

MSME Financing Instruments in Latin America and the Caribbean During COVID-19

Diego Herrera

Institutions for
Development Sector

Connectivity, Markets,
and Finance Division

DISCUSSION
PAPER N°
IDB-DP-771

MSME Financing Instruments in Latin America and the Caribbean During COVID-19

Diego Herrera

May 2020



<http://www.iadb.org>

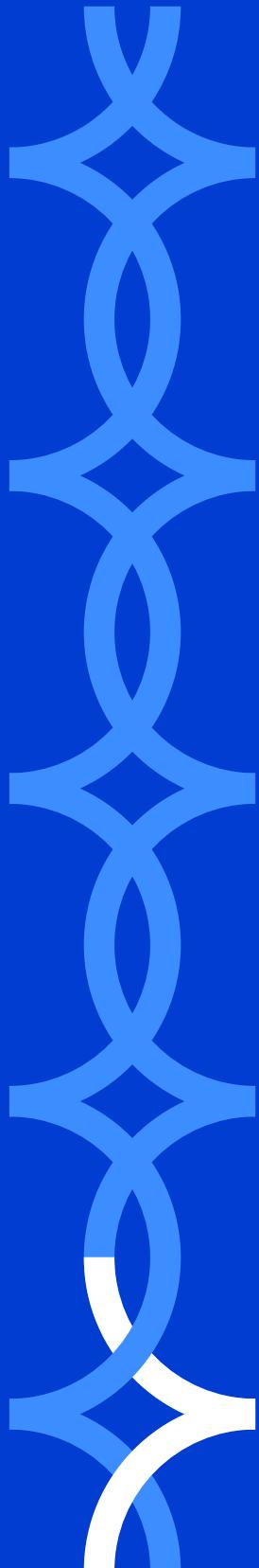
Copyright © 2020 Inter-American Development Bank. This work is licensed under a Creative Commons IGO 3.0 Attribution-NonCommercial-NoDerivatives (CC-IGO BY-NC-ND 3.0 IGO) license (<http://creativecommons.org/licenses/by-nc-nd/3.0/igo/legalcode>) and may be reproduced with attribution to the IDB and for any non-commercial purpose. No derivative work is allowed.

Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the UNCITRAL rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this CC-IGO license.

Note that the link provided above includes additional terms and conditions of the license.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.





MSME Financing Instruments in Latin America and the Caribbean During COVID-19

AUTHOR:
DIEGO HERRERA

The author is currently a financial markets lead specialist at the Inter-American Development Bank (IDB). He would like to thank Olver Bernal and Sonia Vadillo for the compilation of the annexes; Juan Ketterer, Daniel Fonseca, Rafael Cavazzoni, and Claudia Márquez for their inputs; and Phillip Keefer and Eduardo Cavallo for their review and comments.

ABSTRACT

Micro, small and medium-sized enterprises (MSMEs) comprise 99.5 percent of the businesses, 60 percent of the employed population, and about 25 percent of the gross domestic product (GDP) in Latin America and the Caribbean (LAC). Despite their social and economic importance, MSMEs have had great difficulty accessing credit, even before the COVID-19 pandemic struck the world.

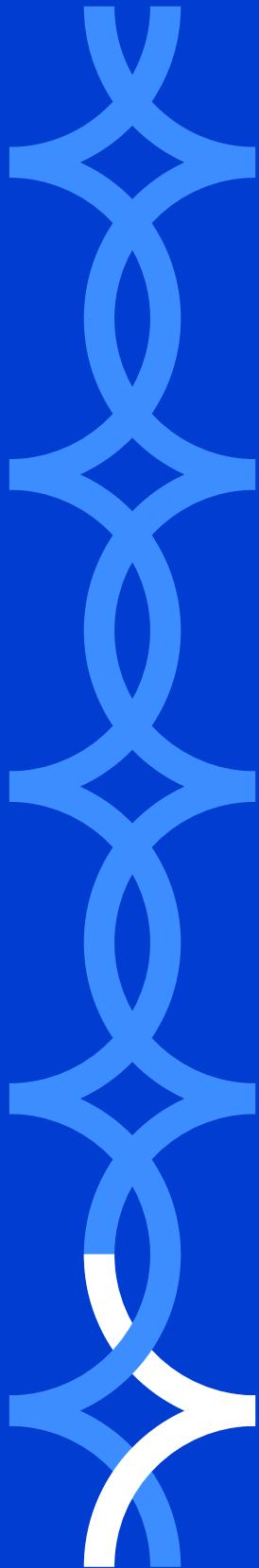
This paper analyzes access to finance for MSMEs in LAC. It also surveys the theoretical and empirical literature on access to finance in times of economic and financial crisis, discusses an approach to insolvency in the region, and provides policy recommendations for monetary and financial measures in the context of the pandemic. A summary of monetary and fiscal measures in LAC and Organisation for Economic Co-operation and Development (OECD) countries is included as an annex to the document.

KEYWORDS

Banks, bankruptcy and liquidation, capital and ownership structure, depository institutions, financial economics, financing policy, financial risk and risk management, goodwill, government policy and regulation, microfinance institutions, mortgages, public economics, value of firms.

