

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BRAZIL

**PROMOTION AND INNOVATION OF ACCESS TO MULTISECTOR MEDIUM AND
LONG-TERM CREDIT FOR PRODUCTIVE INVESTMENTS BY MICRO, SMALL AND
MEDIUM ENTERPRISES (MSME)**

(BR-L1521)

**SECOND INDIVIDUAL OPERATION UNDER THE CONDITIONAL CREDIT LINE FOR
INVESTMENT PROJECTS (CCLIP) FOR FINANCING PRODUCTIVE AND
SUSTAINABLE INVESTMENTS**

(BR-O0001)

LOAN PROPOSAL

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ABBREVIATIONS	
AOP	Annual Operating Plan
BACEN	Central Bank of Brazil
BNDES	<i>Banco Nacional de Desenvolvimento Econômico e Social</i>
CCLIP	Conditional Credit Line for Investment Projects
CGU	<i>Controladoria Geral da União</i>
DD	Difference-In-Difference
DIA	<i>Desarrollo en las Américas</i>
EA	Executing Agency
ECLAC	Economic Commission for Latin America and the Caribbean
E&S	Environmental and Social
ESMR	Environmental and Social Management Report
FE	Fixed Effects
FEBRABAN	<i>Federação Brasileira de Bancos</i>
FGI	<i>Fundo Garantidor para Investimentos</i>
FI	Financial Institutions
FINTECH	Financial Technology
GDP	Gross Domestic Product
IBGE	Brazilian Institute of Geography and Statistics
IDB	Inter-American Development Bank
IPEA	Instituto de Pesquisa Econômica Aplicada
IRR	Internal Rate of Return
LAC	Latin America and the Caribbean
MARVIM	<i>Modelo Automatizado em R para Verificação de Impacto</i>
MSE	Micro and Small Enterprises
MSME	Micro, Small and Medium Enterprises
NDB	National Development Banks
NPL	Non-Performing Loans
NPV	Net Present Value
OECD	Organization for Economic Co-operation and Development
OPR	Operational Program Report
OR	Operating Regulations
OVE	Office of Evaluation and Oversight
PSM	Propensity-Score Matching
RAIS	<i>Relação Anual de Informações Sociais</i>
SEBRAE	<i>Serviço Brasileiro de Apoio às Micro e Pequenas Empresas</i>
SECEX	<i>Secretaria de Comércio Exterior</i>
SERASA	<i>Centralização de Serviços Bancários</i>
SFN	<i>Sistema Financeiro Nacional</i>
SME	Small and Medium-sized Enterprises
TLP	Market-indexed Long-term Rate
UIS	Update to the Institutional Strategy
WEF	World Economic Forum
WEO	World Economic Outlook

PROJECT SUMMARY
BRAZIL
PROMOTION AND INNOVATION OF ACCESS TO MULTISECTOR MEDIUM AND LONG-TERM CREDIT FOR
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(BR-L1521)
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Financial Terms and Conditions				
Borrower: <i>Banco Nacional de Desenvolvimento Econômico e Social - BNDES</i>			Flexible Financing Facility^(a)	
			Amortization Period:	25 Years
Guarantor: Federative Republic of Brazil			Disbursement Period:	4 Years
			Grace Period:	5.5 Years ^(b)
Executing Agency: BNDES			Interest rate:	LIBOR Based
			Credit Fee:	(c)
Source	Amount (Millions US\$)	%	Inspection and supervision fee:	(c)
IDB (Ordinary Capital):	750.0	83.3	Weighted Average Life WAL:	15.25 years ^(d)
Local	150.0	16.7	Currency of Approval:	Dollars of the United States of America
Total:	900.0	100		
Project at a Glance				
Project Objective/Description: The general objective of the second program under the CCLIP is to promote productive investments by MSMEs in Brazil, to support growth, job creation and productivity gains in the long term. The specific objectives are: (i) increase and strengthen MSME access to credit, including new opportunities opened up by digital channels; and (ii) to ensure availability of medium and long-term financing for MSMEs in Brazil.				
This program is the second individual loan operation under the CCLIP approved by the Board of Executive Directors by Resolution DE-129/16.				
Special Contractual Clauses prior to the first disbursement of the financing: Prior to the first disbursement of the loan, BNDES shall provide evidence of approval and entry into effect of the Operational Regulations (OR) of the program in terms previously agreed with the Bank (¶3.6).				
Exceptions to Bank Policies: In an identical manner, as in the first individual loan operation under the CCLIP, for this second program the guarantee of the Federative Republic of Brazil will be limited to BNDES' financial obligations under the loan (including repayment of principal, payment of interest and other financial charges); and will not cover the performance obligations and local counterpart contribution. Consequently, it is proposed that a partial waiver to the Bank's policy on guarantees required from the Borrower (document GP-104-2) be approved by the Board of Executive Directors (¶3.5).				
Strategic Alignment				
Challenges^(e):	SI	<input type="checkbox"/>	PI	<input checked="" type="checkbox"/>
Cross-Cutting Themes^(f):	GD	<input type="checkbox"/>	CC	<input type="checkbox"/>
			IC	<input type="checkbox"/>

^(a) Under the Flexible Financing Facility (FN-655-1), the borrower has the option to request modifications to the amortization schedule as well as currency and interest rate conversions. In considering such requests, the Bank will take into account operational and risk management considerations.

^(b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded

^(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with the relevant policies.

^(d) The original WAL of the loan may be lower depending on the signature date of the loan agreement.

^(e) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(f) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, Justification

- 1.1 The Brazilian economy is recovering after two years of negative growth, but recent data suggests a weakening pace. As of July 2018, growth projections for 2018 and 2019 were 1.50% and 2.50%. Given this scenario, unemployment rate is expected to continue high: 11.6% at 2018 and 10.5% in 2019, albeit less than the 12.8% recorded in 2017.¹
- 1.2 The macroeconomic policy framework is supported by some positive aspects. Inflation is within the target band, with anchored expectations, and policy rates are at historical low levels. The floating exchange rate has acted as a shock absorber and the external accounts have undergone significant adjustments. In addition, external buffers are substantial, allowing the partial smoothing of excessive volatility in financial markets.
- 1.3 However, the fiscal outlook remains a core source of risk. Public debt is high and fiscal sustainability requires structural reforms. The political environment is not conducive to reform implementation at the current juncture as national elections approach (October 2018). The next government will need to gather political capital and quickly advance with an ambitious reform program; otherwise the country will become more vulnerable to confidence shocks, which could trigger sudden tightening of financial conditions, impacting economic growth.
- 1.4 **Micro, Small and Medium Enterprises (MSME) contribute largely to the Brazilian economy and job creation.**² MSMEs represent 99.4% of total firms in Brazil,³ contributing to 54% of formal employment in the country and 43% of total wages in the economy.⁴ In terms of economic activity, the formal Small and Medium-sized Enterprises (SME) market is dominated by the retail and service sector (81%), followed by agriculture (10%) and manufacturing (9%). On account of conditions related to the size of the market, infrastructure, workforce, and the like, SMEs are concentrated (67%) in the southeast region. The smallest companies⁵ employ 1.38 million people and are responsible for US\$61.06 billion of sales in Brazil. There are 88,400 small companies in the Brazilian productive sector, 25,200 of which are considered innovative. However, a very small number of these companies (2,700) invest in R&D, adding up to US\$219.2 million investments per year. Most innovative small businesses buy machinery and equipment to innovate. There are 17,300 companies that invest US\$1.8 billion in the modernization of their factories to launch new products and processes every year.

¹ Central Bank Focus Expectations Survey, May 2018 and World Economic Outlook (WEO) 2018.

² Throughout this document, data is not always inclusive of MSMEs and some references will be made to either Small and Medium Enterprises (SME) or Micro and Small Enterprises (MSE). This is due to the different cohorts used in the data available from different sources. The contextual analysis hence provides in some cases a bottom range for the dimension of the problem, as the sector's contribution to the wider economy, the financing gap and related issues described in the following sections would most likely be larger if data presented were inclusive of MSMEs in all cases.

³ From these, almost 83% are estimated to be microenterprises.

⁴ *Uma Análise Comparativa das abordagens do BID no Apoio às PMEs: Analisando Resultados no Setor Industrial Brasileiro*, IDB, Washington, 2014.

⁵ *Instituto Brasileiro de Geografia e Estatística (IBGE) – PINTEC data*, includes only firms that employ 10 to 29 persons.

- 1.5 A variety of factors drive company size and the firm structure of a country. In Brazil, important deficiencies that affect the entire productive sector, such as the business climate and inadequate infrastructure, still prevail.⁶ All in all, it is estimated that SMEs contribution to Brazil's Gross Domestic Product (GDP) is in the order of 20%,⁷ less than half the average contribution of SMEs in Organization for Economic Co-operation and Development (OECD) countries, which may be an indication of large productivity gaps of Brazilian SMEs.⁸ Broadly speaking, firm size and growth dynamics have an effect on productivity. On average, larger firms are more productive than smaller ones as a result of economies of scale, especially in the manufacturing sector.⁹ In Brazil, the data on net revenues of firms in the industry and services sectors by size shows that productivity (measured as the relation of net revenue per worker) is lower in smaller firms, and that it increases together with [firm size](#). In a vicious cycle, as low productivity (inefficient operational levels) produces less profitability, MSMEs are less able to make the investments needed to improve their performance and productivity, and hence cannot expand or compete in wider markets. Given the large number of jobs that MSMEs represent for the Brazilian economy, an increase in systemic productivity that does not results from the elimination of jobs, but that is rather inclusive, calls for efforts of public policies directed to the less productive strata; that is, the segment of MSMEs.¹⁰
- 1.6 **Smaller firms have been proved to receive a strong boost in growth when financing is provided; yet, MSMEs face harsh credit constraints.** Firm-level, cross-country evidence from the World Bank shows that “access to and use of finance favorably affect firm performance”, including entry, growth, innovation, equilibrium size, and risk reduction. At the aggregate level, economic performance is also improved by having stronger financial systems.¹¹ But around the world, especially in developing economies, MSME financing gaps are pervasive. In addition to the structural issues limiting the supply of credit, there are many factors constraining lending to the MSME sector, among which are: (i) limited availability of information (credit scores, proper financial statements, legal documentation, national databases, etc.); (ii) high financing needs in relation to their income; (iii) lack of tangible assets for collateral, a more stringent requirement by Financial Institutions (FI) when evaluating loans to smaller firms; and (iv) higher transaction costs for lenders, associated to relatively smaller loans. Asymmetries of and deficiencies in

⁶ The [2017-18 Global Competitiveness Index](#) by the World Economic Forum (WEF) places Brazil in the 80th position among 137 countries, a significant drop from its 48th position (out of 144 countries) in the 2012-13 ranking. In the World Bank's [2017-2018 Ease of Doing Business](#), Brazil has remained between the 120th and 130th position (out of 190 countries) over the last 10 years. In the most recent survey, the country fell two positions, to rank 125. Among the 32 participating countries from Latin America and the Caribbean (LAC), Brazil ranks 22nd. For an assessment on challenges faced by the local productive sector, see *Estratégia Nacional de Desenvolvimento Econômico e Social, Ministério do Planejamento, Desenvolvimento e Gestão*, Brazil, 2018.

