention fostered and influenced 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).

[8] The World Bank (2018, p. 12) defines development banks as "any type of financial institution that a national government fully or partially owns or controls and has been given an explicit legal mandate to reach socioeconomic goals in a region, sector, or market segment". Based on this definition, state holds the total ownership of 85% of the 64 development banks analyzed; and only 2% of them are totally private (World Bank, 2018, p. 15). In addition, as a sign of the diffusion of the development convention during the post-war era, it should be noted that only 16% of development banks were created before 1946, while 37% were founded between 1945 and 1979.

The Brazilian Development Bank[9] was founded in 1952, during Vargas' second term (1951-1954), following suggestions of the Brazil-United States Joint Commission (1951-1953). The working group sought to identify the main bottlenecks of the Brazilian economy and to analyze technical and financial requirements to overcome them, particularly in the energy and transportation infrastructure sectors (Ferreira & Rosa, 2017). The Commission approved several of the projects of the "Economic Re-equipment Plan", elaborated by the government. The plan envisaged financial support from the United States through funding from Eximbank and the International Bank for Reconstruction and Development (IBRD), which would account for half of the funds to be invested. The other half would be raised in Brazil, in national currency. In order to finance and manage the resources of these projects, BNDES was founded. Since then, BNDES has become the main source of long-term finance in Brazil and one of the largest and most profitable development bank in the world (Musacchio & Lazzarini, 2014). In total assets, BNDES is the third largest national development bank, after China Development Bank and KfW Bankengruppe (Gallagher & Kring, 2017).

However, its history has not been linear, reflecting changes in the development conventions that materialized in changes in economic policy and even in the political-economic orientation of the selected presidents of the bank (Torres Filho & Costa, 2012). These changes are noticeable in the bank's financing priorities and funding sources over time (Doctor, 2015).

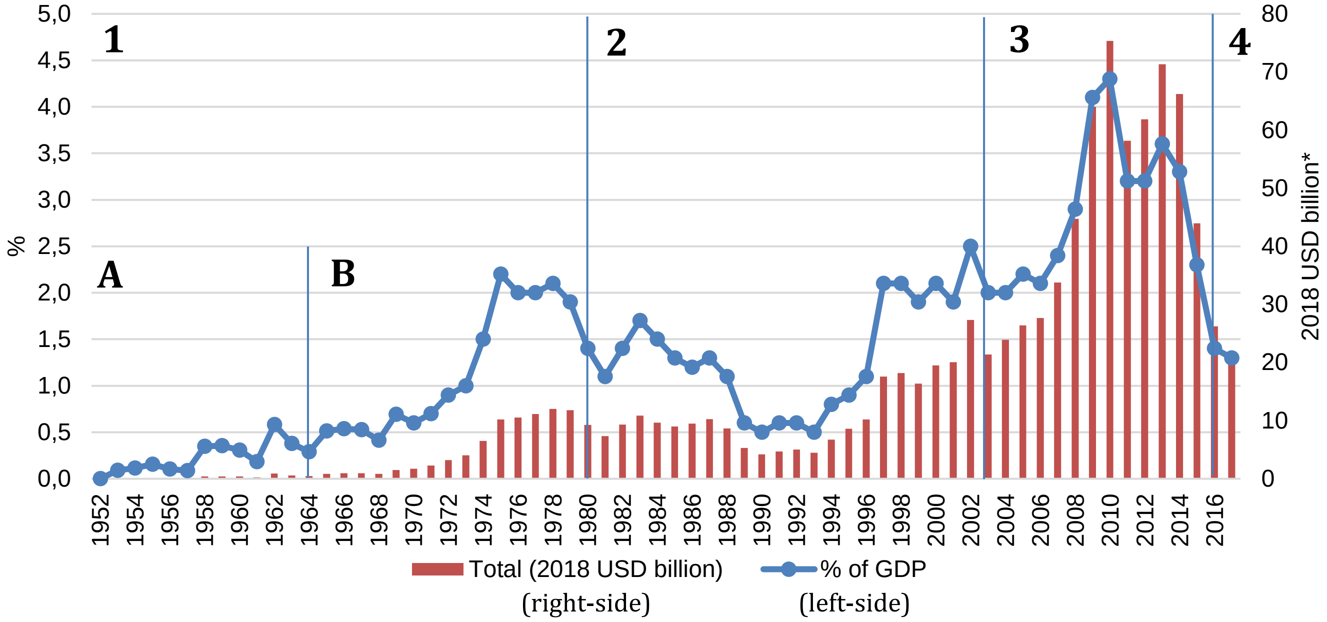
Three major phases can be distinguished: (i) from its foundation to the debt crisis in the 1980s, a period marked by "developmentalism"; (ii) the neoliberal turn of the 1980s and 1990s; and (iii) the rehabilitation of BNDES as a relevant tool for development in the 2000s, through a renewed form of "developmentalism". In addition, a fourth phase seems already discernible since mid-2016, marked by a new neoliberal turn.

The first phase can be subdivided into two periods: (i) a democratic period from 1952 to the mid-1960s; and (ii) a military regime from the mid-1960s to the early 1980s.

During the first decade, BNDES disbursements showed a steady growth rate, albeit at a relatively low level. In fact, in 1963, BNDES disbursements accounted for only 0.4% of GDP (Figure 1, 1A).

[9] Originally created as BNDE, the "S" referring to social was added to the bank's name only 30 years later, in 1982, in the wake of the Brazilian redemocratization process and increasing pressures for better social conditions after a military dictatorship (1964-1985).

