

Chapter 12

Alberto de Oliveira

THE ROLE OF PUBLIC CREDIT PROGRAMMES IN MITIGATING THE ECONOMIC EFFECTS OF THE COVID-19 PANDEMIC: BRAZIL'S EXPERIENCE

This chapter's objective is to examine the role that public institutions play in mitigating the social and economic effects of Covid-19 in the context of transformations under way in the Brazilian financial system. During the pandemic, subsidized loans granted by both public and private banks were supported exclusively with resources from Brazil's Federal Government. With regard to these resources provided, our investigation did not find substantial differences between the actions of public and private banks. However, these subsidized loans represent only a small fraction of total loans granted during the pandemic, which means that the financing of the economy was mostly sustained by private banks through interest rate adjustment and market mechanisms. On the one hand, small- and medium-sized enterprises (SMEs), which are the primary source of job creation, did not receive sufficient affordable financial support. On the other hand, Brazil's Federal Government obtained support to modify the country's Constitution to adopt the controversial non-conventional monetary policies (NCMP). Among other decisions adopted by the Central Bank, the NCMPs offered

important support for private banks and financial funds. In sum, the secondary role played by public banks during the pandemic crisis is in line with the neoliberal policy adopted by the Government, despite the evidence that such policies tend to deepen chronic Brazilian social inequality.

INTRODUCTION

Brazil's Ministry of Health announced the country's first case of Covid-19 on February 26, 2020. Beginning in the second half of March, several major cities adopted social distancing measures to curb the pandemic. The Federal Government's response to the economic effects of Covid-19 focused on three areas: (i) providing emergency funds to low-income families; (ii) postponing or eliminating selected taxes and fees, and; (iii) offering credit and increasing liquidity in the country's financial system.

This chapter examines the role played by public financial institutions in mitigating the pandemic's social and economic effects in the context of the ongoing changes to Brazil's financial system. The investigation includes: (i) details of credit lines and financing conditions; (ii) identification of the segments benefitting from these changes; and (iii) a description of the government measures vis-à-vis the behaviour of the financial market.

The investigation found that private financial institutions have been primarily responsible for the supply of credit during the Covid-19 pandemic, inasmuch as governmental aid programmes cover only a fraction of the country's credit demands, and private financial institutions operate some of the credit lines supported by public resources. Furthermore, Brazil's National Congress, by adopting the 106th amendment to the country's constitution, allowed for the adoption of so-called non-conventional monetary policies. Thus, banks were allowed to take out loans from Brazil's Central Bank backed by private securitized credit portfolios and

corporate debt securities. Similarly, public banks have bought credit portfolios from private medium-sized banks and quotas from debt funds, with the purpose of increasing economic liquidity.

All these public measures are in line with the principles of the macroeconomic policies adopted after 2015, which focus on reducing state intervention in the country's economy. This contrasts with Brazil's experience during the 2008 economic crisis, when public banks provided credit to support economic development (Vasconcelos et al. 2018; Deos and Mendonça 2017).

In April, the Federal Government released measures to expand private banks' liquidity a few weeks after the first lockdowns, whereas Government loan programmes only reached small firms in June. Central Bank statistics show that loans have been granted mainly to large companies, and small- and medium-sized businesses have been facing credit restrictions, usually related to their credit history or lack of sufficient guarantees. Such firms have also had to contend with higher interest rates in the loans provided by private banks. Although Brazil's benchmark interest rate has continued to fall in recent years due to the country's economic slowdown, credit costs remain higher in light of the challenges imposed by the Covid-19 crisis.

The movement of credit markets undoubtedly depends on other Government policies, especially policies for direct income transfers and productive investments intended to restore economic development. However, Government policy seems to depend on a market-based approach, meaning that Brazil may face high unemployment rates and low economic growth for the foreseeable future.

This chapter is organized into four sections. The first outlines the methodological approach. The next gives details related to lines of credit provided by Brazil's Federal Government to illustrate both the scope and the beneficiaries of Government aid programmes. The third section analyzes Brazil's domestic credit supply, highlighting the role played by public banks. The last section presents the conclusions.

CONTENDING VIEWS AND METHODOLOGY

The predominant neoliberal view of the role of public banks in the economy is based on the theory of financial repression adopted by Shaw (1973) and McKinnon (1973). They argue that savings allocation is artificially distorted by the actions of public banks, which in turn leads to inefficient financial markets and obstructed economic growth. According to these authors, the state should only guarantee the security, stability and predictability of the financial system so as to reduce costs and risks for economic agents. Still within the orthodox economic field, Stiglitz (1993) allows for some governmental intervention in specific situations, such as in the case of a lack of long-term credit supply, or in order to avoid banking insolvency during systemic crises.

Economists not aligned with neoliberalism, such as Mazzucato and Penna (2016), argue that Stiglitz's approach restricts knowledge regarding the role of public banks. They believe that Stiglitz's interpretation regarding the theory of market failures is static and limited, since it focuses exclusively on a cost-effective perspective, which in turn implies a specific design for public institutions. From Stiglitz's perspective, the use of public banks as a countercyclical economic tool is unjustifiable. Mazzucato and Penna emphasize the market and value creating the potential of public banks and patient finance.

Castro (2008), an economist from the institutionalist school of economics, argues that the financial system must contribute to economic development without creating imbalances or weaknesses in financial markets. She defends the use of public banks to mitigate the effects of economic crises. Similarly, Yeyati et al. (2007) show that, in periods of economic uncertainty, private banks usually cut the supply of credit as a defensive measure. Supported by the principles of Keynesian and institutionalist lines of economic thought, their research discusses the supply of credit to businesses and individuals. In methodological terms, it focuses on small and medium-sized firms because of their

important roles in job creation, as well as on governmental measures directed toward firms of this size. A detailed accounting of credit lines in Brazil only exists for those managed by the large public banks (see Box 12.1), although, at a regional level, the country depends on other medium-sized public banks. Both public and private financial institutions operate most of the measures related to the Federal Government's credit provisions. In some cases, public banks manage credit funds operated by private banks. This chapter analyzes government measures introduced between March and July 2020.

THE PROFILE OF GOVERNMENT CREDIT PROGRAMMES

The current configuration of Brazil's financial system has its roots in reforms that took place in the 1960s and 1990s. In the 1960s, the Federal Government undertook a wide-ranging reform that included measures ranging from the creation of the country's Central Bank to the design of specialized institutions and mechanisms focused on long-term funding. The primary changes of the 1990s included the internationalization of Brazil's financial system, support for private banks and the privatization of several regional public banks.