⁷ Ibid. [4].

⁸ Across LAC, large enterprises are estimated to be 6 times more productive than SMEs. In developed economies, this ratio is only 1.3 to 2.4. OECD, Paris, 2013.

⁹ [Small, Medium, Strong. Trends in SME Performance and Business Conditions](#), OECD, Paris, 2017.

¹⁰ Nogueira, M., [Um pirilampo no porão: um pouco de luz nos dilemas da produtividade das pequenas empresas e da informalidade no Brasil](#), IPEA, Brasília, 2017 and [Pequenas e Médias Empresas, Crédito e Produtividade](#).

¹¹ Beck, T. and Demirgüçkunt, A., Firms' Access to Finance: Entry, Growth, and Productivity, The World Bank Economic Review, Washington, D.C., 2012. See also [Report on Support to SMEs in Developing Countries Through Financial Intermediaries](#), Dalberg Global Development Advisors, Geneva, 2011.

information, collateral and operational efficiency hamper FIs' risk assessment of these firms, especially those starting-up or investing in innovation.¹²

- 1.7 There is held assessment that MSMEs in Brazil have more difficulty to access public and private financing for their productive activities in general and especially for developing new products and processes. According to a study by the Brazilian Institute of Geography and Statistics (IBGE),¹³ Brazilian SMEs in fact suffer from rationing in the credit market, which affects their survival, growth and ability to increase productivity. Their analysis shows that almost half of these firms only survive for a period of four years, partly because of low productivity and lack of credit. In its 2017 survey on MSE financing in Brazil,¹⁴ the *Serviço Brasileiro de Apoio às Micro e Pequenas Empresas* (SEBRAE) found that these firms largely depend on their suppliers for financing. Only 11% report they have loans from private banks and 5% from credit cooperative, 11% use public bank loans and 3% have microcredit. All these financing sources show a declining trend since 2015, and only financing from “family and friends” and “other” sources of financing grew in that same period. Also, 66% of firms report they use own resources to finance fixed investment and 82% of firms that tried to access credit in 2017 report they faced difficulties to obtain it.¹⁵ More specifically, the percentage of financing with own funding for R&D activities of smaller companies is between 85% and 87%, and between 63% and 79% for other innovation activities.¹⁶
- 1.8 **Brazil's financial system is one of the largest in the region, but still lacks important elements to consolidate its development.** According to WEF's Financial Market Development Index,¹⁷ Brazil stands below average, ranking 92th among 137 countries. In the World Bank's [2017-2018 Ease of Doing Business](#), Brazil ranks 105th in the “Getting Credit” category, from a list of 190 countries. Notwithstanding its position, these indexes are heavily burdened by affordability of the financial service provided and efficiency of financial institutions. The *Sistema Financeiro Nacional* (SFN) is composed by 551 FIs authorized by the monetary authority, from which 171 are banking institutions. The system is highly concentrated, with the six largest banking institutions – Itaú, Banco do Brasil, Caixa Econômica Federal, Bradesco, *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES) and Santander – accounting for 78% of total assets of the financial system, and 83% of total credit operations.¹⁸
- 1.9 As noted by the OECD in its most recent report on SME finance,¹⁹ in addition to the inherent characteristics of SMEs regarding risk (see ¶1.6), banks appear to have become more risk-averse after the most recent crisis and are reluctant to offer these

¹² Ibid. [9], Chapter 4; Ibid. [10], Chapter 3; [G20/OECD High-Level Principles on MSME Financing](#), OECD, 2015.

¹³ [Demografia das Empresas](#), IBGE, Brazil, 2013.

¹⁴ [O Financiamento das MPE no Brasil](#), SEBRAE, Brazil, September 2017.

¹⁵ Difficulties reported include lack of collateral, accounting and fiscal documentation, high interest rates.

¹⁶ Ibid. [5].

¹⁷ [2017-18 Global Competitiveness Index](#), WEF, 2018.

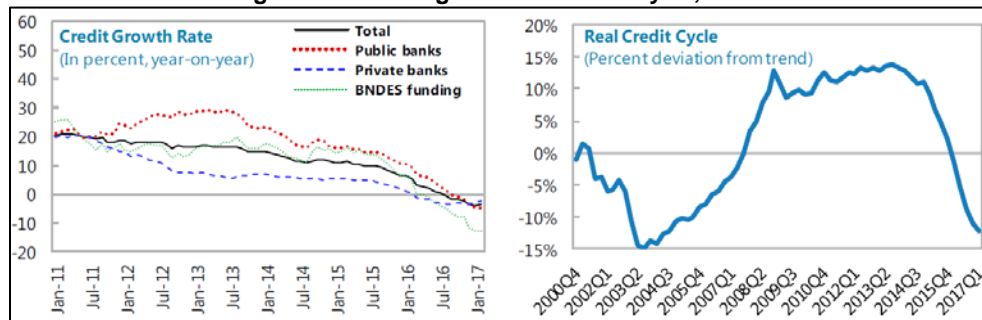
¹⁸ Central Bank of Brazil (BACEN). High concentration of the financial system tends to lead to higher interest rates as a result of less competition. It has also been argued that more competition lowers the probability of a country suffering a systemic banking crisis. Bank Concentration and Crises, National Bureau of Economic Research, 2018.

¹⁹ [Financing SMEs and Entrepreneurs 2018: An OECD Scoreboard](#), OECD, Paris, February 2018.

firms long-term, less expensive credit.²⁰ In fact, the cost of financing charged by FIs (spread) in Brazil shows a growing trend since 2013, reaching 22% in 2016, more than twice as much the spreads of Mexico (9.1%), Chile (4.3%) or Colombia (3.9%).²¹ While lending interest rates are still affected by risk-averse influenced spreads, the government has been making continuous efforts to cut interest rates, bringing the SELIC rate²² to its lowest level since 1986. As a result, SME interest rates have been decreasing but still remain relatively high, at 33.5%.²³ Furthermore, this rate is 12.7 percentage points higher than that offered to large enterprises.

- 1.10 Inadequate conditions and structural issues pertaining local financial markets in Brazil leave smaller firms underserved or plainly without access to finance, limiting private investment.²⁴ As evidence above shows, the problem is aggravated by the current juncture of an economy just recovering from one of the deepest recessions in the country's history (see ¶1.1 to ¶1.3). Credit growth continues to decelerate on account of weak demand and conservative supply, and the downturn phase in the credit cycle has been deepening since 2016 (see Figure 1.1).

Figure 1.1.- Credit growth and credit cycle, Brazil



Source: International Monetary Fund (IMF) Country Report No. 17/215, Brazil: Article IV Consultation Staff Report, July 2017

- 1.11 After a period of steady growth since 2007, mainly triggered by public bank lending, in 2016 credit to GDP in Brazil begun to shrink, falling from a peak of 54% in 2015 to 49.6% in 2016 and 47.1% in 2017. In particular, lending to firms has experienced falls

²⁰ Non-Performing Loans (NPL) in Brazil rose in 2016 compared to pre-crisis levels, particularly for SMEs, which influences risk perceptions of FIs. In 2017, NPLs were at 3.2% (BACEN).

²¹ *O Estudo do spread bancário*, Accenture for *Federação Brasileira de Bancos (FEBRABAN)*, Brazil, 2017. Among the reasons for the country's high spreads, the study enumerates: high cost of provisions, high levels of NPL, inefficient judicial system (increasing recovery cost of guarantees), high levels of taxation on banks, operational costs of banks, and concentration among banks.

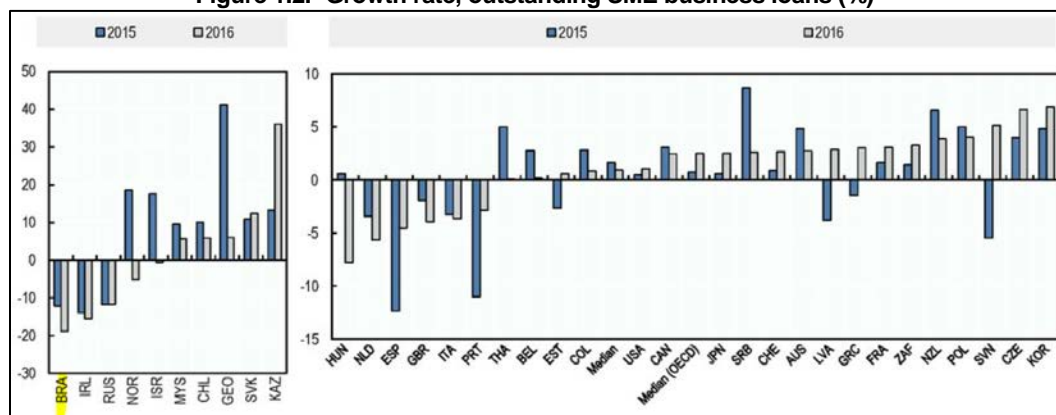
²² The *SELIC* is a target interest rate set by the central bank to influence short-term interest rates as part of its monetary policy strategy. It is currently set at 6.5% (since March 2018), a significant cut from its most recent peak in 2016, when it reached 14.25%.

²³ Data from 2016. To provide ground for comparison, these rates are 9.2% in Mexico, 9.25% in Chile, and 16.87% in Colombia.

²⁴ *Brazilian's Manufacturing Sectors: Empirical Results from Panel Data and Fixed Effects' Models*, Ferreira, H. and Tasso, J., Innovation Center *Fundação Dom Cabral*, Brazil, 2014. Using sectorial industry data for the period of 1996-2010, the study reveals the importance of available funds volume for investment, indicating that financing from own resources and subsidized credit can significantly affect private sector's investment. In addition, economic instability adversely affected private investment during this period. Similarly, a previous study analyses private investment in Brazil over the period of 1970-2005, finding that "a reduction in credit volume and the existence of political and economic instabilities are shown to be harmful to private investment in the analyzed period". Luporini, V. and Alvez, J., *Private investment: An empirical analysis for Brazil*, *Economia e Sociedade* 19(3): 449-475, Brazil, 2010.

since 2014, as outstanding portfolio of credit to firms of all sizes went from R\$2.4 trillion (US\$630 billion) by end of 2014 to R\$1.9 trillion (US\$500 billion) in 2016. Credit portfolios of MSMEs over that period display negative growth rates of -37%, -36%, and -23%, respectively, compared to large firm credit portfolio, which fell only by 15%.²⁵ Moreover, the OECD finds that declining growth rates of the outstanding stock of SME loans are influenced by the maturities of loans and the pace and performance of repayments of these loans. Hence, greater levels of decline in the stock outstanding may be related not only to a reduction in the flow of new loans, but also to the term-composition of the book, as loans with shorter terms will mature earlier²⁶ (see [Optional Link 5](#)) and Figure 1.2 below.