Figure 1. Disbursements as a percentage of GDP and total, BNDES, 1952-2017



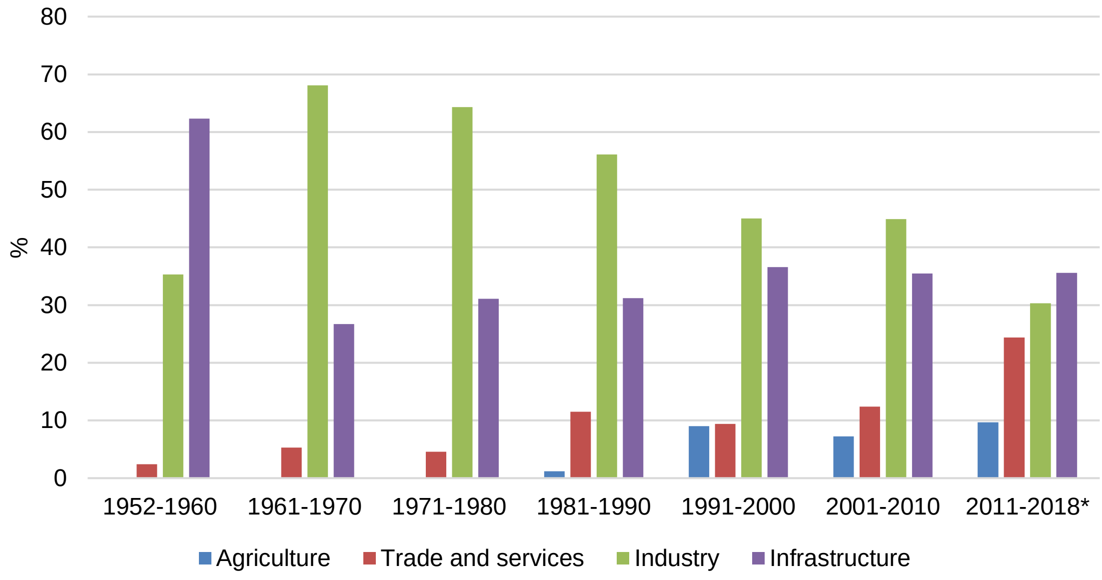
Source: From 1952 to 1969, own elaboration based on BNDES (1992); from 1970 to 2017, Além (1997) and BNDES (2017, pp. 50-51).
* 2018 BRL converted into USD by the average exchange rate of 2018 (BRL/USD = 0.2737).

Although important projects were financed in the first period, the volume of resources seemed low in face of the challenges to the continuity of the industrialization process in Brazil. To a large extent, this results from the lack of adequate funding sources (Cavalcante, 2018). Until 1974, the bank's main funding sources were relatively unstable, based on income tax transfers and government deposits from the so-called "monetary reserves" (Prochnik, 1995). In addition to these sources, part of the funding between 1952 and 1966 came from specific sector funds, such as the Federal Fund for Electrification, the National Railway Fund and the Paving Fund. In the same period, BNDES also began to manage the resources of the Railways Renewal and Improvement Fund, the Merchant Navy Fund (FMM, in its acronym in Portuguese) and the National Port Fund (Ferreira & Rosa, 2017, p. 104).

In face of the main bottlenecks identified in the Brazilian economy, loans approved during the 1950s focused on the infrastructure sector (Figure 2). Electric power and railways were prioritized (BNDES, 1992). During the first subperiod, loans were mainly directed toward the public sector itself in the wake of the projects of the Kubitschek Government's (1956-1960) "Goals Plan", elaborated by the bank's staff. In fact, this reveals another important dimension of the BNDES activity: technical support and policy advice to private and public sectors for the elaboration of investment projects, including those aimed at attracting external funding (Doctor, 2015; Cavalcante, 2018). As Ferreira & Rosa (2017, p. 104) highlight, even when BNDES did not lend directly to the private sector:

> "[…] the bank was a key coordinator of the private sector's investment. Even without transferring funds, BNDES was significant in its endorsement of projects for external financing and in its organizing entrepreneurs to string together a sequence of private investment, with or without the participation of public investment. Its joint action with the monetary and fiscal authorities, which exceeds the typical nature of financial institutions, is one of the central features of BNDES's contribution to the transformation and continued support of ongoing economic development".

Figure 2. Loan approvals by sector as a percentage of total, BNDES, 1952-2018[10]



Source: Own elaboration based on BNDES - https://www.bndes.gov.br/wps/portal/site/home/transparencia/centraldedownloads.
* 2018 = September/2018.

Due to the deepening of the industrialization process throughout the 1960s, supported by BNDES lending, the industry began to account for a significant part of the bank's loans. Steel and metallurgy were sectors that received expressive share of the bank's loans in the period. Not by chance, BNDES even became known informally as the "Steel Bank" (Schneider, 2015, p. 121). From the mid-1960s, during the military government (1964-1985), BNDES began to direct its loans to the private sector. According to Cavalcante (2018), BNDES disbursements to the public sector, which corresponded to approximately 90% of the total between 1952 and 1964, declined thereafter, stabilizing at around 20% in the 1970s. Loans approved during that period were concentrated in the industrial sector (Figure 2) and BNDES disbursements grew at a higher rate (Figure 1, 1B).

An important initiative to boost the import substitution industrialization under this new orientation was the creation of the Financing Fund for the Acquisition of Industrial Machinery and Equipment (FINAME, in its acronym in Portuguese)[11]. Founded in 1964, FINAME became an autarchy in 1966 and has been one of the bank's main subsidiaries since then. Through FINAME, the aim was to stimulate national machinery and equipment sectors by linking BNDES loans to the use of a minimum level of local input (BNDES, 2002).

Strong economic growth marked the period between 1967 and 1973, known as the "Brazilian Miracle"[12]. However, new bottlenecks arose as the industrialization process deepened. In order to intensify national industrial chains and reduce external vulnerability, a broad set of investment projects under the so-called II

[10] As Barboza et al. (2018) argues, this classification should be taken with caution. Not only are there methodological changes over time, but also the organization of the economic sectors itself has changed. For example, various activities that were carried out within the industrial firm in the 1960s began to be outsourced and often classified in the service or commercial sector.
[11] A number of other funds were created under the BNDES during this period, although their relative importance was lower than that of FINAME. For more details, see BNDES (2002).
[12] It should be noted that, during the military dictatorship, economic growth was accompanied by the rapid increase of inequality (Hoffmann, 2001).