Regarding private institutions, in the 1990s Brazil's Federal Government created PROER (Programme for the Stimulation of Restructuring and Strengthening the National Financial System – Programa de Estímulo a Reestruturação e ao Fortalecimento do Sistema Financeiro Nacional), a programme dedicated to supporting private banks through the acquisition of toxic assets and the creation of guarantee funds so as to support specific banking products. Also in the 1990s, the Federal Government created the PROES (Programme for Incentivizing the Reduction of the Public Sector in Baking Activity – Programa de Incentivo a Redução do Setor Público Estadual na Atividade Bancária) with the intention of privatizing or closing public banks created by individual Brazilian states (see Vidotto 2005; Araujo 2001; Araujo and Cintra 2011).

Box 12.1: *Large Brazilian Public Banks*

Banco do Brasil (Bank of Brazil – BB) was created as a public bank during Brazil’s colonial period, and it served as the country’s monetary authority until the 1960s, when the Central Bank was created. In 1996, the Federal Government’s privatization programme opened its capital. Currently, the Federal Government is the bank’s majority shareholder, while remaining shares are divided between domestic (23.9%) and foreign (25.6%) investors. Banco do Brasil is one of the main institutions responsible for rural credit in Brazil (see Graner et al. 2019).

The Caixa Econômica Federal (Federal Economic Fund – CEF) was also created as a public bank during the colonial period, but its importance was accentuated in the 1980s, when it assumed primary responsibility for operating Brazil’s housing credit programme, as well as for major investments in urban infrastructure and basic sanitation. Today, Brazil’s Federal Government holds 100% of stocks in CEF, which is responsible for approximately 70% of the country’s housing-related credit.

Banco Nacional de Desenvolvimento Econômico e Social (National Bank for Economic and Social Development – BNDES) is a fully public bank and it was created in the 1950s to support long-term investments. In the 1990s, BNDES became the primary operator of Brazil’s privatization policy. BNDESpa is the subsidiary of BNDES for operating large investments through the acquisition of shares or private securities. In the 2000s, the Federal Government undertook a major capitalization of BNDES (Torres Filho and Costa 2013), but beginning in 2016, the expansion of BNDES credits was reversed. In 2019, BNDES transferred US\$32 billion to the Treasury (BNDES 2019), which is the equivalent of 65% of the World Bank’s disbursements (US\$49 billion) during the same period (World Bank 2020).

The measures announced by Brazil's Federal Government to mitigate the economic effects of the pandemic have affected individuals as well as companies. Banks have offered short-term lines of credit and have postponed loan payments to individuals. In addition to offering companies new lines of credit and postponing loan payments (see Table 12.1), public banks have bought credit portfolio from medium-sized banks. Similarly, BNDES has bought quotas from debt capital funds oriented to provide credit to small- and medium-sized firms. BNDES and the CEF (Caixa Econômica Federal) are management guarantee funds for supporting credit operations made by both public and private financial institutions. Finally, health institutions, as well as municipal and state governments, have been supported by credit lines with interest rates below market rates.

Table 12.1: *Credit Postponement measures*

Institution	Beneficiaries	Product name (1)	Benefit
BNDES	Firms	Direct, indirect and mixed operations (all credit lines)	Postponing debts (principal and interest) until September, 2020. Original loan conditions are preserved
CEF	Firms	Working capital and real estate production (real estate funding)	Postponing debts (principal and interest) for 90 days. Original loan conditions are preserved

Institution	Product name (1)	Benefit
CEF	Check cashing loans (<i>Cheque especial</i>) regarding new loans	Interest rate reduction (for 90 days) from 4.95% p.m. to 2.90% p.m.
	Check cashing loans (<i>Cheque especial</i>) regarding early debts	Interest rate reduction (for 90 days) from 7.7% p.m. to 2.9% p.m.
	Short-term loans (<i>CDC Salário</i>) regarding new loans	Interest rate reduction (for 90 days) from 2.29% p.m. to 2.17% p.m.
	Short-term loans (<i>Crédito Consignado</i>) regarding new loans	Interest rate reduction (for 90 days). During this period, fees charged begin at 0.99% p.m. These fees may vary depending on the guarantees. In Jan 2020, the average interest rate was 1.56% p.m.
	Short-term loans (<i>Penhor</i>) regarding pledges	Interest rate reduction (for 90 days) from 2.10% p.m. to 1.99% p.m.

Sources: CEF and BNDES websites; legislation related to aid programmes; legislation provided by monetary authorities.

Brazil's Federal Government has directed most of its aid packages towards small- and medium-sized enterprises, although Government aid programmes have also supported large companies. Credit lines are classified in three categories: (i) support for employment (BRL 17 billion); (ii) support for agricultural activities (BRL 34 billion); and (iii) support for working capital (BRL 21 billion).

In terms of employment support, the Federal Government created the PESE programme (Programme for Emergency Employment Support – Programa Emergencial de Suporte ao Emprego) in order to finance payearoll expenses to firms with annual revenues between BRL 360,000 and BRL 10 million. For a period of four months, companies can take out loans of up to two monthly minimum wages per employee. BNDES is the official manager of the PESE programme, but other public and private commercial banks are also allowed to operate this credit line.

BNDES manages and is the direct operator for medium-sized and large companies with annual revenues above BRL 10 million. Other public and private banks provide loans supported by the PESE programme for businesses of all sizes. The interest rate charged by the PESE programme (3.75%/year) is below market rate (usually above 11%/year) and the Federal Government will share losses on these loans (85%) with bank operators (15%).

The PESE programme was launched in April, but by the end of June only 12.5% (or BRL 4.3 billion) of its original resources had been contracted (Bacen 2020). Monetary authorities and the media argued that most small business did not have sufficient guarantees or good enough credit history to take out PESE loans (see Datt 2020; CN-Covid-19 2020). Despite the obstacles that these firms face, most may have chosen to dismiss their employees instead of taking out loans to support their payearolls. According to the Government's statistics bureau (IBGE 2020), 8.9 million jobs were lost between the first quarter (Jan-March 2020) and the second (April-June 2020). In addition, a survey conducted by SEBRAE/FGV (2020) showed that 12% of small firms laid off their employees. In July 2020, BRL 17 billion from PESE's original budget (BRL 34 billion) was transferred to the PRONAMPE programme, which will be discussed further below.

In relation to agricultural activities, Brazil's Department of Agriculture or MAPA (the Ministry of Agriculture, Stockbreeding and Supplies – Ministério da Agricultura Pecuária e Abaste-

cimento) released new credit for two existing rural funding programmes: PRONAF (National Support Programme for Family Agriculture – Programa Nacional de Apoio a Agricultura Familiar) and PRONAMP (Support Programme for Midsize Rural Producers – Programa de Apoio ao Médio Produtor Rural). PRONAF is dedicated to small rural producers, while PRONAMP is oriented towards midsize producers. The programmes' interest rates range from 4% to 6%/year, depending on the size of the specific rural producer. The credit limit is BRL 20,000 for small producers and BRL 40,000 for midsize producers. Farmers also have the option to postpone payments on contracts signed before the pandemic (MAPA 2020).