Figure 1.2.- Growth rate, outstanding SME business loans (%)



Source: Financing SMEs and Entrepreneurs 2018, OECD

- 1.12 The OECD also observes that the share of SME loans as a percentage of total business loans in Brazil has been “declining substantially” since 2010.²⁷ Although they point out how declining rates for this indicator may be affected by demand-side factors (as well as the use of alternative sources by large enterprises in times of crises), in the case of Brazil declines are likely due to access to bank credit for SMEs remaining more difficult compared to large enterprises. Particularly for MSEs, credit share in total portfolio fell from 17.5% at end of 2014 to 14.4% by the first trimester of 2017.²⁸ Inflation-adjusted growth of new SME loans in Brazil has declined continuously and increasingly since 2014 (see Figure 1.3). While a declining rate can be attributed to a variety of factors (including lower demand for credit, lower investment dynamics or FIs becoming more risk-averse), in Brazil the decline “appears mainly due to unfavorable macro-economic conditions”.²⁹

²⁵ Ibid. [14]. Data from end of 2014 to first trimester of 2017 from BACEN.

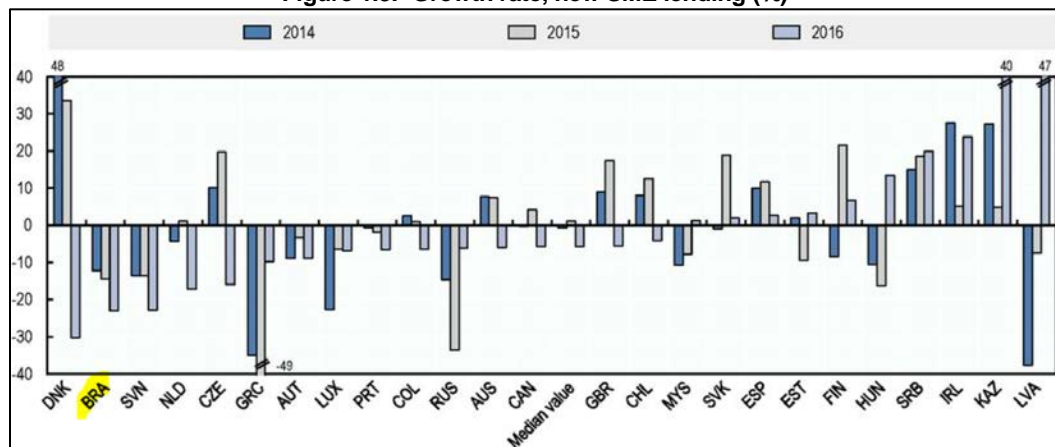
²⁶ Ibid. [19].

²⁷ In contrast, the overall trend in the evolution of SME loans across countries in LAC has been upward.

²⁸ Ibid. [14].

²⁹ Ibid. [19].

Figure 1.3.- Growth rate, new SME lending (%)



Source: Financing SMEs and Entrepreneurs 2018, OECD

- 1.13 **Public intervention via National Development Banks (NDB).** The analysis presented shows that reduced MSME credit in Brazil derives from both supply-side (risk-aversion of FIs and tightened credit standards) and demand-side (overall economic environment and slow investment recovery amidst recession) factors. Across the region, NDBs have progressively increased their role in filling major financing gaps and developing long-term financing. Furthermore, the countercyclical role they play in response to global financial crises becomes crucial, as they contribute to support investment and mobilize broader financial resources in times of recession, helping governments in the pursuit of economic recovery.³⁰ In Brazil, BNDES is the largest national development bank and represents the main source of long term financing for investment in the country (see [Optional Link 4](#) and [Optional Link 5](#)).
- 1.14 In 2016, BNDES support to MSMEs reached its record high in since 2004 with 53% share of total disbursements going to MSMEs.³¹ In terms of number of operations, the share is around 96%. BNDES implements several initiatives for improving access to credit by MSMEs with aims to supporting their growth, almost entirely over second-tier transactions via its broad network of accredited FIs (see [Optional Link 10](#) and [Optional Link 11](#)). These initiatives include a variety of dedicated product lines such as the [Fundo Garantidor para Investimentos](#) (FGI),³² credit products tailored to the specific needs of these firms (*Programas Agropecuarios*, *BNDES Finame*, *Cartão BNDES*, *BNDES Automatico*, *BNDES Microcredito*)³³ and,

³⁰ [Bancos públicos de desarrollo ¿Hacia un nuevo paradigma?](#), De Oloqui, F. et al., IDB, 2013; *Investment Financing in the Wake of the Crisis: The Role of Multilateral Development Banks*, Chelsky, J. et al., World Bank, 2013.

³¹ *Relatório de Efetividade 2017*, BNDES, Brazil, 2018. See also [Optional Link 12: Apoio do BNDES às Micro, Pequenas e Médias Empresas](#).

³² The BNDES FGI is a credit guarantee fund that covers 20% to 80% of second-tier loans, thereby increasing the chance of applicants to get their loans approved. Well-gained reputation of this product among FIs has a positive effect in credit conditions, leading to longer terms, less constraints, and in some cases lower rates.

³³ For a complete list of BNDES products tailored for MSME, see [Opções de Financiamento para MPMEs](#) and [Optional Link 12: Apoio do BNDES às Micro, Pequenas e Médias Empresas](#).

most recently, digital innovations including their specialized MSME portal “*Canal do Desenvolvedor MPME*” (see ¶1.19), the BNDES Apps for MSME (*Aplicativo BNDES MPME*, *Aplicativo BNDES Agro*) and a range of [online services](#). Moreover, their extended network of FIs does not only contribute to providing nation-wide access to financing,³⁴ but it also has been found to operate in a much less concentrated manner than the SFN: the four largest FIs operating second-tier BNDES financing products concentrate 42% of the activity, while the four largest FIs in the SFN take up as much as 78.5%³⁵ (see [Optional Link 5](#)).

- 1.15 Despite the expansion and specialization of their MSME-oriented financing products, BNDES still reaches only a relatively low share of MSMEs. According to SEBRAE, in 2017 79% of MSE reported they had never used BNDES products. Another study by the Economic Commission for Latin America and the Caribbean (ECLAC) finds a share of MSMEs supported by BNDES of 6.1% micro, 17.2% small and 25% medium - although they note a significant improvement from 2007, when these shares were 1%, 4.5%, and 11.1%, respectively.³⁶ While BNDES is actively pursuing a change in strategy in order to direct more of its efforts to MSMEs – indeed, this segment achieved record shares in BNDES portfolio in the past two years (see ¶1.14), the overall amount of disbursement fell drastically from 2016 to 2017, affecting the volume of financing for all firm sizes. When looking at outstanding loans, the volume of financing to MSE in general has experienced important declines in the portfolio of public banks since 2016, in as much as 30%; more than half of this fall is explained by a decrease in the volume of financing from BNDES.³⁷
- 1.16 **Digital innovation and Financial Technology (FinTech)³⁸ solutions may contribute to overcoming some of the challenges faced by MSMEs and FIs globally.**³⁹ As established above, several factors contribute to limiting lending to MSMEs, including those related to availability of information, collateral requirements, and transactional costs for borrowers and lenders (see ¶1.6 and ¶1.7). Digital technology reduces operating and transaction costs primarily by optimizing processes that are typically paper-based and require human intervention, such as loan applications and credit scores. Moreover, the use of digital channels reduces costs related to delivery, that typically act as a barrier to serve many firms, particularly the smallest ones, while it also reduces the time and effort dedicated by these firms for loan applications. New technologies also provide the potential for easing some of the constraints associated with information asymmetries and incomplete information through models based on digital data; for example, by using the digital footprint left behind by companies.⁴⁰

³⁴ In 2017, second-tier MSME operations were approved in 85% of municipalities in Brazil, with regional coverages ranging from around 65% in the northeast to 100% in the south.

³⁵ Data from 2017 provided by BNDES, based on the *Relatório de Estabilidade Financeira* from BACEN, April 2018. The 2016 and 2015 figures show the same concentration patterns for both groups.

³⁶ De Paula, Germano, [Inclusão financeira de pequenas e médias empresas no Brasil](#), ECLAC, 2017. Data presented as of 2014.

³⁷ Ibid. [14].

³⁸ FinTech, a contraction of “finance” and “technology”, is defined as the use of technology and innovative business models in financial services.

³⁹ [The Future of FinTech A Paradigm Shift in Small Business Finance](#), World Economic Forum, Switzerland, 2015.

⁴⁰ Support to SMEs and Financial Access/Supervision Sector Framework Document GN-2768-7, IDB, Washington D.C., 2017.

- 1.17 The advantages of digital models relative to traditional financial sector processes, paired with the market opportunity provided by segments that remain financially excluded or underserved, have fostered the rapid growth of FinTech companies and startups that offer new and innovative business models tailored to every segment, including MSMEs. This, in turn, increases competition and progressively drives incumbent FIIs to improve efficiency and their offerings with or without potential partnerships with FinTech firms.⁴¹ As such, the potential to expand the financing frontier for MSMEs through digital solutions that: (i) improve origination terms, by reducing the problem of information asymmetry; and (ii) facilitate distribution through purely online channels, is increasingly considered as critical to efforts that aim to improve productive financing.⁴²
- 1.18 Brazil has the largest FinTech market in LAC with 380 companies operating across all segments, representing 33% of the region's market and the main destination of Venture Capital investments. Brazil is also the fourth largest adopter of FinTech solutions among 20 markets studied by the 2017 EY FinTech Adoption Index, with 57% of Brazilian respondents declaring that they prefer digital channels. This, together with a 65% growth in the number of FinTech companies in the country between 2017 and 2018, and the sustained increase in investments, demonstrates a dynamic and maturing market. Considering the country's highly-concentrated banking sector, it is expected that the impact from FinTech disruption will be greater in Brazil than in other countries and a wave of partnerships of FinTech companies with traditional institutions is also expected. In the longer term, as the broader banking system deploys these innovations more extensively, lending costs are bound to decrease, which should have a positive impact on risk spreads, maturities and collateral requirements. (See [Optional Link 7](#)).
- 1.19 BNDES is already implementing the use of technology and digital channels through a comprehensive strategy to redesign and digitalize its second-tier operation via BNDES online (see [Optional Link 9](#)). The strategy has been designed to reduce transactional costs, improve compliance and security in transactions, reduce bureaucracy with a paperless policy and reduce maintenance costs of underlying operating systems via integration of processes and databases. As of May 2018, 57% of their lines targeted to MSME had completed the digitalization process. The recently implemented "[Canal do Desenvolvedor MPME](#)" provides potential borrowers with a one-stop platform to facilitate access to information on their products and accredited FIIs offering them, as well as automating some of the procedures associated to starting loan applications. More than 46,000 applications have been processed through this channel since its implementation, with over 100,000 proposals sent to FIIs connected to the platform equivalent to some R\$200 million (US\$53 million).
- 1.20 Since the beginning of 2018, BNDES has also started a plan to integrate FinTech solutions to its Canal MPME. The first step was a public tendering process for

⁴¹ Fintech and the Financing of Entrepreneurs: From Crowdfunding to Marketplace Lending. Mark Fenwick, Joseph a. McCahery and Erik P.M. Vermeulen, ECGI Working Paper Series in Law N° 369/2017, 2017.