National Development Plan (1975-1979) (II PND, in its acronym in Portuguese) has been advanced by the government[13]. These investment projects were focused on the production of raw materials and capital goods.

In this context, BNDES funding sources underwent major changes, which greatly expanded its financial activities (Figure 1, 1B), as a way to support the new round of planned investments. In 1974, BNDES started to have resources from two new funds created in the early 1970s from workers' compulsory savings: the Social Integration Program and the Patrimony of the Public Servant (PIS and Pasep, respectively, in their acronyms in Portuguese). The PIS-Pasep were abolished by the 1988 Federal Constitution and replaced by the Workers' Assistance Fund (FAT, in its acronym in Portuguese), 40% of which came to be managed by BNDES. 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 become a shrinking share of the bank's total funding (Prochnik & Pereira, 2008). This process has made room for the greater diversification of the bank's operations that would mark the coming decades (Figure 2).

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.

Due to Volcker's interest rate shock of 1979, the oil shock in the same year and the Latin America debt crisis that followed in the early 1980s, a new phase was opened to BNDES. More broadly, at the international level, the fall of the Bretton Woods system and increased international competition in the early 1970s have contributed to the rise of political and economic forces pushing for market deregulation and liberalization (Belluzzo, 1995; Glyn, 2006; Helleiner, 1994). Low economic growth, high inflation and external constraints were the hallmarks of the 1980s in Brazil, known as the Brazilian "lost decade". In this context of intense international transformations and under pressure from the International Monetary Fund (IMF) and international creditors, new development conventions based on a neoliberal reconfiguration of the role of the state in the economy were formed. The Washington Consensus and its prescriptions for liberalizing policies seemed to consolidate as the development model to be adopted by developing countries[14].

This broad neoliberal orientation marked the Brazilian governmental policies. At the same time that BNDES disbursements fell (Figure 1, 2), the bank supported a wide process of privatization of state-owned enterprises in the 1980s (BNDES, 2002). The success with early privatization operations led BNDES to

[13] The II PND itself, however, implied an increasing external vulnerability due to its dependence on foreign borrowing (Carneiro, 2002).

[14] The term Washington Consensus was coined by Williamson (1990) to describe a set of liberalizing economic policy prescriptions for countries in crisis, particularly in Latin America. "Washington" refers to the "IFIs [international financial institutions], the US Treasury, the Federal Reserve Board, senior members of the US administration and Congress, and think tanks (such as the Institute for International Economics)" (Wylde, 2017, p. 49). Ten topics are covered by Williamson (1990): fiscal deficits, public expenditure priorities, tax reform, interest rates, exchange rate system, trade policy, foreign direct investment policy, privatization, deregulation, and property rights policy. Thus, the Washington Consensus is a broad set of institutional change prescriptions aligned with a neoliberal development model. As Lapavitsas (2005, pp. 37-38) argues, "[t]he Washington consensus is a set of neoliberal ideas, demanding of developing countries that they should achieve macroeconomic stability (typically by cutting government spending, including subsidies to the poor), deregulate their domestic markets, privatise state enterprises, and open their economies to foreign trade and finance".

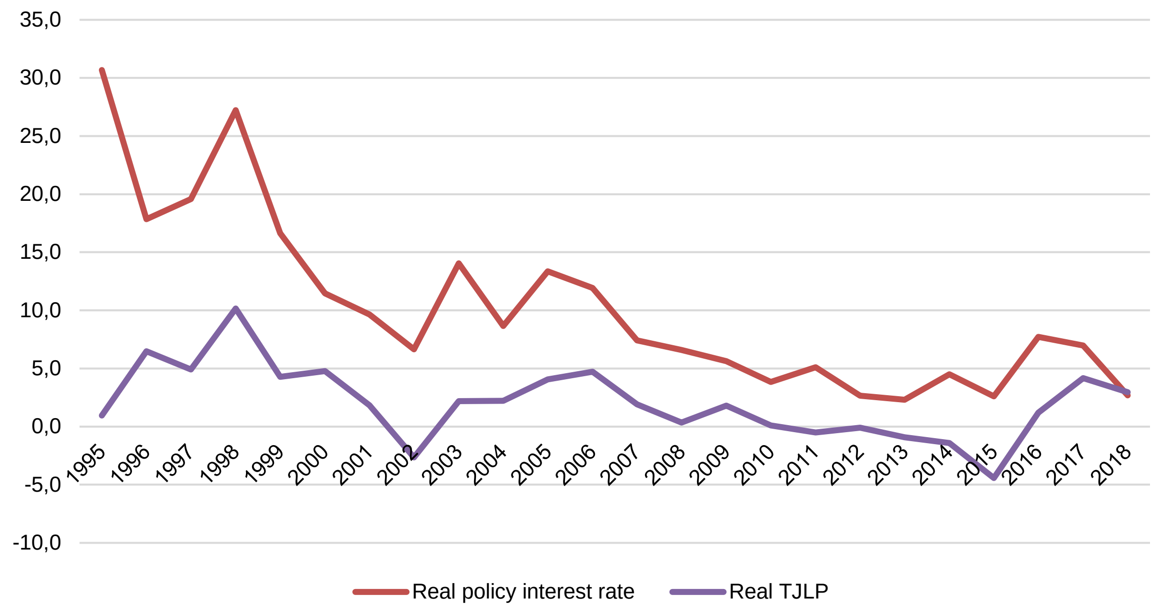
manage the National Privatization Fund (FND, in its acronym in Portuguese) in 1990. Due to growing privatization-related operations that marked Brazil's economic liberalization in the 1990s, BNDES disbursements increased again from 1993 onwards. In fact, BNDES was elevated to the position of the main financial coordinator of the Brazilian privatization process (Cavalcante, 2018). In 1995, the legal distinction between national and foreign corporations was blurred through a constitutional amendment. Thus, foreign companies gained access to government credit agencies, such as BNDES, a process that was important for several privatization-related operations (Costa et al., 2016). A year before, in 1994, the Long Term Interest Rate (TJLP, in its acronym in Portuguese) was created to serve as the benchmark interest rate for BNDES financial operations. Initially, the TJLP calculation was based on the average interest rate of external and internal public debt securities. However, due to its high volatility, since 1999, TJLP began to be calculated based on two components: (i) the inflation target rate for the next 12 months; and (ii) an institutionally fixed risk premium. In the absence of a private long-term financing, TJLP was systematically set below the market interest rate, even though it was maintained at a relatively high level during the 1990s[15] (Figure 3).