In recent years, Government-provided credit lines with controlled interest rates have been replaced by loans based on market rates. Servo (2019) shows that the share of controlled interest rate loans declined from 92.6% to 71.6% between the periods of 2014/15 and 2018/19. In addition, Zaia (2020) reports that market interest rates for rural producers have increased during the Covid-19 crisis. These rates were between 6.5% and 8.7%/year before the crisis, but now they may be as high as 10.5%/year.

Concerning working capital credit lines, Brazil's Federal Government instituted PRONAMPE (National Programme Supporting Small and Microbusinesses – Programa Nacional de Apoio as Microempresas e Empresas de Pequeno Porte), a loan programme oriented toward small businesses with annual revenues between BRL 360,000 and BRL 4.8 million. PRONAMPE's credit limit is 30% of a business's total revenue for 2019. The financing term is 36 months, and lenders have an additional grace period of eight months. The interest rate is based on the SELIC (the Brazilian benchmark interest rate) plus 1.25%/year. Intermediary banks may charge administrative fees, which are to be negotiated between borrowers and lenders. In August 2020, the SELIC was 2.0%/year. Loan funding is provided by operator banks, but loans are 100% guaranteed by a governmental fund called FGO (Operator Guarantee Fund – Fundo

Garantidor de Operações), managed by Banco do Brasil. Around 90% of the resources from the first phase of PRONAMPE (BRL 15.9 billion) were contracted in the programme's first few weeks. In July 2020, another BRL 17 billion was transferred to FGO from the PESE programme.

Public banks have also expanded their own credit lines, but these loans are more expensive than those provided by governmental aid programmes. BNDES made BRL 5 billion available to businesses with annual revenues of up to BRL 300 billion, and another BRL 2 billion to companies with annual revenues above BRL 300 billion. The costs of these loans depend on lenders' profiles (see Table 2). Costs include a fixed interest rate for BNDES (from 1% to 1.5%/year), in addition to a variable interest rate (TLP or SELIC), in addition to interest rates charged by intermediary banks based on borrowers' credit histories and the guarantees they offer. The TLP (Long-Term Rate – Taxa de Longo Prazo) is a long-term interest rate, based on a fixed interest rate plus an inflation adjustment. The total cost of BNDES loans may reach 11%/year (Datt 2020). BNDES has also provided BRL 2 billion to healthcare institutions. The total cost is determined by the SELIC rate plus 1%/year (BNDES fees), and an additional 4.26%/year (risk component).

The CEF has been offering working capital credit lines guaranteed by a fund called FAMPE (Guarantee Fund for Small and Microbusiness – Fundo de Aval à Micro e Pequenas Empresas). Its interest rates are between 1.19% p.m. and 1.59% p.m. (per month), equivalent to a range of 15% to 20%/year. The CEF also makes working capital credit lines without FAMPE available, for which its interest rates begin at 0.57% p.m. to 1.51% p.m., depending on borrowers' risk profiles (see Table 12.2).

Table 12.2: Additional public financial institution resources for firms

Institution	Amount*	Target companies	Benefits	Financing cost**
BNDES	BRL 5 billion	Companies with annual revenue up to BRL 300 million	Financing up to BRL 70 million Term: 60 months. Grace period: 24 months	Interest Rate = TLP or SELIC* BNDES fees = 1.25%/year Intermediation rate = direct negotiation between lenders and borrowers
BNDES	BRL 2 billion	Companies with annual sales above BRL 300 million	Financing up to BRL 200 million Term: 48 months. Grace period: 12 months	Interest Rate = SELIC* BNDES fees = 1.5%/year (without job guarantee) or 1.1%/year (with job guarantee) Risk rate = direct negotiation.
BNDES	BRL 2 billion	Non-profit healthcare institutions and companies responsible for producing equipment and derived inputs	Financing up to BRL 150 million Term: 60 months. Grace period: from 3 to 24 months	Interest Rate = TLP*** BNDES rate = 1.0%/year Risk rate = 4.26%/year
PESE Programme	BRL 17 billion	Small and medium-sized firms' annual revenue from BRL 360,000 up to BRL 10 million)	Financing of payroll up to two minimum wages (per employee) for 120 days	Interest Rate: 3.75%/year
CEF	Not available	Small and medium-sized businesses	Working capital credit line not supported by guarantee fund	Interest Rate: from 0.57% p.m. to 1.51% p.m.

CEF/FAMPE	BRL 12 billion	(MEI) Autonomous workers – annual income up to BRL 81,000; (ME) Micro-firms – annual revenue up to BRL 360,000 (EPP) Small firms – revenue up to BRL 4.8 million	Financing of working capital supported by guarantee fund (FAMPE) Term: from 24 to 36 months. Grace period: from 9 to 12 months	MEI = 1.59% p.m. ME = 1.39% p.m. EPP = 1.19% p.m.
PRONAF E PRONAMP	BRL 34 billion	Small rural producers (PRONAF) and Medium rural producers (PRONAMP)	Credit lines up to BRL 20,000 (PRONAF) or up to BRL 40,000 (PRONAMP)	PRONAF = 4.6% / YEAR PRONAMP = 6.0% / YEAR
PRONAMPE	BRL 15.9 billion	Small businesses with annual revenues between BRL 360,000 and BRL 4.8 million	Loans provided by public or private banks, with controlled interest rate. The loans are entirely backed by public funds (FGO)	Interest Rate: TLP or SELIC* BNDES fees: 1.25% / YEAR Administration fee: direct negotiation

Sources: CEF and BNDES websites; legislation related to the aid programmes; legislation provided by monetary authorities.

Notes: * The amounts indicated represent those made available by the banks, and not the sum of the loans contracted. ** Administrative fees charged by banks are not included. *** In August 2020, the SELIC rate was 2.00%/YEAR, while the TLP rate was 1.78%/YEAR plus inflation.

In an effort to increase economic liquidity, the Federal Government has supported private financial institutions. BNDESpar, which is a subsidiary of BNDES, made BRL 4 billion available for purchasing quotas from debt capital funds. These purchases are limited to BRL 500 million per fund, and BNDESpar is allowed to buy up to 90% of the total quotas. Debt capital funds that benefit from BNDESpar resources must steer their credit operations toward small- and medium-sized firms with annual revenues of up to BRL 300 million (BNDESpar 2020) (see Table 12.3).

During the 2008 crisis, resources were transferred to major banks

in response to a single account holder's perception regarding the vulnerability of small- and medium-sized banks. However, this migration of resources did not increase credit offers for the entire economy, because major banks retained a significant portion of these resources (Schiozer and Oliveira 2013). To avoid the situation that occurred in 2008, that CEF made BRL 30 billion available to purchase credit portfolios from private midsize banks to reinforce their financial health. Small- and medium-sized banks play an important role in offering credit to small and medium-sized companies (see Table 12.3).