⁴² For example, in the United Kingdom, the British Business Bank (the National Development Bank for small businesses) moved to significantly capitalize Funding Circle, an online lending FinTech, to leverage nearly US\$700 million in SME loans. Since its inception, Funding Circle has lent £5 billion to businesses. In the United States, the Small Business Administration has created its own online platform to connect investors to SMEs seeking credit.

FinTechs providing solutions for connecting potential borrowers with FIs, including aspects related to credit score analysis, financial education, matching (of applicants with FIs), and reverse auctions.⁴³ These solutions are aimed at improving access to BNDES funding by MSMEs, by providing alternative ways to better identify the product that best matches the client needs, reducing the use of unnecessary documentation, increasing knowledge about credit demand and enhancing the transparency and ease of applying for a credit, specifically addressing common barriers MSMEs face. As the use of these alternative channels is expected to accelerate, BNDES will require additional resources to source the increasing demand and secure funding for MSMEs using them. Coupling the lack of long-term capital to MSMEs and the importance of BNDES' role in this space with the initiative to move toward alternative channels that mitigate barriers, an IDB intervention to support and complement BNDES' initiatives, seems appropriate (see [Optional Link 9](#)).

- 1.21 **Problem addressed by the program.** The proposed program intends to address the lack of sufficient funds available for medium and long-term credit for productive investments by MSMEs in Brazil. Issues related to adverse selection and moral hazard and higher costs of serving smaller firms, result in potential lenders attributing higher risks of default and denying credit to MSMEs, which often lack credit history, adequate collateral and expertise to produce sophisticated financial statements, particularly for investments and activities that require longer payback periods. But even if impediments related to information, collateral and transactional costs may be partly offset by innovation and FinTech (see ¶1.16 to ¶1.20), the structural constraints of the financial system and trends in allocation of resources seem to confirm that supply of funds is still insufficient to meet the demand for medium and long-term credit by MSMEs. Insufficient access to credit, in turn, negatively impacts MSMEs' capacity to invest, diminishing their capacity to grow and become more productive.
- 1.22 **Magnitude of resources needed.** Globally, the total credit gap for all formal and informal SMEs is estimated to be between US\$2.4 and US\$3.5 trillion. In LAC, the total credit gap is around US\$225 billion.⁴⁴ Based on the size of the economies in LAC, since Brazil represents some 33% of regional GDP,⁴⁵ a simple extrapolation would result in a rough estimation of US\$74.4 billion SME credit gap for Brazil providing a sense of the significance of the problem. If the statistic included microenterprises, the gap would turn out even higher. Although this is an extra simplification of the calculation the result is reasonable given that only 11% of MSMEs have financing from private banks and most must rely on suppliers or other resources for financing. In fact, a recent study by the IFC suggests that the MSME finance gap in Brazil is significantly larger, roughly US\$626 billion, equivalent to some 35% of its GDP. The study values the unmet demand for financing in the MSME segment in 182 developing countries at US\$5.2 trillion.⁴⁶
- 1.23 **IDB experience and lessons learned.** There is substantial literature that suggests that well-targeted policies aimed at promoting MSMEs can lead to positive

⁴³ Out of 23 participants in the first round, 20 FinTechs have been selected for the proof-of-concept phase.

⁴⁴ [International Finance Corporation \(IFC\) Enterprise Finance Gap Database](#).

⁴⁵ The size of Brazil within the LAC economy was determined using estimations on GDP (Purchasing Power Parity) of 32 countries in LAC from the International Monetary Fund. [World Economic Outlook Database, October 2017](#).

⁴⁶ [MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small and Medium Enterprises in Emerging Markets](#), IFC, Washington D.C., 2017.

development outcomes. A significant number of interventions have been designed to improve access to credit and provide MSMEs with the capital they need to untap their full potential. While literature on the impact of credit access specifically on MSME productivity is limited, studies have broadly demonstrated the relationship between a higher level of credit to the private sector and an increase in productivity,⁴⁷ and there are some examples on evaluations of MSME access to finance support in the region.

- 1.24 In 2014, IDB's Office of Evaluation and Oversight (OVE) published the results of an empirical analysis of the various types of programs through which the IDB supports SMEs in Brazil.⁴⁸ While the evaluation focuses on SMEs in the manufacturing sector only, it provides some insight on the effectiveness of models of interventions or financial instruments implemented by Brazilian institutions with IDB support. Out of the various interventions analyzed, credit support is the only one observed to significantly affect all outcome variables, showing the most positive impact on employment and wages. Evaluators found evidence that establishments participating in a credit support program experienced a 13% increase in their number of workers, 1.4% increase in wages and significant gains in the value of exports and trademark registrations. Estimations on the duration of program support effects also show credit support as the most positive type of intervention, with durations of some 15 and 9 years on the effect on jobs and wages, respectively. Eslava et al.⁴⁹ found evidence of more than 19% growth in employment and 22% growth in productivity in firms benefitting from Colombian Bancoldex credit resources. Particularly in Brazil, De Negri et al.⁵⁰ found that SME access to Brazilian public credit lines has a significant positive impact on employment, although they did not find evidence of effects on productivity. Similarly, Machado et al.⁵¹ found positive impacts on employment from the use of the BNDES *Cartão* by MSE in Brazil. Another study by BNDES on its overall activity, analyzed ten financing instruments via its newly implemented system, *Modelo Automatizado em R para Verificação de Impacto* (MARVIm), including *Cartão* BNDES and acquisition of capital goods (a sub-group of BNDES *Finame*). In both cases, results show robust positive impacts on employment and gross income (close to 5% larger on treated MSMEs), and investment (rate increases considerably for treated MSMEs, in some cases doubling it).⁵² Thus,

⁴⁷ *Desarrollo en las Américas (DIA)*, "La era de la productividad: Cómo transformar las economías desde sus cimientos", IDB, Washintgon D.C., 2010; Ibid. [40].

⁴⁸ Ibid. [4]. The analysis defines SMEs as firms with 1 to 250 employees. It comprises programs implemented in Brazil between 2003 and 2012. The methodology used was a Fixed Effects (FE) model combined with Propensity-Score Matching (PSM) techniques and applies a Difference-in-Difference (DD) estimation as a robustness test purpose.

⁴⁹ Eslava, M., A. Maffioli, and M. Melendez, Second-tier government banks and access to credit: Micro-evidence from Colombia. IDB Working Paper Series No. 308. Washington, DC, 2012. The paper assesses effects of access to credit by comparing Bancoldex loans to loans from other sources and study the impact of Bancoldex credit on firms' subsequent credit history. It uses a combination of FE models and matching techniques.

⁵⁰ De Negri, J., A. Maffioli, C. Rodriguez, and G. Vazquez, The impact of public credit programs on Brazilian firms. IDB Working Paper Series No. 293. Washington, DC, 2011. The paper focuses on the impact of BNDES and FINEP credit lines in employment, labor productivity and exports, using a unique panel data set developed by the *Instituto de Pesquisa Econômica Aplicada* (IPEA) and quasi-experimental techniques (DD with matching methods for robustness check).

⁵¹ Machado, L., M. Parreiras, and V. Peçanha. *Avaliação de impacto do uso do Cartão BNDES sobre o emprego formal nas firmas de menor porte*, BNDES, Brazil, 2011. This study evaluates the impact of *Cartão* BNDES on employment, using data from BNDES and the *Relação Anual de Informações Sociais* (RAIS) from the Ministry of Labor and Employment of Brazil. The methodology used was DD.

⁵² Albuquerque, B. et al. *Uma solução automatizada para avaliações quantitativas de impacto: primeiros resultados do MARVIm*, BNDES, Brasil, 2017. The MARVIm tool is an automated system that performs impact evaluations on BNDES products using DD techniques with PSM on its own consolidated data from RAIS, the *Centralização de Serviços Bancários* (SERASA), and the *Secretaria de Comércio Exterior* (SECEX).

appropriately designed credit support emerges as a valuable tool to support employment, growth and productivity in MSMEs in Brazil.

- 1.25 IDB experience with MSME interventions in LAC countries, through sovereign and non-sovereign-guaranteed lending and technical cooperation, is extensive. More specifically, the IDB has successfully implemented several operations of second-tier financing for MSMEs via NDBs, including in Colombia ([4439/OC-CO](#)), Chile ([3677/OC-CH](#)), El Salvador ([3271/OC-ES](#)), Mexico ([3531/OC-ME](#)), Nicaragua ([3042/OC-NI](#)), Paraguay ([3354/OC-PR](#)), and Brazil ([2236/OC-BR](#)). In addition, BNDES successfully implemented the first loan under the CCLIP (loan [3866/OC-BR](#)), smoothly disbursing all its resources to projects with high environmental and social safeguards and technical quality that leveraged private investments in additional renewable energy capacity in Brazil and demonstrating their executing capacity and consolidating their relationship with the IDB. Building up on this experience, lessons and good practices have been incorporated in the design of the proposed program, including: (i) the inclusion of proper supervision of financial conditions at which resources are provided to final beneficiaries, in order to avoid market distortions and ensure additionality is not exhausted throughout the intermediation chain; (ii) guaranteeing institutional capacity of the NDB and FIs for adequately assessing and monitoring sub-loans, including risk management practices; (iii) establish relationships and commit the use of resources within the NDB to encourage high-quality execution of the program, with support of staff specifically responsible for responding for program activity; (iv) the encouragement of a formal monitoring and evaluation system so that local capacity is developed and the importance of accountability is understood; and (v) related to the latter, a systematic collection, management and maintenance of data on the program, so that results can be properly analyzed and used for further enhancing future interventions. As a new element arising from digital innovations associated to this program in particular, the IDB will continue exploring the potential of these technologies as part of its knowledge agenda.
- 1.26 **Strategic alignment.** The operation is aligned with the Country Strategy for Brazil 2016-2018 (GN-2850) through the strategic objective of supporting the development of SMEs. The operation is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008) and is strategically aligned with the development challenge of productivity and innovation as it promotes access to finance by SMEs. The program will contribute to the Corporate Results Framework (CRF) 2016-2019 (GN-2727-6), by increasing the number of Micro/Small/Medium Enterprises Financed, as well as the number of jobs created by supported firms. The program is also consistent with the Support to SMEs and Financial Access/Supervision Sector Framework Document (GN-2768-7) and the Institutions for Growth and Social Welfare Strategy (GN-2587-2). Additionally, the program is included in the Update of Annex III of the 2018 Operational Program Report (OPR) (GN-2915-2).
- 1.27 The program is also aligned with the priority of the [Brazilian National Development Plan](#) to expand Brazilian competitiveness through the improvement of its business environment, including by facilitating access to credit by MSMEs.