It is also important to note that during the 1980s and 1990s agriculture, a non-priority sector in the past, experienced a growing share of loans approved by the bank (Figure 2).

Thus, the bank survived successive rounds of privatization of public-owned organizations, but its mission was reinvented, especially during the governments of Fernando Henrique Cardoso (1995-2002) (Doctor, 2015; Lazzarini et al., 2015). Although BNDES disbursements grew until the end of the 1990s, even with the slower pace of privatizations, they did not correspond to a clear sector-specific development strategy (Torres Filho & Costa, 2012). In this context, the bank expanded its operations in general to stimulate exports (Ferreira & Rosa, 2017).

[15] In 2018, TJLP was replaced by the Long-Term Rate (TLP), with the purpose of reducing the implicit subsidy on BNDES financial operations and bringing the benchmark interest rate closer to market levels. TLP is pegged to the inflation target rate and the interest rate of a government five-year bond. However, TJLP will continue to be applied until the end of contracts to operations approved by BNDES before January 1, 2018.

Figure 3. Real policy interest rate and Real TJLP, Brazil, 1995-2018



Source: Own elaboration based on Ipeadata - https://www.ipeadata.gov.br/.

From 2003, with the rise of the Workers' Party to the government (2003-2016), the role of BNDES seems to have entered a third phase. While it is true that traces of "developmentalism" have never disappeared completely during the neoliberal period, it is also possible to identify the 2000s as a turning point in the development conventions, especially during Lula's second term (2007-2010). A kind of renewed "developmentalism" came to dominate the strategies of the public sector adopted from then on (Cavalcante, 2018). As Hochstetler & Montero (2013) argue, there was a kind of combination between the strengthening of certain market-oriented macroeconomic policies[16], inherited from the previous period, and the attempt to form Brazilian 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, 3), as well as a greater diversity in the sectors supported (Figure 2).

The increasing size assumed by the bank in terms of both total disbursements and proportion of GDP attests this new phase. In addition to the consolidation of global players and the support to SMEs, especially in medium- and high-technology sectors, BNDES assumed a strategic role in face of the outbreak of the great financial crisis after 2008, being an important tool for government's countercyclical policies. The next section will deal with these topics in more detail.

[16] In this regard, it should be mentioned the Brazilian macroeconomic "tripod" based on: (i) inflation targeting; (ii) managed floating exchange rate regime; and (iii) primary surplus targets.

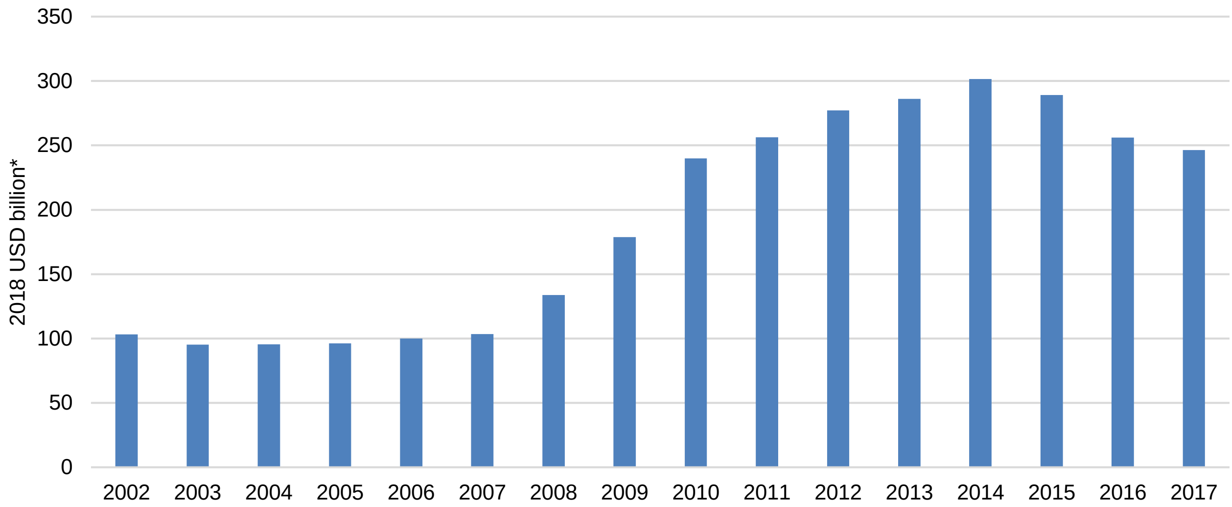
3. BNDES in face of the international financial crisis

In the recent period, marked by the predominance of a development convention that bears developmental characteristics in face of a major international crisis, it is possible to observe different forms of BNDES activities. As Ferraz & Coutinho[17] (2017, p. 2, emphasis in original) highlight:

> "[...] institutions like BNDES play three distinct roles: 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".

These different roles assumed by BNDES are made clear, especially its counter- and pre-cyclical roles. BNDES has assumed unprecedented importance over the 2000s, especially after the outbreak of the global financial crisis (Figure 1, 3). The bank's assets nearly tripled between 2007 and 2014 (Figure 4), indicating the high growth rate of its financing operations since 2008.

Figure 4. Total assets, BNDES, 2002-2017



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

The bank has worked as a key tool for public policy from the point of view of both diversity of financed activities and government's restored capacity to channel funds to areas deemed to be priority. BNDES orientation during this period could be considered from two complementary analytical perspectives: a *structural* and a *conjectural* perspective.