Both initiatives – the purchasing of quotas and portfolios respectively from debt capital funds and midsize banks – are among the typical policies directed to the financial market. According to Brazil's Federal Government, the deconcentration process is a way to increase the competition and efficiency of the financial system. As such, policies to support midsize banks and other financial institutions are among the Government's strategies. However, this is not the only way to increase the competition in the financial system. The increase of credit supply by public banks under competitive conditions may be an important stimulus to improve the behavior of private financial institutions.

Additionally, the Federal Government created the PEAC programme (Special Programme for Access to Credit – Programa Especial de Acesso ao Crédito) in order to offer complementary guarantees to borrowers through a fund guarantee called FGI (the Investment Fund Guarantee – Fundo Garantidor de Investimentos), which is managed by BNDES. FGI was designed for businesses with annual revenues of up to BRL 300 million, and its coverage may comprise up to 30% of loans for small business, and up to 20% of loans for midsize firms. The Federal Government justified the guarantee funds it made available by invoking obstacles faced by small- and medium-sized businesses in accessing banking credit. In late April 2020, a SEBRAE/FGV survey (2020) showed that only 14% of small firms were successful in contracting loans within Brazil's banking networks.

In addition to credit lines and guarantee funds supported by

public resources, the Federal Government is offering fiscal incentives to private financial institutions. In July 2020, the Government created a working capital credit programme called CGPE (Giro Capital for Business Preservation – Capital de Giro para a Preservação de Empresas), which is directed toward firms with annual revenues of up to BRL 300 million. The CGPE programme does not include public resources, and it will be operated by public and private banks. Its interest rates and other loan parameters will be negotiated directly between borrowers and lenders. However, banks are allowed to seek reimbursement for some of their losses related to CGPE operations through two federal taxes: the Imposto de Renda Pessoa Jurídica (Corporate Income Tax) and the Contribuição Social sobre Lucro Líquido (Social Fund for Liquid Profits).

Table 12.3: Public financial institutions' indirect measures to expand the credit supply

Institution	Amount*	Target companies	Expected benefits
BNDES	BRL 4 billion	Purchase of quotas from private credit funds directed to small and medium-sized firms with annual revenues up to BRL 300 million	Increase economic liquidity
CEF	BRL 30 billion	Purchase of credit portfolio from midsize financial institutions related to payroll loans (<i>crédito consignado</i>) and automobile loans	Increase economic liquidity and reinforce balance sheets for midsize banks
PEAC	BRL 20 billion	Firms with annual revenue from BRL 360,000 and BRL 300 million. The guarantee coverage is limited to 30% of loan to small business and 20% to midsize firms	Increase credit offerings to small and medium-sized firms

Sources: CEF and BNDES websites; legislation related to the aid programmes; legislation provided by monetary authorities.

Notes: * The amounts indicated represent those made available, not the sum of the loans contracted.

In accessing banking credit, small and medium-sized businesses not only face a lack of guarantees, they also must contend with higher interest rates. A report by Infinity Asset Management (Menezes 2020) shows that interest rates negotiated in Brazil are among the highest in the world.

Brazil's Central Bank classifies credit lines into two distinct categories: market credit lines (or free lines) and targeted credit lines. Interest rates and other parameters for market credit lines are freely negotiated between lenders and borrowers, whereas funding for targeted credit lines are regulated by the state, meaning that the Government can define interest rates and other parameters. Most of the targeted credit lines are made available through public banks, but some are provided by private banks in accordance with definitions set by Brazil's monetary authorities. According to governmental policy, targeted credit lines may be provided with or without controlled interest rates. Targeted loans with controlled interest rates may be contracted by individuals or firms, and their costs are usually below the market rate.

Since 2017, the benchmark interest rate (SELIC) has decreased as a result of low economic growth, which has had important impacts in market interest rates. In June 2020, the market interest rate for working capital lines was 11.2%. This is lower than the average 2019 rate (16.4%). In June, the interest rate charged by BNDES through its working capital lines decreased from 6.6% to 4.1% in response to federal government mandates. The same occurred in relation to investment credit lines provided by BNDES (see Table 12.4).

Table 12.4: *Interest rates according to credit line**

Credit lines	2019 average	Jan/20	Feb/20	Mar/20	Apr/20	May/20	Jun/20	
Market credit lines - /YEAR percentages								
Anticipation of receivables (trade notes)	18.3	17.2	15.2	14.5	14.9	14.5	12.2	
Anticipation of receivables (credit card bills)	14.1	10.0	8.9	8.3	9.2	7.8	6.8	
Anticipation of receivables (check cashing)	33.1	30.8	30.7	30.0	27.7	25.4	25.2	
Working capital	16.3	16.0	15.1	15.0	13.6	12.4	11.2	
Targeting credit lines (with controlled interest rates) - /YEAR percentages								
Rural producers	6.8	6.2	5.3	5.4	5.4	5.6	5.2	
Real estate industry	10.0	9.4	9.1	8.6	8.8	8.6	8,8	
BNDES	Working capital	12.1	16.3	13.3	11.0	6.7	6.6	4.1
	Investment	9.3	10.4	8.3	8.4	7.4	8.2	6.5
	Agribusiness	7.4	7.4	7.3	7.8	7.1	6.7	7.5

Sources: Central Bank/press release (Bacen 2020a).

Notes: * Rates are calculated based on different types of credit. They represent the weighted average of the respective portfolios.

Finally, the Federal Government is also negotiating aid programmes to large companies through BNDES (see Neder 2020; ANEEL 2020; Rittner 2020a; Rittner 2020b). The Federal Government may release BRL 4 billion to urban transport companies. According the ANEEL (the National Electric Energy Agency – Agência Nacional de Energia Elétrica), Brazil's energy regulation agency, a pool of banks (BNDES included) released BRL 14.8 billion to energy distribution companies in an at-

tempt to mitigate losses related to the pandemic crisis.

In summary, the Federal Government is offering credit lines at below market rates through public and private banks to small- and medium-sized businesses, in addition to improving guarantee funds managed by public banks in order to increase private banks' supply of credit to firms with difficulties accessing financing. In other words, public and private banks utilized resources made available by Brazil's Federal Government to attend to the credit necessities of businesses. Therefore, these financial institutions acted only as operators of public resources. The final borrowers benefitting from federal programmes are indifferent as to whether their financing is obtained through a public, semi-public or private bank. In the case of the CGPE programme, public and private banks used their own resources in credit operations. However, any eventual losses that banks sustain in operations supported by CGPE will be compensated through fiscal renunciation. The question here, then, is whether these initiatives are sufficient to attend to small- and medium-sized firms. The following section will present statistics regarding the amount of credit made available to firms and individuals by the public and private sectors during the pandemic.