B. Objectives, Components and Cost

- 1.28 The general objective of the second program under the CCLIP⁵³ is to promote productive investments by MSMEs in Brazil, to support growth, job creation and productivity gains in the long term. The specific objectives are: (i) increase and strengthen MSME access to credit, including new opportunities opened up by digital channels; and (ii) to ensure availability of medium and long-term financing for MSMEs in Brazil.
- 1.29 **Single component. Promotion of productive investments by MSMEs.** The proposed program consists of a single component in the form of a global credit loan to be executed by BNDES. Loan and local counterpart resources will be channeled by BNDES through accredited first-tier FIs⁵⁴ to MSMEs on a first-come-first-served basis, for the financing of investments that support MSMEs in their expansion, modernization and diversification, aiming to promote an increase in productivity and competitiveness. The proposed scheme of on-lending via FIs will allow to cover a larger number of MSMEs more efficiently and is intended to crowd in FIs in the provision of dedicated medium and long-term financing for MSMEs, by enabling them to fully take on risks of these transactions which would not have been possible to undertake without support from BNDES.⁵⁵
- 1.30 Furthermore, the proposed scheme of intermediation via FIs serves a dual purpose by promoting access to finance by MSMEs while also supporting the development of local financial markets, helping to catalyze an independently sustainable local MSME lending industry.⁵⁶ Financial sustainability is further enhanced by carefully screening FIs, applying appropriate lending standards and controls.⁵⁷
- 1.31 **Eligible Beneficiaries.** As defined in the program's OR, the eligible beneficiaries will be MSMEs with demonstrated administrative, technical, financial, legal and environmental capacity to implement eligible investments. The program will follow

⁵³ The objective of the CCLIP BR-O0001, approved by the Board of Executive Directors in December 12, 2016, by Resolution DE-129/16, is to promote Brazilian productivity by providing firms access to medium and long-term finance, in particular to promote higher participation of private investments in infrastructure financing, investments in sustainable energy projects and investments by SME productive projects. The first program of the CCLIP focused in supporting Brazilian productivity by providing medium and long-term finance to scale up private investments in renewable energy, whereas the second program is focused in leveraging SMEs investments in productive investments.

⁵⁴ Eligible first-tier FIs are regulated by the Central Bank and accredited and supervised according to BNDES accreditation and risk management policies and procedures. There are currently [57 FIs enabled to operate BNDES products](#), including commercial banks, development banks, cooperative banks and captive finance companies. Accreditation is based on a formal process that includes minimum legal and technical capacity requirements, as well as thorough qualitative and quantitative risk assessments and procedures and continuous monitoring. (see [Optional Link 10](#) (*Credenciamento de agentes financeiros do BNDES*) and [Optional Link 11](#) (*Gestão e Controle de Riscos em Operações Indiretas no BNDES*)).

⁵⁵ BNDES fully relies on participating FIs for credit risk assessments and loan approval decisions in all eligible product lines.

⁵⁶ Program activities enable on-lending of resources via FIs to many small borrowers across various productive sectors, thrusting the inclusion of MSMEs in FIs portfolios by imposing MSME-directed credit eligibility conditions for accessing funds. When accessing credit, MSMEs may be encouraged to use other banking services from the FI, contributing to the expansion of the market. This is especially relevant in the case of smaller FIs, such as cooperatives, which normally attend sectors that are otherwise underserved. Ibid. [36].

⁵⁷ Ibid. [54, 55]. The program uses FIs local expertise in collecting and processing information to accurately assess the risk of various investments. As the bulk of FIs are private, origination of credit follows commercial banking practice under market conditions, and the inclusion of sub-loans in their lending portfolio is indicative that the expected value of these investments will return net profits.

BNDES' definition of MSME, which classifies companies based on annual gross income (operational revenue) as follows: (i) micro, below R\$360,000 (US\$97,000); (ii) small, below R\$4.8 million (US\$1.3 million); and (iii) medium, below R\$300 million (US\$80.4 million).

1.32 **Specific BNDES product lines eligible** for financing under the program, which together represent some 58% of the total volume of financing approved for MSMEs, will be limited to:

- i. [Cartão BNDES](#): which functions in the form of a pre-approved credit line for acquisition of specific products accredited by BNDES (machinery, equipment, other production goods and services⁵⁸) at reduced rates and extended terms for repayment. The *Cartão* is issued only by accredited FIs subscribed to the product line⁵⁹ and is designed to enable a significant reduction in bureaucracy associated to accessing credit for investment. It is currently implemented to operate exclusively via internet, through the “*Operações do Cartão BNDES*” portal. Repayment terms average 29 months;
- ii. [BNDES Automático – Projetos de Investimento](#): for investment projects of MSMEs in all sectors, mainly related to construction, expansion or reform of facilities (store, warehouse, storage, factory, office, etc.),⁶⁰ including acquisition of machinery, equipment, software and related services accredited by BNDES. Operating capital associated to the investment project, albeit included in this financing line, will not be eligible for the program. Repayment period is around 83 months;
- iii. [BNDES Finame – BK Aquisição e Comercialização](#): for acquisition and commercialization of machinery, equipment, parts, industrial systems, and IT and automation goods, including new vehicles (buses, trucks) that have been accredited by BNDES. Average repayment term of this product is 71 months.

1.33 In line with the above, the program will provide medium and long-term credit (+18 months), through individual loans of up to US\$1 million, to finance product and services accredited under the product lines listed.⁶¹ As per directive of BNDES, financing to MSMEs under the eligible product lines will be provided up to 100%.⁶² MSMEs shall not only prove their investments are financially sustainable, but they must be technically, institutionally, environmentally and legally viable as well, as per standard practice and operational policies of IDB and BNDES. Specific eligibility criteria will be described in detail in the OR.⁶³ All guidelines included in this OR shall

⁵⁸ Services may include software, innovation services, certifications or the like, which support improvements in the overall quality of products or services provided by MSMEs.

⁵⁹ Ibid. [54].

⁶⁰ While these activities typically leverage additional resources, the share of this product in total program disbursements is expected to be very small (around 3%). Hence, monitoring of leverage is not deemed necessary.

⁶¹ The program does not aim to increase financing terms but rather support BNDES existing conditions as major provider of long-term financing for the MSME sector.

⁶² The product lines covered by the program are intended to facilitate the provision of financing adapted to the needs and operational dynamics of Brazilian MSMEs. While a particular good or service eligible under these lines may be part of a larger investment project, its financing is administered as an isolated credit transaction, thus providing the beneficiary with flexibility and promptness in accessing credit for up to 100% of the asset.

⁶³ To be eligible, the beneficiary must be a MSME as per BNDES definition (see ¶1.31). Resources shall be used for the financing of approved expenses under any of the eligible financing lines of the program: *Cartão BNDES*,

be consistent with BNDES' and IDB's policies and procedures and local legislation (See [Optional Link 14](#)).

- 1.34 It should be noted that the program is intended to support productive investments by increasing the availability of medium and long-term funding provided by FIs, thus enabling MSMEs to have access to resources with repayment periods that better match their cash flows. It is not the program's goal to provide loans at predetermined or below-market rates, since this could generate distortions and limit the opportunities of competition for companies without access to subsidized loans.⁶⁴ In 2017, the government reviewed the role of the BNDES through the creation of a Market-indexed Long-term Rate (TLP) for the remuneration of loans granted by BNDES, to avoid distorting the markets and to level the playing field among FIs with a long-term subsidized rate. With the repositioning of BNDES, it is expected that the private sector will play an increasingly important role in financing sectors such as infrastructure and MSMEs.
- 1.35 With the exception of sector eligibility limitations established in the OR, the program does not impose restrictions related to MSME sector of activity, neither does it establish specific amounts to be allocated for each product line eligible under the program (namely, *Cartão BNDES*, *BNDES Automático*, except operating capital, or *BNDES Finame*).
- 1.36 Based on the recent evolution of the product lines to be supported by the program, and BNDES projections (particularly following the implementation of the digitalization strategy), sufficient demand for program resources is anticipated. While the portfolio of sub-loans to be financed is unknown ex-ante, historical data from BNDES financing to MSMEs, as well as information on demand generated through digital channels and future expectations from BNDES operational units, will be used to create an indicative pipeline to be financed by the program, to support assumptions associated to the economic analysis (see ¶1.39) and target values of monitoring indicators (see ¶1.37).

C. Key Results Indicators

- 1.37 Indicators considered for monitoring the effectiveness of the program are: (i) in output, the number of MSMEs funded with program resources; (ii) as results, the average annual financing issued to MSME under eligible credit lines each year by BNDES, the percentage of MSME funded with program resources which originated via digital channels, the average tenor and interest rate to final beneficiaries of eligible credit lines, and the average sales of MSME financed with program resources (before and after); and (iii) for impact, percent increase in average number of employees for

BNDES *Automático*, or BNDES *Finame* (see ¶1.32). No projects with an "A" or "B" E&S risk classification will be financed. The program is strictly conditioned to these criteria, as established in the OR.

⁶⁴ The OECD notes that, in general, the correlation between new lending and credit conditions (including interest rates) is weak. Their analysis finds no clear relationship between interest rates and changes in credit to SMEs and describes how the increase in credit between 2007 and 2016 appears to be "largely independent of its cost". Ibid. [19].

the treatment group of MSMEs financed through the program relative to a control group (see Annex II).⁶⁵

- 1.38 Details on the frequency of data collection, sources and means of verification, as well as the responsibilities regarding management and reporting of monitoring information are included in the [Monitoring and Evaluation Plan](#).
- 1.39 **Economic evaluation.** A cost-benefit analysis calculates program net benefits/costs assumed to not otherwise accrue to the economy in the absence of the program. Consistent with existing literature on similar interventions by BNDES and IDB, this analysis validates the program's creation of significant net benefits. Net benefits are projected for a 5-year period, using a 12% percent discount rate to calculate the present values of costs and benefits associated to productive assets acquired with financing provided by the program. The program yields a Net Present Value (NPV) of US\$1,343 million, indicating that for every dollar in cost born by the program, US\$2.9 in benefits are generated. The Internal Rate of Return (IRR) is 31%. Variations in key assumptions in a sensitivity analysis led to the same conclusion, namely that program benefits significantly outweigh its costs. See [Economic Analysis](#).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing Instrument

- 2.1 This program is the second individual loan operation under the CCLIP for Productive and Sustainable Investments (BR-O0001), approved by the Board of Executive Directors in 2016, by Resolution DE-129/16, for a total amount of US\$2.4 billion. The total cost of this program is US\$900 million, which will be financed through a loan of up to US\$750 million from resources of the IDB's Ordinary Capital (OC) and a local counterpart contribution of US\$150 million. This operation has been designed as a global credit program and, as such, the resources will be used exclusively for the concession of sub-loans to eligible investments and beneficiaries (see ¶1.31-1.33). The disbursement period for the program will be 48 months from the date of signature of the loan contract between IDB and BNDES considering the estimated MSME financing demand (see Table 2.1 below and the detailed disbursement plan - [Optional Link 3](#)).

Table 2.1.- Disbursement Plan (Millions of US\$)

Single Component – Financing	Year I 2019	Year II 2020	Year III 2021	Year IV 2022	Total
BID	250	250	225	25	750
Local	50	50	45	5	150
Total	300	300	270	30	900

⁶⁵ The program's result framework is consistent with the standard relationship between firm investment, employment creation and productivity. By using program funding for investment, MSMEs are expected to expand production, generating economies of scale and delivering a positive impact on the number and quality of associated jobs. These results are targeted via the eligibility criteria and project selection of MSMEs. Hence, without access to finance, MSMEs will continue to face capital constraints which adversely affect their growth and, ultimately, their productivity. This is the theoretical basis underpinning MSME financing programs in more than 42 countries studied in the [latest OECD report](#) Ibid. [19].