A broader scope of action could be defined under the structural dimension, given the diversification of bank's loans, the reinforcement of bank's concern about investments in infrastructure for future development, and the support for the consolidation of big businesses and SMEs, with particular focus on innovation (Mazzucato & Penna, 2015). Part of this orientation, however, was redefined – or even intensified – after the

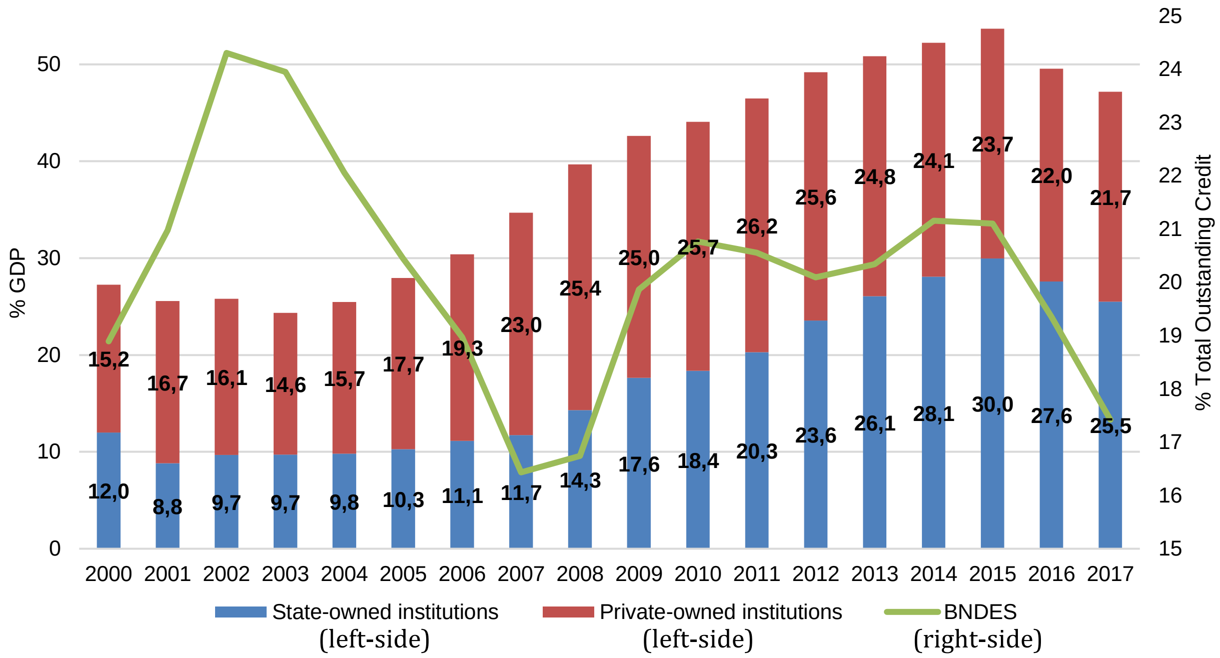
[17] Luciano Coutinho was BNDES president from May 2007 to May 2016.

widespread consequences of the international crisis over the Brazilian economy. BNDES guidelines and policies started working clearly as countercyclical forces in the aftermath of the global crisis, as detailed below.

From the *structural* perspective, BNDES had been following before the crisis a strategic position in Brazilian investment financing. Due to the expansion of available instruments for private financing, BNDES share in total credit stock has reduced in the 2003-2007 period from 24% to 16.4%. Despite this decline, which resulted from a strong credit expansion of private institutions between 2003 and 2007 (Figure 5), BNDES continued to be the main supplier of long-term financing in Brazil (Oliveira, 2015).

Furthermore, as already noted, the bank's disbursements have been increasing significantly over the period, thus contributing to the credit increase observed in the booming period of the Brazilian economy. As a proportion of GDP, total credit reached almost 40% by 2008 and would rise even more after the global financial crisis, especially through credit from state-owned institutions, BNDES included (Figure 5). The pre-crisis movement followed strong basic interest rate decline and better loan conditions, increasing formal employment, rising income and, particularly to company's long-term investments, BNDES subsidized credit policy.

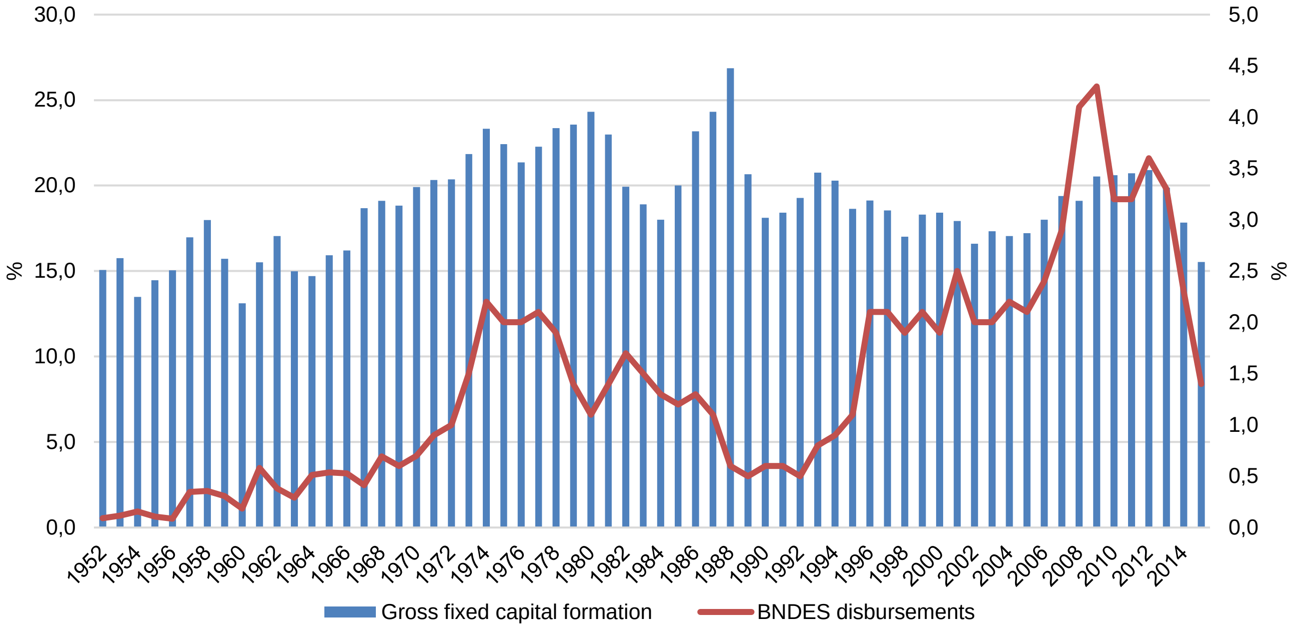
Figure 5. Outstanding credit as a percentage of GDP by institution, Brazil, 2000-2017