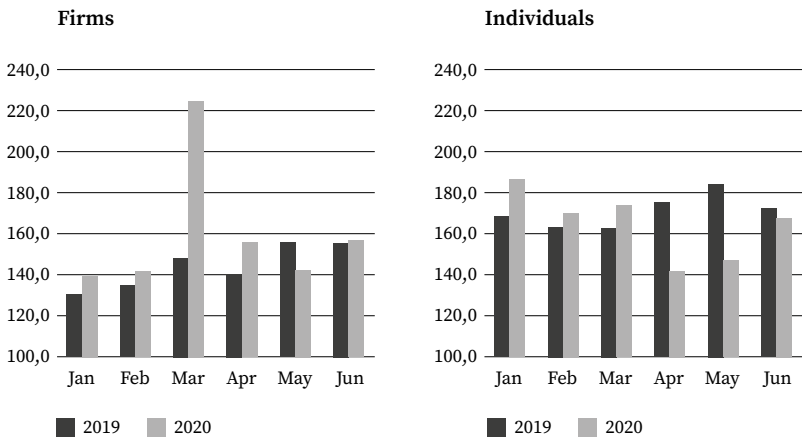
THE ROLE OF GOVERNMENTAL CREDIT PROGRAMMES IN BRAZIL'S FINANCIAL SYSTEM

Keynesian and post-Keynesian economists (Keynes 1973; Minski 1986) argue that periods of uncertainty are marked by liquidity preference: the supply of credit decreases and interest rates rise due to defensive decisions made by financial institutions. Thus, the key question is: how are governmental measures impacting Brazil's financial system during the Covid-19 pandemic crisis?

In March 2020, when social distancing measures were initiated in several Brazilian cities, credit concessions to firms and individuals moved in different directions. In March, credit operations

to firms grew 59.7%, from BRL 140.8 billion to BRL 224.8 billion. However, beginning in April, these concessions returned to levels observed in 2019. In contrast, credit concessions to individuals decreased by approximately 20% in April and May, before returning to 2019 levels in June, probably as a reaction to the economic reopenings taking place in certain major cities (see Figure 12.1).

Figure 12.1: *Credit concessions in the first half of 2019 and 2020**



Source: Central Bank/press release (Bacen 2020a).

Notes: * In BRL billion as of 2020, June. Inflator: IPCA.

Loans contracted by firms and individuals have similar values in terms of total concessions. In June, total loans contracted by individuals accounted for BRL166.2 billion, while those made to firms totaled BRL 155.7 billion. Targeted operations with controlled interest rates to individuals are concentrated in housing programmes, while loans with controlled interest rates to firms are oriented toward rural and BNDES programmes. Despite the growth that occurred beginning in March, the share of targeted loans to firms in June (BRL 15.1 billion) accounted for approximately 10% of the total concessions made to firms (BRL 155.7 billion) (see Table 12.5).

Table 12.5: Concessions by beneficiary and type of credit (BRL billion)

Month	Total	Individuals Free + Targeted Resources	Firms		
			Total	Free resources	Targeted Resources
2019					
Jan/19	283.8	159.8	124.0	116.6	7.4
Feb/19	284.1	155.0	129.1	121.3	7.8
Mar/19	297.3	155.4	141.9	134.7	7.1
Apr/19	304.3	168.7	135.7	129.2	6.5
May/19	329.3	177.8	151.5	143.7	7.8
Jun/19	318.3	166.5	151.8	141.5	10.2
2020					
Jan/20	322.5	184.0	138.5	133.1	5.4
Feb/20	308.7	167.9	140.8	135.4	5.4
Mar/20	396.8	172.0	224.8	216.3	8.5
Apr/20	296.0	140.6	155.4	143.7	11.7
May/20	287.2	145.5	141.8	127.4	14.3
Jun/20	321.9	166.2	155.7	140.6	15.1

Source: Central Bank/Press release (Bacen 2020a).

The total of targeted credit operations grew during the pandemic crisis. The sum of targeted operations between March and June 2020 was BRL 48.553 million. During the same period in 2019, these amounts reached BRL 31.662 million. Compared to 2019, approximately 45% of the new targeting operations were granted by BNDES. BNDES's working capital concessions grew from BRL 122 million to BRL 1.76 trillion between the periods of March-June 2019 and March-June 2020. Other credit lines with controlled interest rates also showed relevant growth: rural credit increased to 42.4% and real estate credit grew to 75.7% between the periods of March-June 2019 and March-June 2020 (see Table 12.6).

Table 12.6: Targeted resource concessions to firms according to financing lines (BRL millions)

Month	Rural credit			Real State funding			BNDES resources				Others	
	Total	Market rates	Controlled rates	Total	Market rates	Controlled rates	Total	Working capital	Financing			Total
									Investment	Agro-industrial		
2019												
Jan/19	7,357	1,099	373	1,472	129	323	452	57	4,043	557	4,657	776
Feb/19	7,756	1,367	1,144	2,511	110	435	545	13	3,538	244	3,795	904
Mar/19	7,148	1,505	430	1,935	113	366	479	5	3,820	157	3,982	752
Apr/19	6,459	2,154	1,040	3,194	138	417	555	23	1,615	161	1,799	912
May/19	7,837	2,919	604	3,523	121	366	487	91	2,540	268	2,899	929
Jun/19	10,218	2,278	3,197	5,475	293	503	796	3	2,676	220	2,899	1,049
2020												
Jan/20	5,406	753	697	1,450	293	396	689	10	1,054	173	1,237	2,030
Feb/20	5,438	1,035	1,160	2,195	170	297	467	11	1,620	102	1,733	1,042
Mar/20	8,476	1,983	1,791	3,774	436	849	1,285	21	1,747	196	1,964	1,452
Apr/20	11,749	2,683	1,900	4,583	469	710	1,179	132	4,208	224	4,564	1,423
May/20	13,226	2,379	1,700	4,079	543	784	1,137	650	5,456	240	6,346	2,574
Jun/20	15,102	2,581	2,177	4,758	370	559	929	957	5,136	156	6,249	3,165

Source: Central Bank/Press release (Bacen 2020a).

In addition to the regular channel of communications regarding monetary statistics (Bacen 2020a), the Central Bank created a new channel (Bacen 2020b) to divulge resources and measures related to the Covid-19 pandemic. Statistics from the new channel were first published on March 16, when most Brazilian cities began their lockdowns. Through to July 24, most loans were provided by private financial institutions to major companies. Only 15% of total loans (BRL 598.4 billion) were supported by public banks. Table 12.7a shows that major public banks lent BRL 38.9 billion to large companies, which is slightly more than the amount made available to small businesses (BRL 32.5 billion), whereas midsize firms borrowed BRL 16.4 billion from public banks.

Table 12.7a: New credit concessions between March 16 and July 24

Financial institution	New credit concessions (BRL million)			
	Large companies	Midsize companies	Small business	Total
Large institutions – public	38,955	16,444	32,495	87,894
Large institutions – private	238,251	41,868	43,862	323,981
Other institutions	108,683	52,353	25,503	186,539
Total	385,889	110,665	101,860	598,414

Source: Banco Central do Brasil (BACEN 2020b).