- 2.2 **Eligibility of this second individual loan operation under the CCLIP.** This program complies with the requirements established in the Bank's policy applicable to individual loan operations under the CCLIP (document GN-2246-9) and its guidelines (GN-2246-11), as it has been established that: (i) the objectives and components of the program are consistent with the objectives of the CCLIP, as this program will finance productive investments from MSMEs supporting the CCLIP overarching goal of promoting productivity; (ii) the EA is the same institution as that of the previous individual loan operation under the CCLIP; (iii) the second individual loan is included in the Update of Annex III of the 2018 OPR (GN-2915-2); (iv) the first loan under the CCLIP (loan 3866/OC-BR; BR-L1442) was fully and successfully disbursed, and BNDES demonstrated a satisfactory level of performance in the execution of the program, as in several previous operations with the Bank, including global credit loans and CCLIPs;⁶⁶ (v) BNDES complied with contractual conditions provided in loan contract 3866/OC-BR and with the Bank's policies on financial management and procurement; and (vi) financial and operational reports for the first operation, including audited financial statements, were prepared and presented to the Bank in a timely manner and in acceptable quality.
- 2.3 The Bank has a relevant track record with BNDES, having carried out several global credit loan operations satisfactorily. In this context, it should be noted that BNDES has previous experience in financing MSMEs and that the Bank has verified BNDES's financial and institutional soundness,⁶⁷ indicating that the institution is expected to maintain its satisfactory performance during execution of the second loan operation under the CCLIP.
- 2.4 BNDES is a national credit institution with ample experience in finance structuring and fiduciary management and is the main financing development agency in Brazil. Since its foundation in 1952, BNDES has played a fundamental role in stimulating the expansion of MSMEs in Brazil (see ¶1.14). BNDES has extensive knowledge and technical capacity to offer several financial support mechanisms to Brazilian companies of all sizes as well as public administration entities, enabling investments in all economic sectors. BNDES maintained good financial performance and a better quality of loan portfolio than the Brazilian SFN. Finally, recent BNDES organizational structure adjustments show improved governance in risk and environmental management (See [BNDES Institutional Presentation](#)).
- 2.5 BNDES will use IDB resources to diversify and lengthen its funding sources, thus better responding to the financing needs of MSMEs in Brazil. The total amount of resources from the IDB will be channeled by BNDES to sub-borrowers indirectly, through the intermediation of its accredited FIs (second-tier transactions). Resources will ultimately be used to provide sub-loans to finance productive investments by MSMEs (see ¶1.28 to ¶1.30).

B. Environmental and Social Safeguards Risks

- 2.6 Due to its financial intermediation structure and following Directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), the program does not require classification. Based on the E&S due diligence conclusions and the intended use of proceeds, it is classified as low-risk (FI-2). The program will be managed

⁶⁶ Five operations in the last decade, including loans [1608/OC-BR](#), [1860/OC-BR](#), [2023/OC-BR](#), [2236/OC-BR](#) and the first loan operation under the CCLIP, loan [3866/OC-BR](#), in a total of 14 loans.

⁶⁷ See Annex III, Optional Link 4 [BNDES Institutional Presentation](#), as well as the links to BNDES' [performance](#) and

through the implementation of an E&S Risks Management Report ([ESMR](#)), agreed between the IDB and BNDES, to be fully integrated in the program's [OR](#). Only sub-loans categorized as environmental risk "C" will be eligible for financing under the program. Nevertheless, the ESMR provides for a framework for the proper assessment, management and monitoring of individual sub-loans and overall portfolio, in accordance with IDB environmental safeguards policies. The ESMR also integrates all applicable local systems and norms. The BNDES will be responsible for establishing all interagency arrangements needed for properly implementing the ESMR and will ensure that projects financed are in compliance with the ESMR. The due diligence process concluded that the BNDES has proper institutional capacity to manage a portfolio of projects with the risk levels identified.

C. Other Key Issues and Risks

- 2.7 **Sustainability.** The proposed program is expected to play a critical role to fill the long-term financing gap and mobilize FI intervention, providing necessary support to MSMEs productive investments unable to obtain suitable financing in the current market and macroeconomic situation. Over time, through its second-tier structure and increased access to credit through digitalization, the program is expected to have a positive demonstrative effect on private sector financing sources, local FIs and MSMEs.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of Implementation Arrangements

- 3.1 The borrower and Executing Agency (EA) of the program will be BNDES and the guarantor will be the Federative Republic of Brazil.
- 3.2 **Implementation arrangements.** BNDES will ensure readiness of all necessary administrative and control mechanisms to provide and maintain a transparent and effective administration of the program. Previous experiences of BNDES working with the IDB, along with their leading position in MSME financing, makes them a suitable partner with strong will to continue developing the sector.
- 3.3 BNDES will implement the program under its current organizational structure and will be responsible for supervising the adequate use of program financial resources as well as for the timely provision of human and technical resources necessary to implement the program. For the granting of loans under the program, BNDES will enter into agreements or will use its existing legal instruments with its accredited FIs. Eligible FIs will be those regulated by the Central Bank and accredited and supervised according to BNDES accreditation and risk management policies and procedures.⁶⁸ IFIs will formalize the corresponding legal instruments with each eligible sub-borrower establishing the precise terms and conditions (i.e. maturity, rates and costs) of the financing, which will depend on the characteristics of the investment, its internal rate of return and risk profile.
- 3.4 The provisions governing program execution, accredited FIs participation, and eligibility of each project and MSMEs to be financed with funds from the program will be established in the OR agreed between the Bank and BNDES, in accordance with their policies and procedures. This OR includes specific procedures, conditions and requirements for the use of the resources of the program, including: (i) technical,

⁶⁸ Ibid. [54].

regulatory and financial criteria for accessing the sub-loans; (ii) disbursement mechanisms; (iii) eligibility criteria for participating accredited FIs and MSMEs; and (iv) monitoring and evaluation requirements, amongst others.

- 3.5 **Exceptions to Bank Policies.** In an identical manner, as in the first individual loan operation under the CCLIP, for this second program the guarantee of the Federative Republic of Brazil will be limited to BNDES' financial obligations under the loan (including repayment of principal, payment of interest and other financial charges); and will not cover the performance obligations and local counterpart contribution.⁶⁹ Consequently, it is proposed that a partial waiver to the Bank's policy on guarantees required from the Borrower (document GP-104-2) be approved by the Board of Executive Directors. This proposal is deemed necessary considering that there is no provision in Brazilian legislation allowing for the Federal Government of Brazil to guarantee the borrower's performance obligations and the local counterpart contribution. BNDES is a solvent and financially autonomous institution with broad operational and financial capacity in relation to the obligations it assumes vis-à-vis the Bank. This waiver will not affect the risk profile of the Bank.
- 3.6 **Special contractual condition prior to the first disbursement of the financing.** Prior to the first disbursement of the loan, BNDES shall provide evidence of approval and entry into effect of the [OR](#) of the program in terms previously agreed with the Bank. The condition above is justified considering that the OR is a crucial instrument for the execution of the program.
- 3.7 **Disbursements.** In the same manner as in the first operation under the CCLIP, disbursements of program resources from BNDES to accredited FIs for the financing of sub-loans granted for eligible investments (see ¶1.31-1.33) will constitute the expenditures for the purpose of the justification of expenditures to the Bank. In all cases, the portfolio of sub-loans to be recognized by the program will be subject to revision by the IDB in order to proceed with the disbursement.⁷⁰ Nonetheless, all modalities of disbursements of funds available in the Bank's norms on financial management (OP-273-6) will be available to the borrower, if needed.
- 3.8 For the supervision process of eligible expenditures, BNDES shall apply oversight procedures as per their own internal norms of operation via accredited FIs, which should allow for an effective verification of the use of resources by the final borrowers, if necessary (see [Optional Link 11](#) and [Optional Link 12](#)).
- 3.9 BNDES will prepare and present to the IDB annual financial statements and expenses of the program duly audited by the *Ministério da Transparência e Controladoria-Geral da União* (CGU) or by an independent auditing firm acceptable to the Bank, which will be contracted by BNDES following the terms of reference agreed with the Bank. Annual audited reports will be presented to the Bank within 120 days after the end of BNDES' fiscal year, and the final audit will be presented to the bank 120 days after the date of last disbursement.

⁶⁹ It should be noted that a similar partial waiver was approved for all previous lending operations of IDB with BNDES, including loans [1608/OC-BR](#), [1860/OC-BR](#), [2023/OC-BR](#), [2236/OC-BR](#) and [3866/OC-BR](#).

⁷⁰ There is no predetermined schedule for partial disbursement requests by BNDES. The number and frequency of disbursement requests presented to the IDB will depend on actual demand from FIs and BNDES' analysis on which sub-loans are best suited to be included in each disbursement request portfolio.

- 3.10 **Procurement of goods and services.** No procurement actions or consultant services are contemplated for the proposed loan. Sub-borrowers will use market procurement practices, which are in accordance with the Bank's policies⁷¹.

B. Summary of Arrangements for Monitoring Results

- 3.11 **Project monitoring.** BNDES will prepare an Annual Operating Plan (AOP) to be presented to the IDB until the 30 of November of each calendar year for the next calendar year throughout the disbursement period of the IDB loan. The first AOP, corresponding to the first year of execution, will be presented by BNDES before the first disbursement. These reports shall contain projections on the expected number of MSMEs to be financed throughout the following calendar year, including the schedule of disbursement and estimated costs.
- 3.12 Execution of the program will be monitored via follow-up activities to be reported by BNDES to the IDB and submitted as per conditions established in the [Monitoring and Evaluation Plan](#) and the [OR](#), including: (i) semi-annual and annual reports on the execution of the program, each calendar year throughout the disbursement period; (ii) a mid-term report, within 24 months from the signing of the loan contract or when 50% of program resources have been disbursed, whichever happens first; and (iii) a final report, to be submitted within 6 months after the last disbursement of the program, including all updated data from the mid-term evaluation, plus any additional information that could be relevant to the overall assessment of the achievement of program goals and objectives.
- 3.13 In general, these reports will provide evidence on: (i) the overall state of execution of activities under the program, potential or real problems and/or risks identified and recommended actions for mitigating and overcoming these problems or risks; (ii) level of fulfillment of E&S safeguards and risk management of the program; (iii) level of fulfillment of targets for indicators included in the Results Matrix; and (iv) operational and financial assessment of the portfolio of sub-loans financed under the program, including but not limited to characteristics of the sub-loans (tenors and interest rates), characteristics of final beneficiaries (size, sector of activity), and use of resources.
- 3.14 **Evaluation arrangements.** Finally, an ex post evaluation using propensity score matching with differences in differences methodology to control for heterogeneity between treated and control firms to assess the impact of the program on productivity (employment and potentially, sales) of beneficiary MSMEs will be carried out and presented to the IDB, following the terms established in the [Monitoring and Evaluation Plan](#).