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

BNDES disbursements clearly present positive correlation with Brazilian gross fixed capital formation (Figure 6). Although empirical studies, according to Albuquerque et al. (2018), show mixed results of the impact of BNDES disbursements on gross fixed capital formation depending on the specification of the econometric model used, Barboza & Vasconcelos (2019), Cavalcanti & Vaz (2017), Grimaldi et al. (2018), Machado et al. (2018), Machado & Roitman (2015), Oliveira (2014), and Ribeiro & DeNegri (2009) demonstrate that there is a positive impact on investment.

Figure 6. BNDES disbursements and Gross Fixed Capital Formation as a percentage of GDP, 1952-2016



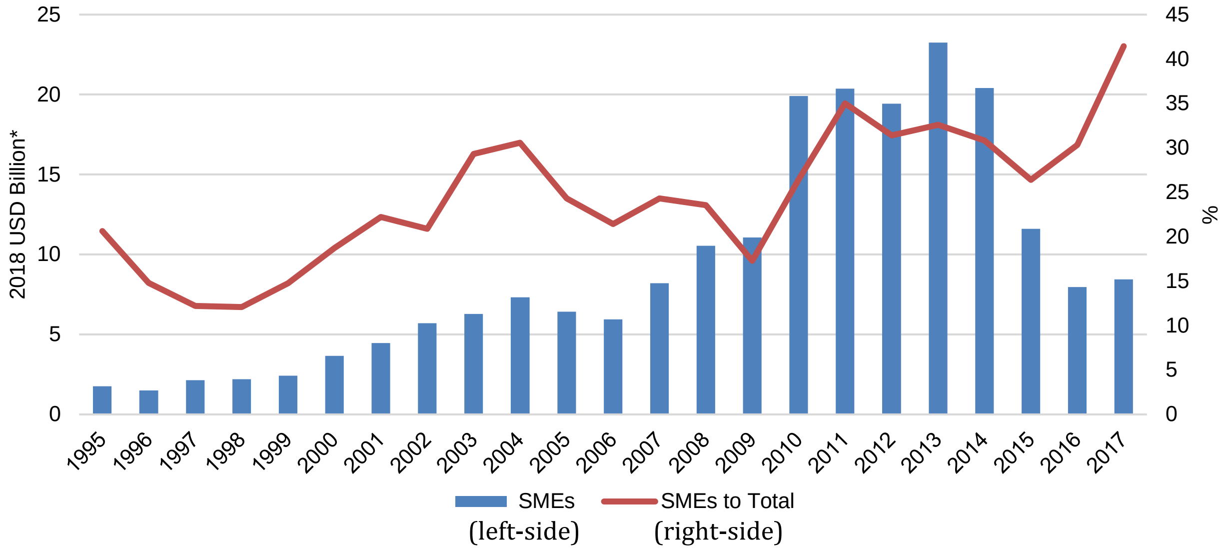
Source: BNDES disbursements – from 1952 to 1969, own elaboration based on BNDES (1992); from 1970 to 2017, Além (1997) and BNDES (2017, pp. 50-51); Gross fixed capital formation – own elaboration based on Ipeadata - https://www.ipeadata.gov.br/.

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 global crisis also highlighted the countercyclical role of the bank and its effort to sustain rates of investment and growth in the context of shrinking external sources, retraction of capital markets, and unwillingness of private banks to expand credit. Once again the bank seemed to return to its developmental role".

The bank has diversified and expanded business financing, also accounting for an increasing share of SMEs (Figure 7). Although in absolute terms the 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 after the global financial crisis. This movement towards SMEs is especially important because there is evidence that the impact of BNDES directly on SMEs' capital accumulation and productivity is usually greater than that of large corporations, with lower financial constraints (Oliveira, 2014; Cavalcanti & Vaz, 2017).

Figure 7. BNDES disbursements to SMEs, total and as a share of the bank's total disbursements, 1995-2017



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

Nonetheless, a policy to consolidate large players at the international level has been at the core of BNDES directives. Inspired by other governmental policies to support big businesses, such as the consolidation of Korean chaebols in the past, the Brazilian Development Bank has promoted large conglomerates and their activities abroad, especially given the opportunities of acquisition of assets that the international crisis opened to large Brazilian groups.