During the same period, BRL 195.2 billion went toward renewing existing loan contracts. Major public banks were responsible for 25% of total loan renewals (BRL 49.4 billion), and the majority of their renewals benefited small and medium-sized businesses. Among major private banks, renewals were mainly directed to large companies (see Table 12.7b). Additionally, the deferral of installments reached BRL 59.9 billion. Major public banks were responsible for 21% of total postponements, which mainly benefited small businesses (see Table 12.7c).

Table 12.7b: *Loan renewals between March 16 and July 24*

Financial institution	Loan renewals (1) (BRL million)			
	Large companies	Midsize companies	Small business	Total
Large institutions – public	8,450	18,970	21,967	49,387
Large institutions – private	82,051	17,369	13,123	112,543
Other institutions	20,433	8,767	4,118	33,318
Total	110,934	45,106	39,208	195,248

Source: Banco Central do Brasil (BACEN 2020b).

(1) Include operations with new resources.

Table 12.7c: *Postponement of payments between March 16 and July 24*

Financial institution	Postponements (BRL million)			
	Large companies	Midsize companies	Small business	Total
Large institutions – public	2,176	3,443	7,054	12,673
Large institutions – private	11,743	9,801	6,127	27,671
Other institutions	2,788	14,235	2,555	19,578
Total	16,707	27,479	15,736	59,922

Source: Banco Central do Brasil (BACEN 2020b).

Through to July 29, loans provided through the Federal Government's programmes totalled BRL 31.5 billion, which represents a small fraction of the country's financial markets' total credit operations (BRL 598.4 billion) between March and July 2020. PRONAMPE's credit line was the most in-demand among govern-

ment programmes, due to its attractive costs (see Table 12.8a). BNDES and the CEF were responsible for 51.2% of total concessions related to Federal Government programmes, while private banks contributed 29.7% of total concessions. Banco do Brasil, which is a semi-public institution, provided 18.2% of the total amount of public credit programmes (see Table 12.8b).

Table 12.8a: Federal Government loans according to programmes*

Credit Line	BRL million		Contracted by available
	Available	Contracted	
BNDES/FGI	20,000	4,139	20.7%
FAMPE	12,000	1,880	15.7%
PESE (2)	17,000	4,529	26.6%
PRONAMPE/FGO**	32,900	18,696	56.8%
Total	81,900	29,244	35.7%

Source: Economic Ministry (Ministério da Economia, 2020).

Notes: * Concessions from April 8 to July 29. ** In July of 2020, BRL 14 billion was transferred from the PESE to PRONAMPE programme.

Table 12.8b: Federal Government credit programmes according to operators*

Institution	Concessions	
	BRL million	Percentage
Public banks	16,169	51.2%
Caixa Econômica Federal	9,476	30.0%
BNDES (2)	6,475	20.5%
Banco Desenvolvimento de Minas Gerais	215	0.7%
Banco Desenvolvimento do Rio Grande do Sul	3	0.0%
Semi-public banks (1)	6,013	19.0%
Banco do Brasil	5,740	18.2%
Banco da Amazonia	257	0.8%
Banco do Nordeste	16	0.1%
Private banks	9,395	29.7%
Itau	5,183	16.4%
Banco cooperativo do Brasil (cooperative credit)	1,248	4.0%
Santander	957	3.0%
Sistema de Crédito Cooperativo (cooperative credit)	835	2.6%
Bradesco	792	2.5%
Banrisul	362	1.1%
Viacredi	18	0.1%
Total	31,580	100.0%

Source: Economic Ministry – Ministério da Economia (2020) (1) Concessions from April 8 to July 29 (2) include working capital credit lines.

Notes: * Data from the semi-public banks were separated from the ones from the public banks. In some cases, the semi-public banks may operate as a private bank in response to the shareholders' demands.

New concessions for families contracted between March 16 and July 24 totalled BRL 273.8 billion. These loans were granted in almost equal measure by large public and private banks (BRL 99.0 and 88.5 billion, respectively). Another BRL 122.3 billion was used to renew loans taken out by families. In some cases, such renewals included granting additional resources. Additionally, the postponement of payments related to credit agreements with families reached BRL 41.7 billion (BACEN 2020b).

Finally, the Central Bank made BRL 1.274 trillion – equivalent to 17.5% of Brazil's Gross Domestic Product (GDP) – available to increase the liquidity of the country's financial system (BACEN 2020b). Some of these measures are common in financial crises, such as loosening mandatory requirements on reserves (BRL 135 billion) and on term deposits (BRL 70 billion). However, by adopting constitutional amendment number 106 on May 7, 2020, Brazil's National Congress allowed the Central Bank to operate with public and private bonds in the context of so-called non-conventional monetary policy. Thus, the Central Bank made BRL 91 billion available to debentures (private debt securities) operations and BRL 670 billion to loans backed by Letras Financeiras (private debt securities), all guaranteed through credit operations.

The Central Bank also created the NDPGE (Novo Depósito a Prazo com Garantias Especiais – New Term Deposit with Special Guarantees), which is a debt security supported by the FGC (Fundo Garantidor de Créditos – Credit Guarantee Fund). Through the NDPGE small- and medium-sized banks may attract investors to support their credit lines. The Central Bank estimates in BRL 200 billion the effects over the credit supply derived by the NDPGE (see Table 12.9).

Table 12.9: *Conventional and non-conventional Central Bank measures*

Measures	BRL billion
Reduction in reserve requirement ratio on time deposits (from 31% to 25%) and regulation enhancement on liquidity coverage ratio (LCR)	135
Additional reduction on reserve requirements on term deposit	70
More flexibility on LCA regulation (LCA = debt securities)	2
Reduction of requirements related to targeting resources (housing programme)	56
Loans backed by <i>Letras Financeiras</i> guaranteed by credit operations	670
New Term Deposit with special guarantee (NDPGE)	200
One-year term repos backed by federal securities	50
Loans backed by <i>debentures</i>	91
Total	1,274

Source: Central Bank (BACEN 2020b).

Many countries used non-conventional monetary policies (NCMP) during the 2008 subprime crisis, but the effects of such policies are controversial. On the one hand, defenders of NCMP argue that the reduction of distortions on secondary markets may stimulate the supply of credit, thereby resulting in positive effects on labour markets and economic growth (Meinusch and Tillmann 2016; Anderson and Gascon 2009). On the other hand, studies suggest that its effects may not be sustainable in the long term (Gambacorta et al. 2014). Additionally, experiences from Japan show that NCMP have contributed to increases in income inequality (Saiki and Frost 2014).