⁷¹ BNDES has local content requirements for financing equipment; nonetheless, after analyzing the whole processes involved in the selection of projects and the finance mechanism, it was confirmed that the commercial practices followed by the private sub-borrowers are in accordance with the private market and the principles of economy and efficiency. In relation to the three lines of financing described under this program, these practices have positively impacted on the growth of SMEs.

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Productivity and Innovation	
Country Development Results Indicators	-Jobs created by supported firms (#)* -Micro / small / medium enterprises financed (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2850	Support the development of SMEs
Country Program Results Matrix	GN-2915-2	The intervention is included in the 2018 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		9.0
3.1 Program Diagnosis		3.0
3.2 Proposed Interventions or Solutions		4.0
3.3 Results Matrix Quality		2.0
4. Ex ante Economic Analysis		10.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		3.0
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		1.0
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		9.3
5.1 Monitoring Mechanisms		2.5
5.2 Evaluation Plan		6.8
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Low
Identified risks have been rated for magnitude and likelihood		Yes
Mitigation measures have been identified for major risks		Yes
Mitigation measures have indicators for tracking their implementation		Yes
Environmental & social risk classification		B.13
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting, External Control, Internal Audit.
Non-Fiduciary	Yes	Monitoring and Evaluation National System, Environmental Assessment National System.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	The Program will benefit from the efforts of BNDES to promote increased digitalization of financial intermediation and the piloting of innovative Fintech solutions to promote access to credit by SMES, in particular in the context of the working group of Fintech of Brazilian Financial Innovation Laboratory - being supported by the regional technical cooperation RG-T2506, see also: http://www.labinovacaofinanceira.com/grupos-de-trabalho-gt/fintech/ . See paras 1.16-1.20

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

In Brazil, SMEs contribution to GDP is in the order of 20%, less than half the average contribution of SMEs for OECD countries which highlights the large productivity gaps of Brazilian MSMEs. In general, MSMEs are credit constrained given factors such as information asymmetries, lack of collateral, and lack of economies of scale. In Brazil, MSMEs are particularly credit constrained and depend largely on their suppliers for financing. Only 11% of Brazilian MSMEs access private bank loans and 82% of firms that tried to access credit in 2017 report they faced difficulties obtaining it. In 2016, credit to GDP in Brazil began to shrink and particularly for MSMEs credit portfolios display negative growth rates given short-term maturities of the existing stock and the slow pace of new loan emission. Share of SMEs credit in the total portfolio fell from 17.5% to 14.4% from 2014 to 2017. MSME credit constraints has partially to do with supply-side risk aversion in the context of declining overall credit. Thus, the specific objectives of this program are to (i) increase and strengthen MSME access to credit, including related to new opportunities opened up by digital channels; and (ii) to ensure availability of medium and long-term financing for MSMEs in Brazil. This will be accomplished via a second-tier credit line to BNDS for a total of US\$900MM toward productive investment by MSMEs. The Results Matrix captures project benefits such as average tenor of issued loans, increase in sales for beneficiary MSMEs, and an increase in loans originated through the supported digital channels; among others. The cost benefit analysis demonstrates the program is viable. To assess results, an impact evaluation is planned which will gauge benefits to MSMEs using differences-in-differences vis-à-vis a control group selected using Propensity Score Matching.

RESULTS MATRIX

Project Objective:	The general objective of the second program under the CCLIP is to promote productive investments by MSMEs in Brazil, to support growth, job creation and productivity gains in the long term. The specific objectives are: (i) increase and strengthen MSME access to credit, including new opportunities opened up by digital channels; and (ii) ensure availability of medium and long-term financing for MSMEs in Brazil.
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EXPECTED IMPACT

Indicator	Unit	Baseline value	Baseline year	Y1	Y2	Y3	Y4	Target	Means of verification	Comments
Percent increase in average number of employees for the treatment group of MSMEs financed through the program relative to a control group	%	0 ¹	n.a.					4%	Employment data will be collected from the annual survey of the Ministry of Labor, <i>Relação Anual de Informações Sociais</i> (RAIS). BNDES has access to this data. As program resources are used to fund existing products without changing their conditions, data collected may include borrowers of eligible financing lines before the program.	Since it is not possible to randomize the MSME financed with program resources, propensity score matching (PSM) and differences-in-differences (DD) methodologies will be used to assess the impacts. If access the confidential data of industrial survey <i>Pesquisa Industrial Anual</i> (PIA) is authorized, the impacts on sales and credit constraint may also be estimated. Target was established based on the existing body of impact evaluations. ²

¹ Value is zero since the principle is that treatment and control firms are similar at baseline.

² Albuquerque, B. et al. *Uma solução automatizada para avaliações quantitativas de impacto: primeiros resultados do MARVIm*, BNDES, Brasil, 2017.

EXPECTED RESULTS

Indicator	Unit	Baseline value	Baseline year	Y1	Y2	Y3	Y4	Target	Means of verification	Comments
Average annual financing issued to MSME under eligible credit lines each year by BNDES (disbursements)	US\$ million	1,500	2018	1,800	1,800	1,770	1,530	1,680	Periodical reports on program execution by BNDES.	Indicator includes average disbursement for the eligible financing lines: BNDES <i>Finame</i> , BNDES <i>Automático</i> (excluding operating capital) and <i>Cartão BNDES</i> . While disbursements are flows of money, the indicator only refers to the stock of financing issued (without considering repayments). Baseline is equivalent to disbursements issued in 2018. Annual program disbursements are added to the 2018 baseline to obtain yearly values for the indicator until end of program. For the target, the annual average disbursement was used. Exchange rate used for baseline: (US\$/R\$:3.7)
MSME financed by eligible credit lines which originated via digital channels	%	1	2018	5	8	10	15	15	Counting of <i>Cadastro Nacional da Pessoa Jurídica</i> (CNPJ) ³ matching disbursements made through BNDES Online platform, divided by total count of CNPJ. BNDES has access to the CNPJ and will use its internal operational systems for	Indicator considers MSMEs using at least one of the platforms included in BNDES digital channels. Indicator includes only BNDES <i>Finame</i> and BNDES <i>Automático</i> , <i>Cartão BNDES</i> is excluded. The low baseline rate observed in 2018 is explained by the fact that some of the products initially digitalized (agriculture and operating capital) are not part of the program and thus are not included in the count. Nonetheless, rapid growth is expected for this indicator in the coming years, as BNDES

³ The CNPJ is the national registry of legal entities, which provides a unique identification number for Brazilian companies.

Indicator	Unit	Baseline value	Baseline year	Y1	Y2	Y3	Y4	Target	Means of verification	Comments
									disbursement information.	<i>Finame</i> migrates to BNDES Online platform.
Average tenor of eligible credit lines	Number of months	50	2018	51	51	52	52	52	Calculation of average tenor of total financing, weighted by disbursements. Data obtained from internal operational systems of BNDES.	<p>Tenor is defined as the grace period plus the amortization period. It is important to note that financing tenors are determined via negotiations between each prospective borrower and the FI. Very limited variation has been observed over the period of analysis to estimate a target: average tenors remain between 50 and 54 months from 2016 until first semester of 2018.</p> <p>Sub-loans will be placed under market conditions following market interest rates. Thus, related to the tenor a sub-indicator will be added as tracking indicator to the PMR to keep track of the average interest rate to final beneficiaries and calculated based on the value of all components of the rate for each sub-loan in the month of disbursement and weighted by respective values. The “all-in” interest rate will be tracked including BNDES costs and the spread. This evolution in this indicator is beyond control of the program and in-line with the market and thus it is emphasized that it is only for tracking purposes.</p>

Indicator	Unit	Baseline value	Baseline year	Y1	Y2	Y3	Y4	Target	Means of verification	Comments
Sales of MSME financed with program resources	R\$ million	*	n.a.					**	Database from the <i>Centralização de Serviços dos Bancos</i> (SERASA). ⁴ If possible, subject to being granted access, data from the industrial survey <i>Pesquisa Industrial Anual</i> (PIA). ⁵ Indicator will be measured before and after and will only compare values across time.	Baseline (*) and target (**) values will be obtained by using average sales of MSMEs supported by BNDES. Sufficiently accurate data is not available at the time of this proposal. The SERASA database is composed by a sample of firms and is likely to include larger firms, so average could be biased and not inclusive of a portion of smaller supported firms. By the end of 2021, values will be determined in two possible ways: (i) reprocessing data from SERASA; or (ii) if granted authorization to confidential data from the PIA, data from this source will be collected and measured for both baseline and target points in time.

⁴ The SERASA is a private Brazilian company that gathers information and produces analyses and surveys on firms and individuals incurring in financial default

⁵ The PIA, performed by the *Instituto Brasileiro de Geografia e Estatística* (IBGE), is a survey aimed at identifying the structural characteristics of the enterprise segment of industrial activity in Brazil. Some of its data is confidential and accessing it requires authorization via a formal process of request.

PRODUCTS

Indicator	Unit	Baseline value	Baseline year	Y1	Y2	Y3	Y4	Target	Means of verification	Comments
MSMEs funded with program resources	Number	0 ⁶	2018	1,633	1,634	1,470	163	4,900	Periodical report on program execution by BNDES.	

⁶ The team attempted to feature the output to reflect “MSMEs funded with program resources under the existing credit lines” and have a non-zero baseline, but as the credit recipients are in flow (and not a stock) the Executing Agency expressed it would not be able to gather this information accurately. Notwithstanding, the portfolio indicator under Outcomes does serve to capture the additionality of the funds, as they are not displacing, but adding to, existing financing.

FIDUCIARY ARRANGEMENTS

COUNTRY: Brazil
NAME OF THE PROGRAM: Promotion and Innovation of Access to Multisector Medium and Long-Term Credit for Productive Investments by Micro, Small and Medium Enterprises (MSMEs).
Second Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) for Financing Productive and Sustainable Investments (BR-O0001)
NUMBER OF THE PROGRAM: BR-L1521
EXECUTING AGENCY (EA): *Banco Nacional de Desenvolvimento Econômico e Social -BNDES*
PREPARED BY: Santiago Schneider and Karina Díaz (FMP/CBR)

I. EXECUTIVE SUMMARY

- 1.1 The institutional evaluation for the fiduciary management of the project was prepared based on: (i) current fiduciary context of the country; (ii) results from the evaluation of the main fiduciary risks; (iii) previous experience from the implementation of the first individual line of the operation; and (iv) working meetings with the project team and BNDES.
- 1.2 The *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES) is the largest development financial institution in Brazil. Its objective is to promote the country's economic and social development through the financing of major projects in areas such as infrastructure, energy, and business development, among others. This is the Second Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) for Financing Productive and Sustainable Investments (BR-O0001) and seeks to promote productive investments carried out by MSMEs in Brazil, increasing and strengthening their capacity to access credit, especially with respect to opportunities available through digital channels and ensuring the availability of medium and long-term financing for MSMEs.