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

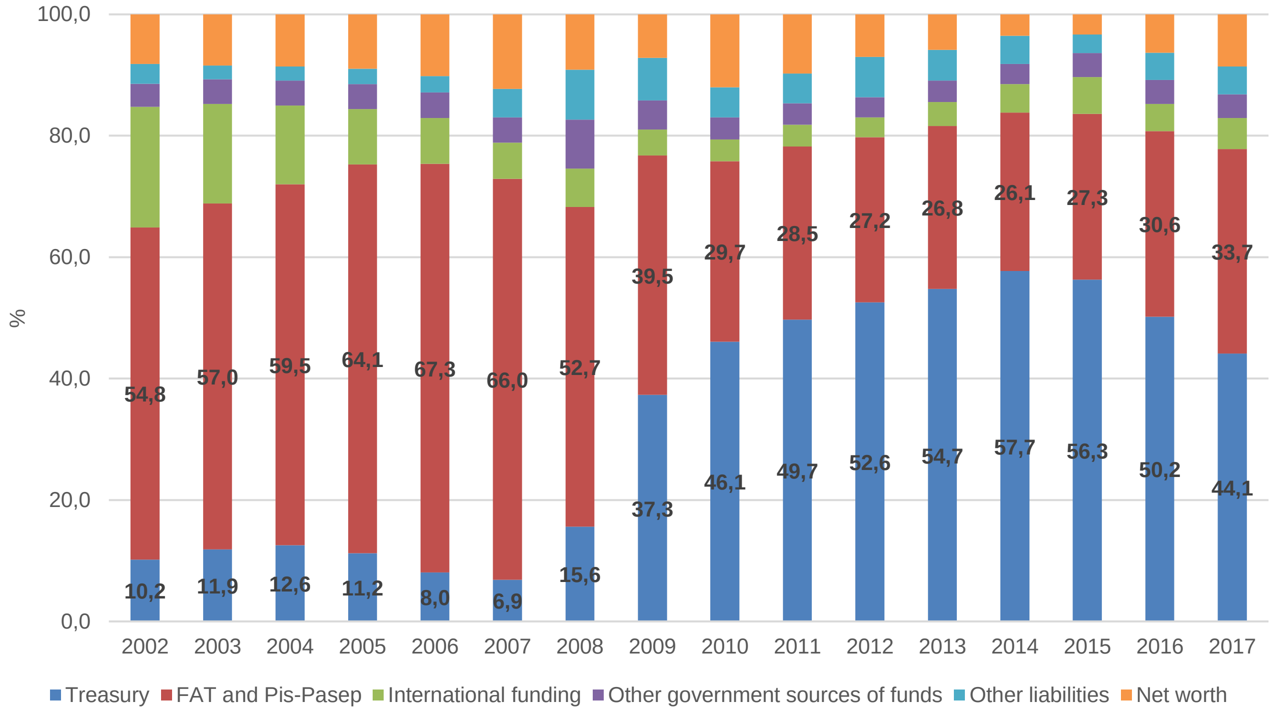
Company	Sector	Amount	%**
Petrobras***	Oil	17,1	12,9
Embraer	Aviation	13,5	10,2
Norte Energia	Energy	6,9	5,3
Vale****	Mining	6,2	4,7
Odebrecht	Construction	5,0	3,8
State of São Paulo	Government	4,0	3,0
TAG	Gas transportation	3,6	2,8
TIM	Telecommunications	3,3	2,5
Telefonica	Telecommunications	2,8	2,1
FCA Fiat Chrysler	Automotive	2,7	2,1

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

Table 1 illustrates the main credit borrowers from the bank over the 2000s, among which there are not only Brazilian public and private internationalized groups, but also subsidiaries of large foreign companies of different sectors. Only these ten companies have borrowed 49.3% of total credit borrowed by the 50 largest clients of the bank from 2004 to 2018, which together have accounted approximately for 20% of the bank's loans in the period.

The key role assumed by BNDES was, in part, consequence of political decisions taken under the prevailing development conventions at that time and, in part, made possible because of the diversification of BNDES funding sources, another decision taken under that context. In this regard, it is worth highlighting the position assumed by the National Treasury as BNDES main funding provider, a position that would be later criticized by several Brazilian mainstream economists and representatives of following governments[18] (Figure 8). This position assumed by the Treasury in the bank's funding, however, should be understood within the context of the global financial crisis and the government's responses to it, especially in order to smooth business cycle, assure quick demand recovery and restore companies' liquidity. In fact, despite the implicit fiscal cost involved in this operation, Treasury transfers seemed at that time the easiest way to expand the bank's capacity to lend in the context of a drastic and sudden reduction in credit from private financial institutions.

Figure 8. Liabilities by source, BNDES, 2002-2017



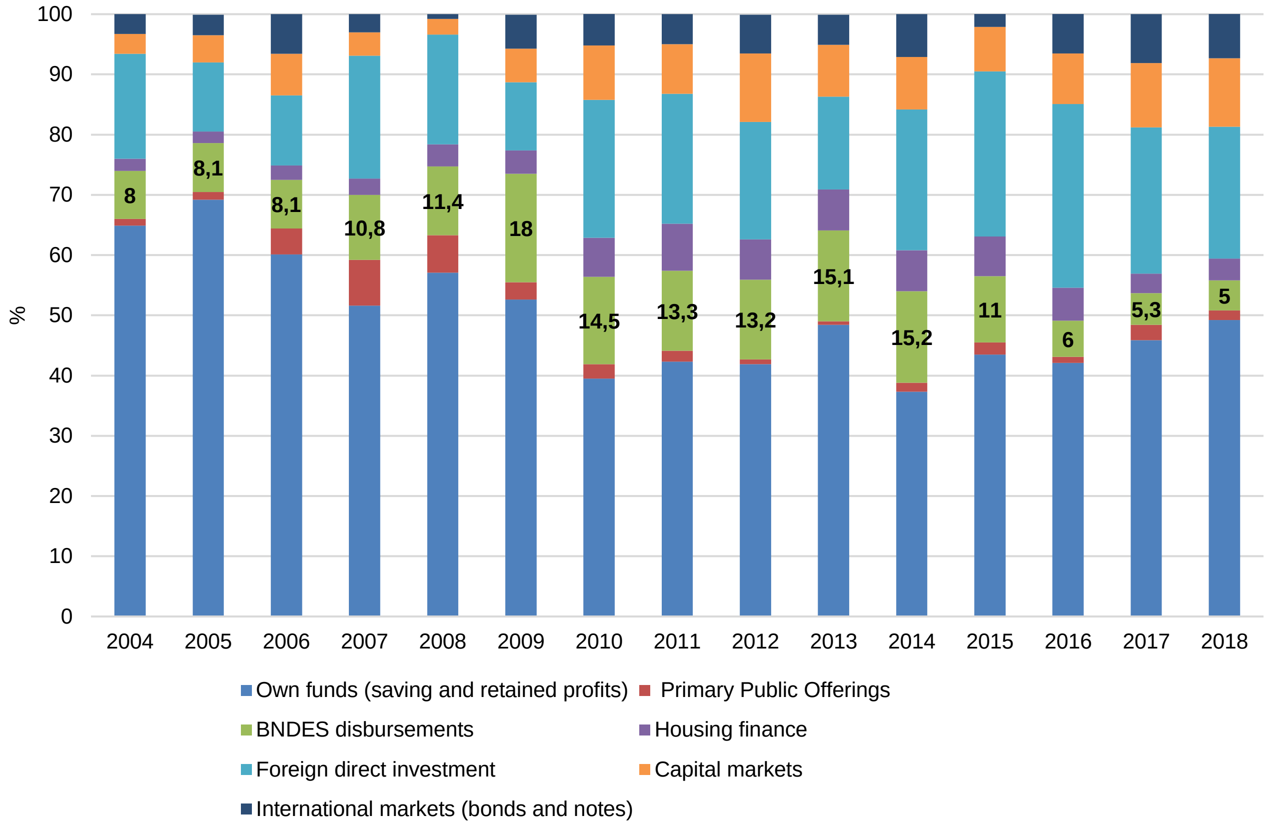
Source: Own elaboration based on BNDES - https://www.bndes.gov.br/wps/portal/site/home/transparencia/centraldedownloads.