CONCLUSION

In recent years, the Government's attention has been directed almost exclusively to the reformulation of judicial and constitutional orders to reinforce fiscal austerity policies. In this context, the role played by public banks during the pandemic could not be any more different. Loans made with Brazil's Federal Government resources only attended to a small fraction of these demands. Both public and private banks intermediated in these subsidized loans. Final borrowers were indifferent as to whether their financing was obtained through a public or private bank. Such operations may even be advantageous to certain private banks given the low risks involved and the potential to attract new clients.

Pronouncements of authorities from Brazil's Central Bank and the Ministry of the Treasury highlight the virtuosic role played by private financial institutions. However, this chapter shows that the private financial institutions were supported in many ways by the Brazil's Federal Government during the pandemic crisis. Actions are in progress to replace public funding systems by private ones.

A series of measures aimed at the long-term strengthening of private financing is underway, with the secondary market for private titles playing a standout role. Additionally, Brazil's Federal Government obtained support to modify the country's constitution to make the adoption of controversial non-conventional monetary policies (NCMPs) viable. While NCMPs were already in effect in April 2020, loans supported by the Government only reached small businesses in July 2020. There is no doubt that the measures adopted by Brazil's Central Bank were favourable for investment funds and banks.

However, BNDES' financing capacity is continually being reduced because of the transfer of resources to the Federal Government, as well as modifications in its interest rates over the long term. Semi-public banks, especially the Bank of Brazil, already act in accordance with private sector logic. Brazil's congress is debating

Provisional Measure 995, which opens lucrative segments of business under the CEF's control to the private sector.

The economic recovery depends on other Government policies, especially policies for direct income transfers and productive investments. However, during the pandemic, while the primary sectors responsible for job creation did not receive enough financial support, a series of measures adopted by Brazil's Federal Government have benefited the financial sector. In accessing banking credit, small- and medium-sized businesses not only face a lack of credit, they must also contend with higher interest rates. In this context, Brazil may face high unemployment rates and low economic growth for the foreseeable future.

Although a full discussion of the transformations under way in the Brazilian financial market is beyond the scope of this chapter, this review of the measures adopted by Brazil's Federal Government and its peculiarities allow us to see that the market-based approach is not the answer to the current crisis.

REFERENCES

- Anderson, R.G., and Gascon, C.S. 2009. "The commercial paper market, the Fed, and the 2007-2009 financial crisis." *Federal Reserve Bank of St. Louis Review*, 91 (November/December 2009).
- ANEEL – Agência Nacional de Energia Elétrica. 2020. Empréstimos da conta Covid totalizaram 14,8 bilhões para 50 distribuidoras. *ANEEL press release*. Published July 21, 2020. https://www.aneel.gov.br/sala-de-imprensa-exibicao/-/asset_publisher/XGPXSqdMFHrE/content/emprestimos-da-conta-covid-totalizam-14-8-bilhoes-para-50-distribuidoras/656877.
- Araújo, E.L.A.D. 2001. Os bancos públicos frente ao processo de privatização e internacionalização bancária no Brasil nos anos 90. MSc. thesis. Universidade Estadual de Campinas. http://repositorio.unicamp.br/bitstream/REPOSIP/286334/1/Araujo_ElderLintonAlvesde_M.pdf.
- Araujo, V.L.D., & Cintra, M.A.M. 2011. "O papel dos bancos públicos federais na economia brasileira". *Texto para discussão n. 1604*. IPEA. <http://reposit>

- torio.ipea.gov.br/bitstream/11058/1620/1/td_1604.pdf.
- BACEN – Banco Central do Brasil. 2020a. Notas para imprensa (estatísticas monetárias). <https://www.bcb.gov.br/estatisticas/estatisticasmonetarias-credito>.
- BACEN – Banco Central do Brasil. 2020b. Evolução Recente do Crédito no Sistema Financeiro Nacional. https://www.bcb.gov.br/content/acessoinformacao/covid19_docs/Evolucao_Recente_do_Credito.pdf.
- BNDES. 2019. “BNDES aprova devolução antecipada de R\$ 123 bilhões.” In *BNDES website news*. <https://www.bndes.gov.br/wps/portal/site/home/imprensa/noticias/conteudo/bndes-aprova-devolucao-antecipada-de-mais-30-bi>.
- BNDESpar. 2020. Edital da chamada pública para a seleção de fundos de crédito para micro, pequenas e médias empresas. BNDES Participações S/A. https://www.bndes.gov.br/wps/wcm/connect/site/d196cc68-2550-4e-08-b8a8-370d829bac17/EDITAL-+Chamada+P%C3%BAblica+para+sele%C3%A7%C3%A3o+de+Fundos+de+Cr%C3%A9dito+para+MPME_ajusteAMC.pdf?MOD=AJPERES&CVID=n8KpPLV.
- Castro, L.B.D. 2008. “Financiamento e crescimento econômico: uma visão geral da literatura e posicionamento no debate.” *Revista do BNDES*, 14(2), 277-308.
- CN-COVID19 – Comissão Mista Destinada a Acompanhar a Situação Fiscal e a Execução Orçamentária e Financeira das Medidas Relacionadas ao Coronavírus (2020). “Medidas do Banco Central do Brasil no Combate aos Efeitos do Covid-19.” *Public Hearings with the President of the Central Bank (Roberto Campos Neto) for CN-Covid 19*, June 1, 2020. <https://legis.senado.leg.br/comissoes/reuniao?reuniao=9778&codcol=2342>.
- Datt, F. 2020. “Demanda por capital de giro cresce, mas acesso é difícil.” *Jornal Valor Econômico*. Published June 2, 2020. <https://valor.globo.com/publicacoes/suplementos/noticia/2020/06/09/demanda-por-capital-de-giro-cresce-mas-acesso-e-dificil.ghtml>.
- Deos, S., and de Mendonça, A.R.R. 2017. “Facing the 2008 crisis: Brazilian Central Bank and public banking system as Minskyan ‘big banks.’” In Scherrer, C. (Ed) *Public banks in the age of financialization: A comparative perspective*. Edward Elgar Publishing.