II. COUNTRY FIDUCIARY CONTEXT AND EXECUTING AGENCY

- 2.1 BNDES is a public federal financial institution with legal personality under private law and its own assets, linked to the Ministry of Planning, Development and Management, whose main objective is the promotion of economic and social development in the country as the main instrument for implementing federal policy promoting private investment. The institution has two wholly owned subsidiaries: *BNDES Participações S.A.* (BNDESPAR), and *Agência Especial de Financiamento Industrial* (FINAME), which together make up the BNDES system.
- 2.2 BNDES is subject to the regulations of the National Monetary Council (CMN, in Portuguese), of the Brazilian Transferable Securities Commission (CVM, in Portuguese), and to supervision from the Central Bank of Brazil. In addition, it meets the directives from the Board of Directors, the Audit Committee, the Fiscal Council and BNDES Directorate. It must also meet all applicable laws for private companies, including tax and labor laws.

- 2.3 In terms of accountability, it is subject to various federal agencies such as the Ministry of the Treasury, the National Congress, the Ministry of Transparency, Oversight and Control (Ex Comptroller General) of the Union (CGU) and the Court of Auditors (TCU, in Portuguese).
- 2.4 As part of its support to MSMEs, BNDES provides financing through second tier operations. The latter are credit lines granted through Financial Institutions (FI) registered and accredited by BNDES.¹ Part of the credit lines provides various products, with BNDES FINAME, BNDES Automático, and *Cartão* BNDES being the eligible operations to finance this operation, which do not exceed US\$1 million.
- 2.5 With respect to indirect operations, the accredited financial agent forwards the information on the operation to BNDES online (*Cartão* BNDES, FINAME and BNDES *Automático*). In the BNDES Online platform, the credit granting process is digital and approval is automatic.
- 2.6 BNDES FINAME is a financing line for equipment and machinery, where the IFI pays the provider (manufacturer) selected by the MSMEs after the goods have been delivered. *Cartão* BNDES is a pre-approved credit line used as a virtual credit card for purchases of goods made directly by the MSMEs through the financial product digital portal. BNDES *Automático* works under the logic of a project.
- 2.7 With respect to the operability of these products, once the IFI receives and assesses the financial and technical feasibility of the credit application, the same is approved by BNDES. Credit lines can only be used to purchase goods from manufacturers and equipment registered by BNDES, other goods must be of national origin.
- 2.8 The provider registration process is open when the nationalization of the manufactured good or the national origin of the equipment is verified, with no restrictions to the participation of foreign capital companies, and to date there are 8,000 manufacturers and close to 35,000 products registered.

III. EVALUATION OF FIDUCIARY RISK AND MITIGATION ACTIONS

- 3.1 BNDES has vast experience with operations of International Financial Bodies and has a specialized department within its structure that deals with all requirements related to these, the Fundraising Department. With regard to managing Bank funds, especially global credits, it has been acting as a successful borrower for 60 years.
- 3.2 During preparation of the [3866/OC-BR](#) project and the development of the fiduciary agreements, the Bank updated the analysis of BNDES' institutional capacity, which showed that it maintains high technical capacity, with adequate information systems, and internal and external controls. The implementation process of the [3866/OC-BR](#) operation confirmed BNDES' high implementation capacity. For this

¹ Accreditation is the formal act of incorporating a FI in the roster of financing agents of BNDES. Development Agencies, Commercial, Development, Investment and Multiple Banks, Credit Unions, and Credit, Financing and Investment Associations may be accredited. These entities must meet conditions of technical capability, economic-financial performance, and annual balance of operations determined by BNDES.

second CCLIP operation the fiduciary risk is low.

IV. ASPECTS OF THE SPECIAL PROVISIONS OF THE CONTRACT

- 4.1 **Exchange rate.** The exchange rate for accounting to the IDB will be the effective date of the transfer of resources from BNDES to finance eligible expenditures. The exchange rate to be used is the purchase rate of the Central Bank.
- 4.2 **Presentation of annual Audited Financial Statements (AFS) of the program.** The AFS approved by the CGU shall be presented within 120 days after the closing of BNDES' fiscal year according to the terms of reference agreed with the Bank.
- 4.3 **AFS entity.** BNDES publishes the entity's AFS on its website; thus, this financial statement will not be required.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Procurement Execution.** Because this is a loan to BNDES as a development financial intermediary institution, which, through the IFIs, will provide sub-loans to private investors (sub-borrowers), the procurement will be made by the latter. After analyzing the operational mechanism of the indirect operations made through BNDES FINAME, *Cartão BNDES* and FINAME *Automático*, it is observed that the sub-borrowers will carry out the procurement in accordance with current commercial practices of the private sector, which are acceptable to the Bank, pursuant to the provisions of paragraph 3.12 of the Bank's Procurement Policies for Goods and Works (GN-2349-9)².
- 5.2 **Procurement of works, goods, and services other than consulting services and direct contracting.** Procurement and contracting will be carried out by the sub-borrowers or private sector beneficiaries, pursuant to the provisions of paragraph 3.12 of the Procurement Policies mentioned above, using market or trade practices commonly used in the industry, ensuring the principles of economy and efficiency as well as the rule on eligibility of goods, works and services.
- 5.3 **Procurement Process Thresholds.** These are not identified, considering that the implementation scheme and procurement and contracting methods will be carried out in accordance with paragraph 3.12 mentioned above.
- 5.4 **Recurring Expenses.** Not expected.
- 5.5 **National Preference.** Not identified, considering the implementation scheme (paragraph 3.12 GN 2349-9).
- 5.6 **Procurement Supervision.** The supervision mechanism will be carried out in accordance with the provisions of paragraph 3.12 of the above-mentioned Policies.

² BNDES has local content requirements for financing equipment; nonetheless, after analyzing the whole processes involved in the selection of projects and the finance mechanism, it was confirmed that the commercial practices followed by the private sub-borrowers are in accordance with the private market and the principles of economy and efficiency. In relation to the three lines of financing described along the LP, these practices have positively impacted on the growth of SMEs.

- 5.7 **Records and Files.** Files must be located in the offices of the Execution Unit, duly identified by operation, in chronological order, by private sub-borrower and under the corresponding safety and security conditions.

VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

A. Programming and Budget

- 6.1 BNDES follows the national regulations established in the annual budget law, maintaining an advanced level in its financial management systems. The planning and programming roles and responsibilities are documented in the Financial Planning and Programming Manual, as well as in its planning policies which are authorized by the Board of Directors.
- 6.2 BNDES is a public company and has legal personality and its own assets, thus it does not receive budgeting funds from the Federal Government.
- 6.3 For this operation, similar to the first individual line, BNDES will operate with its own resources and the Bank will reimburse eligible expenses. Each year, BNDES shall send to the Bank a detailed financial planning on the programming of the use of the loan proceeds.

B. Accounting and Information System

- 6.4 BNDES has financial information systems which support the accounting and financial records of the BNDES operation.
- 6.5 With respect to second tier operations, the accredited financial agent submits the information on the operation online to BNDES. In the BNDES Online platform, the credit granting process is digital and approval is automatic, resulting in reduced transaction costs, greater compliance and security in the transactions.
- 6.6 BNDES disburses the funds to the financial agent who in turn disburses them to the final beneficiary. These operations are recorded in the BNDES' Operations System (OPE).
- 6.7 From the moment of the operation disbursement the OPE system sends information to the Contract Control System (SCC). The SCC controls the financial obligations, disbursements and interest and debt calculation. When events are recorded in the SCC, these are automatically sent to the Accounting System (CTB). The CTB sends the records of the accounting movements to the SAP System where BNDES' financial statements are available.
- 6.8 BNDES complies with the rules established for banks in Brazil, issued by the Central Bank, and applies the Brazilian standards for reporting. It also publishes its reports using the IPSAS international Standards for information purposes.
- 6.9 BNDES Information Technology (IT) area ensures the performance and quality of all information systems, including financial management systems. IT is responsible for performing development and operation activities of these systems, data integration, and administration of IT infrastructure.
- 6.10 BNDES debt and collection systems record and control operations indexed to several currencies, which allows records in local currency and USD. In this sense, all IDB financing transactions will be recorded by BNDES in its own systems, using the exchange rate on the day of the transfer to the beneficiaries.

C. Disbursements and Flow of Resources

- 6.11 Loan disbursements will be made in US dollars and in the form of reimbursement of expenses. Disbursement requests for reimbursement of eligible expenses must be presented to the Bank in accordance with the loan contract requirements, the POR and following the financial management guidelines of the IDB.
- 6.12 The Bank will reimburse BNDES for the transfers made in eligible program operations up to a maximum of US\$1 million per loan.
- 6.13 The IDB will process the disbursements, depositing the resources in US dollars to the bank account designated by BNDES.
- 6.14 The IDB will perform ex post checks and verifications of the disbursements.

D. Internal Control and External Audit

- 6.15 BNDES governance comprises management rules and standards involving the relationship between internal bodies such as the Management Board, Board of Directors, Fiscal Council and other Committees; and external bodies such as CGU and TCU. BNDES Internal Control mechanisms seek to optimize the processes and to contribute to the correct management of the resources made available to the agents safeguarding the interests and assets of the company, the reliability of the reports and accounting, financial and operational statements.
- 6.16 BNDES Internal Audit (IA) area evaluates the effectiveness of the processes, internal controls, risk management and governance. This area is linked to the Management Board. The IA is organized in three departments: Audit, Support and Relations with External Control Bodies and Standards and Audit Processes.
- 6.17 The Integrity, Control and Risk Management Area is responsible for evaluating the organization's main processes and controls to identify opportunities for improvement related to internal control objectives.
- 6.18 There is also an Information Security Office that defines the security controls for the information technology environment, to monitor it and to measure the effectiveness of these controls.
- 6.19 To support the decision-making process and strengthen BNDES governance, there are departments responsible for management monitoring and control, in addition to accounting, tax, and process validation activities.

E. External Control and Reports

- 6.20 BNDES is periodically audited by the two national control bodies, the TCU and the CGU. It is also supervised by the BCB and by the CVM.
- 6.21 The Entity's financial statements are audited by a private external audit firm, which is contracted for five-year periods. The current external auditing firm for BNDES is KPMG. BNDES's Financial Statements as an entity are published on its website in the month of April, thus it is not considered necessary to request their submission.
- 6.22 Each year, BNDES shall present to the Bank an AFS of the program within 120 days following the accounting closing. This report will be approved by the CGU and shall be drafted in accordance with the terms of reference previously agreed with the IDB.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/18

Brazil. Loan ___/OC-BR to the Banco Nacional de Desenvolvimento Econômico e Social - BNDES. Promotion and Innovation of Access to Multisector Medium and Long-Term Credit for Productive Investments by Micro, Small and Medium Enterprises (MSME). Second Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) for Financing Productive and Sustainable Investments (BR-O0001)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Banco Nacional de Desenvolvimento Econômico e Social - BNDES, as Borrower, and with the Federative Republic of Brazil, as Guarantor, for the purpose of granting the former a financing aimed at cooperating in the execution of Promotion and Innovation of Access to Multisector Medium and Long-Term Credit for Productive Investments by Micro, Small and Medium Enterprises (MSME), which constitutes the second individual operation under the Conditional Credit Line for Investment Projects (CCLIP) for Financing Productive and Sustainable Investments (BR-O0001), approved on 12 December 2016 by Resolution DE-129/16. Such financing will be in the amount of up to US\$750,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ 2018)