From the *conjectural* perspective, therefore, BNDES has played a key role in dealing with the international crisis and its transmission to the Brazilian economy that has been translated into the orientation and plans pursued afterwards. In 2009, the Brazilian government launched the Investment Maintenance Program (PSI, in its acronym in Portuguese) in order to stop the fall in the investment rate observed at the end of that year. The program sought to stimulate gross fixed capital formation through a temporary reduction of BNDES interest rates for credit lines related to fixed capital goods (Ferraz & Coutinho, 2017; Machado et al.,

[18] See, for instance, Villaverde (2014).

2018). The PSI lasted until 2015, after nine renewals. According to Barboza et al. (2017), the PSI was the main responsible for the rapid growth of BNDES operations over that period. In the wake of the international economic turmoil, the PSI was crucial in order to avoid the decline in investment rates, especially in its early years[19] (Barboza et al., 2017; Machado & Roitman, 2015; Machado et al., 2018). Under the PSI, BNDES disbursements represented a larger share of investment financing sources in Brazil compared to previous and subsequent periods (Figure 9).

Figure 9. long-term financing sources for fixed assets of firms and households, Brazil, 2004-2018*



Source: CEMEC (2017; 2018).
* 2018 = Q1 2018.

Since 2016, however, following a more neoliberal view shared by Brazilian recent administrations, BNDES has been performing in an opposite way. The bank's size has shrunk (Figure 1, 4) under the perception that previous dimension and direction were mistaken. At the same time, investment and growth in Brazil have also reduced. These changes – including the one related to the bank's interest rate from previous TJLP to current TLP – indicate the rise of a new period of interaction between the role of the organization and the Brazilian economic development model. A wave of market-oriented policies has been expected and the role of BNDES is already changing accordingly. The renewed dominant neoliberal development convention is likely to lead to a new round of privatizations of public-owned enterprises and BNDES may once again be one of the main pillars of this process[20].

[19] Barboza et al. (2017) and Machado et al. (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 PSI and reduced its impact on the economy.
[20] As a sign of this movement, see Pamplona (2019).

Concluding remarks

The role of institutions in promoting socioeconomic development has been a recurring theme in contemporary economic theory. However, the prevailing 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 capitalist economies. In fact, from an approach inspired by the Old Institutional Economics, it is possible to observe that certain development conventions shape the way in which other institutions operate and, at the same time, from the socioeconomic outcome of this interaction, are shaped by it. Different roles played by BNDES throughout Brazilian history seem an emblematic illustration of this process, as resulting from the endogenous interplay between the organization itself and prevailing development conventions, thus rejecting the idea of predetermined types of institutions for development.

From the analysis of the role played by BNDES over time, its main activities as a key actor in long-term financing in Brazil, its funding sources and the economic sectors supported, three 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 turn of the 1990s; and (iii) the rehabilitation of BNDES as a relevant tool for development in the 2000s, especially in face of the global crisis. In addition, a fourth phase seems already discernible since mid-2016, marked by a new neoliberal turn.

Each of these periods corresponds to particular dominant development conventions. During the first phase, permeated by a "developmental" convention, the bank started to finance important infrastructure projects and basic industries, contributing to the consolidation of the Brazilian productive structure. The second phase, which began with the debt crisis of the 1980s, was marked by a relative decline in the bank's credit operations and its central role in the privatization process of the period. Although the bank has not ceased to support long-term financing operations, its role has been reoriented under the prevailing context of a neoliberal development convention.

Starting in the 2000s, a new phase opened up for BNDES, when its operations expanded significantly. A kind of renewed "developmental" convention came to dominate the strategies of the public sector. A combination of certain market-oriented macroeconomic policies and active social and industrial policies prevailed. In this context, BNDES reinforced its role in infrastructure financing 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. Part of this orientation, however, was redefined – or even intensified – after the widespread consequences of the international crisis over the Brazilian economy. BNDES guidelines and policies started working clearly as countercyclical forces in the aftermath of the global crisis. In fact, the crisis allowed an accelerated internationalization of Brazilian business groups in sectors in which they had competitive advantages. This scenario changed drastically over the course of 2015 and 2016. In the wake of market-oriented policies, the role of BNDES is changing, with reduction of its activities and its funding sources. The renewed dominant neoliberal development convention is likely to lead to a new round of privatizations of public-owned enterprises and BNDES may once again be one of the main pillars of this process.

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