- Gambacorta, L., Hofmann, B., and Peersman, G. 2014. "The effectiveness of unconventional monetary policy at the zero lower bound: A cross-country analysis." *Journal of Money, Credit and Banking*, 46(4), 615-642.
- Graner, F., Cristiano, Z. e Pupo, F. 2019. "Governo quer diminuir fatia do BB na área de crédito rural." *Jornal Valor Econômico*. Published March 23, 2020. <https://valor.globo.com/agronegocios/noticia/2019/03/25/governo-quer-diminuir-fatia-do-bb-na-area-de-credito-rural.ghtml>.
- Gurley, J.G., and Shaw, E.S. 1955. "Financial aspects of economic development." *The American Economic Review*, 45(4), 515-538.
- Gutierrez, E., Rudolph, H.P., Homa, T., & Beneit, E.B. 2011. *Development banks: role and mechanisms to increase their efficiency. Policy Research Working Paper no. 5729*. The World Bank. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2011/07/20/000158349_20110720101855/Rendered/PDF/WPS5729.pdf.
- IBGE. 2020. "Desemprego atinge 12,6% no trimestre até abril com queda recorde da ocupação. Instituto Brasileiro de Geografia e Estatística (IBGE)." Press release published May 28, 2020. <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/27821-desemprego-atinge-12-6-no-trimestre-ate-abril-com-queda-recorde-na-ocupacao>
- MAPA - "Ministério da Agricultura, Pecuária e Abastecimento 2020. "Governo anuncia medidas econômicas para ajudar produtores rurais afetados pela pandemia do Coronavírus." Published April 9, 2020 In *Portal do MAPA*. <https://www.gov.br/agricultura/pt-br/assuntos/noticias/governo-anuncia-medidas-economicas-para-ajudar-produtores-rurais-afetados-pela-pandemia-do-coronavirus>.
- Mazzucato, M., and Penna, C.C. 2016. "Beyond market failures: The market creating and shaping roles of state investment banks." *Journal of Economic Policy Reform*, 19(4), 305-326.
- McKinnon, R.I. 1973. *Money and capital in economic development*. Washington, D.C, Brookings Institution Press.
- Meinusch, A., & Tillmann, P. 2016. "The macroeconomic impact of unconventional monetary policy shocks." *Journal of Macroeconomics*, 47, 58-67.
- Menezes, F.Z. 2020. "Another effect of COVID-19: Latin America will test negative real interest rates for the first time". *Latin America Business Sto-*

- ries Website. <https://labs.eban12.com/en/news/economy/negative-interest-rates-latin-america>.
- Ministério da Economia. 2020. “Levantamento dos empréstimos concedidos no âmbito dos programas do governo federal (empréstômetro).” <https://app.powerbi.com/view?r=eyJrIjoiYWUzMjRkMTgtZTY0MC00NTljLWJm-ZDctY2JmNDY3OTkzMzAxIiwidCI6ImNmODdjOTA4LTRhNjUtNGRlZS-05MmM3LTEeXZWE2MTVjNjMyZSIsImMiOjR9>.
- Minsky, H. 1986. “Stabilizing an Unstable Economy: The Lessons for Industry, Finance and Government.” *Hyman P. Minsky Archive*. no. 513. http://digitalcommons.bard.edu/hm_archive/513.
- Neder, V. 2020. “BNDES estima ficar com até 25% do financiamento que socorre o setor elétrico.” In *UOL/O Estado de São Paulo*. Published May 24, 2020. <https://economia.uol.com.br/noticias/estadao-conteudo/2020/05/24/bndes-estima-ficar-com-ate-25-do-financiamento-que-socorre-setor-eletrico.htm>.
- Paula, L.F. 2013. “Financiamento, crescimento econômico e funcionalidade do sistema financeiro: uma abordagem pós-keynesiana.” *Estudos Econômicos (São Paulo)*, 43(2), 363-396. <https://doi.org/10.1590/S0101-41612013000200006>.
- Rittner, D. 2020a. “BNDES recalibra Socorro às grandes empresas na pandemia”. *Valor Econômico*. Published August 4, 2020. <https://valor.globo.com/brasil/noticia/2020/08/04/bndes-recalibra-socorro-as-grandes-na-pandemia.ghtml>.
- Rittner, D. 2020b. “Operadoras de metrô e trens urbanos têm perdas de R\$ 4,5 bi”. *Valor Econômico*. Published August 4, 2020. <https://valor.globo.com/empresas/noticia/2020/08/08/operadoras-de-metros-e-trens-urbanos-tem-perdas-de-r-45-bi.ghtml>.
- Saiki, A., and Frost, J. 2014. “How Does Unconventional Monetary Policy Affect Inequality? Evidence from Japan.” *Council on Economic Policies (CEP) Working Paper*, 2.
- Schiozer, R. & Oliveira, R.F. 2013. “Transmissão assimétrica de choques de liquidez a bancos.” In: *Banco Central do Brasil (org) Relatório de Economia Bancária e Crédito*. Banco Central do Brasil. https://www.bcb.gov.br/content/publicacoes/relatorioeconomiabancaria/RELECON13-rebc_2013.pdf.

- SEBRAE/FGV. 2020. “Crédito para o Brasil para MPES em tempo de Covid-19.” *Relatório produzido pela Fundação Getúlio Vargas sob encomenda do Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE)*. https://fgvprojetos.fgv.br/sites/fgvprojetos.fgv.br/files/credito_no_brasil_para_mpes_em_tempo_de_covid19_v08_site_1.pdf.
- Servo, F. 2019. “Evolução do crédito rural nos últimos anos-safra.” *Carta de Conjuntura*, 43(2). 1-8, IPEA. http://repositorio.ipea.gov.br/bitstream/11058/9286/1/cc_43_nt_evolu%c3%a7%c3%a3o%20do%20cr%c3%a9dito_rural.pdf.
- Shaw, E.S. 1973. *Financial deepening in economic development*. New York, Oxford University Press.
- Stiglitz, J.E. 1993. “The role of the state in financial markets.” In *The World Bank Economic Review*, 7 (sup.1), 19-52.
- Torres Filho, E.T., & da Costa, F.N. 2013. “Financiamento de longo prazo no Brasil: um mercado em transformação.” Texto para Discussão no. 1843, IPEA. <https://www.econstor.eu/bitstream/10419/121601/1/821942573.pdf>
- Valor Econômico. 2019. “Ranking dos 100 maiores bancos do Brasil.” <https://www.valor.com.br/valor1000/2018/ranking100maioresbancos>.
- Vasconcelos, D.S., Klaumann, A.P. and Ipiranga, A.H. 2018. “Bancos públicos e política anticíclica: uma análise exploratória com indicadores de alavancagem e liquidez da Caixa Econômica Federal, Banco do Brasil e BNDES, no período de 2005 a 2014.” *Textos de Economia*, 21(2), 26-49.
- Vidotto, C.A. 2005. “O PROER no Centro da Reestruturação Bancária Brasileira dos Anos Noventa.” *Texto para discussão no. 172*. <http://www.abphe.org.br/arquivos/carlos-augusto-vidotto-resumo-e-completo.pdf>.
- World Bank. 2020. “Fiscal Year 2019 Data.” *Annual report 2019* <https://www.worldbank.org/en/about/annual-report/fiscal-year-data>.
- Yeyati, E.L., Micco, A., Panizza, U., Detragiache, E., and Repetto, A. 2007. “A Reappraisal of State-Owned Banks [with Comments].” *Economía*, 7(2), 209-259.
- Zaia, C. 2020. “Sobem os juros em operações de crédito rural.” *Valor Econômico*. Published June 10, 2020. <https://valor.globo.com/agronegocios/noticia/2020/06/10/sobem-os-juros-em-operacoes-de-credito-rural.ghtml>.