JEL CODES

G21, G32, G33, G38, P43

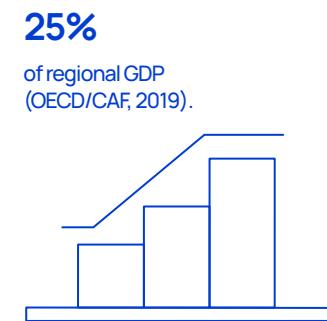


SECTION ONE

Introduction

1. Introduction

Micro, small, and medium-sized enterprises (MSMEs) comprise the most significant component of the productive apparatus in Latin America and the Caribbean (LAC):



MSMEs provide not only jobs and income; they also provide goods and services to the population. In many cases, MSMEs blur the traditional economic distinction between household and business. Despite the economic and social importance of MSMEs in the LAC region, it is difficult for them to access finance in normal times. In times of financial and economic crisis, this situation is even worse.

The aim of this discussion paper is to create a framework to find solutions for MSME financing in the time of the COVID-19 pandemic.

THE PAPER IS ORGANIZED AS FOLLOWS

Section 2 provides an overview of the financial sector's capacity to finance MSMEs in the region, before the COVID-19.

Section 3 discusses access to financing for MSMEs in LAC.

Section 4 surveys the economic literature on the effects of economic and financial crises on MSMEs.

Section 5 proposes solutions to restructure, bail out, and create resolution mechanisms for MSMEs, from a theoretical point of view.

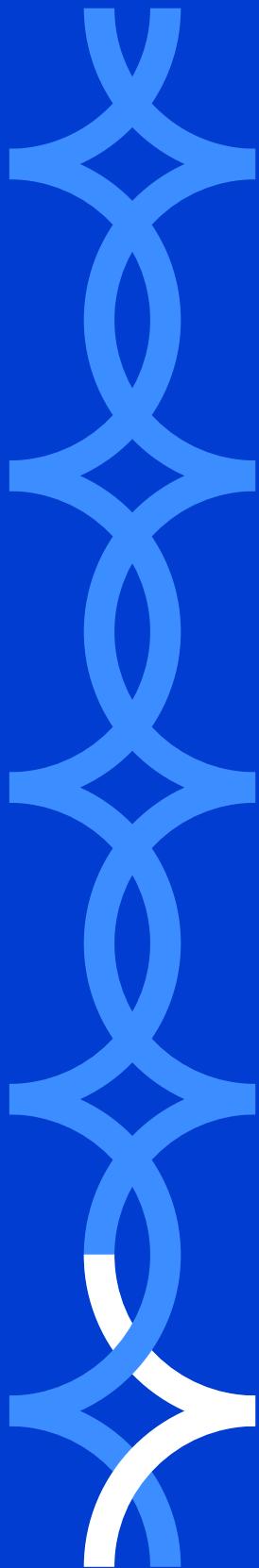
Section 6 presents a brief analysis of regional insolvency regimes, along with a call to adapt them to the current circumstances.

Section 7 offers some policy recommendations.

Section 8 concludes.

The annexes include a summary of fiscal and monetary policies that governments and policymakers are considering around the world to react to the potential economic harm to MSMEs caused by the pandemic.

It is hoped that this paper will be the basis for a discussion on what to do in the context of the COVID-19 pandemic. More ideas will be coming in the future that could improve the solutions to the present issues.



SECTION TWO

Access to Finance for MSMEs in Latin America and the Caribbean

2. Access to Finance for MSMEs in Latin America and the Caribbean

Although the importance of MSMEs as economic actors in the region is well understood, they have few avenues to access financing in many LAC countries. The causes are varied and easier to explain in terms of supply and demand.

2.1. Supply: The Financial System: A Characterization

To understand the financial systems in the LAC region, it is first important to analyze the most recent data available on the situation prior to the COVID-19 pandemic. The global financial crisis (GFC) of 2008–09 generated a series of unprecedented responses from supranational regulatory agencies in the various sub-sectors of the financial sector. The Basel Committee, in particular, carried out multiple modifications of its regulatory standards, widely replicated by financial regulators and supervisors around the globe.

The Basel Committee substantially modified the Minimum Capital Standards Agreements, a benchmark for regulators and supervisors worldwide.¹ It took the following measures: (i) it strengthened minimum regulatory capital requirements, particularly for Tier 1, increasing the minimum from 4 percent to 4.5 percent for ordinary equity and from 4 percent to 6 percent for ordinary capital; (ii) it incorporated regulatory countercyclical buffers; and (iii) it created short-term liquidity measures (Liquidity Coverage Ratio, or LCR) and long-term measures (Net Stable Funding Ratio, or NSFR), as well as requirements for permanent liquidity risk monitoring. The LAC countries have been aware of the adoption of these standards, and the region's regulators and supervisors have enacted them to varying degrees. To some extent, the application of the rules is reflected in solvency and liquidity levels, and impact financial sectors' depth.

¹The most recent version of the Capital Agreement is available at: <https://www.bis.org/bcbs/publ/d457.htm>, retrieved on April 3, 2020.

2.1.1. Financial System Depth

The traditional measure for depth in the financial system is domestic credit to the private sector relative to GDP, measured as "financial resources provided to the private sector, such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable, that establish a claim for repayment" to GDP (GFDD, 2019). The definition also includes credit to public enterprises for some countries included in the sample. This indicator measures the percentage of financial resources transferred from the financial to the real sector as a proportion of value added in a given year.

It is a measure of the capacity of the financial sector to finance real sector activity. As a reference, the number for the United States is 198.9 percent, while the average for the LAC region is 47.4 percent: thus, LAC countries lack financial depth (in terms of credit). This key indicator shows how financial sectors in LAC countries can do better in terms of serving firms and households. Figure 1 depicts financial depth in LAC countries as a percentage of their GDP in 2017.

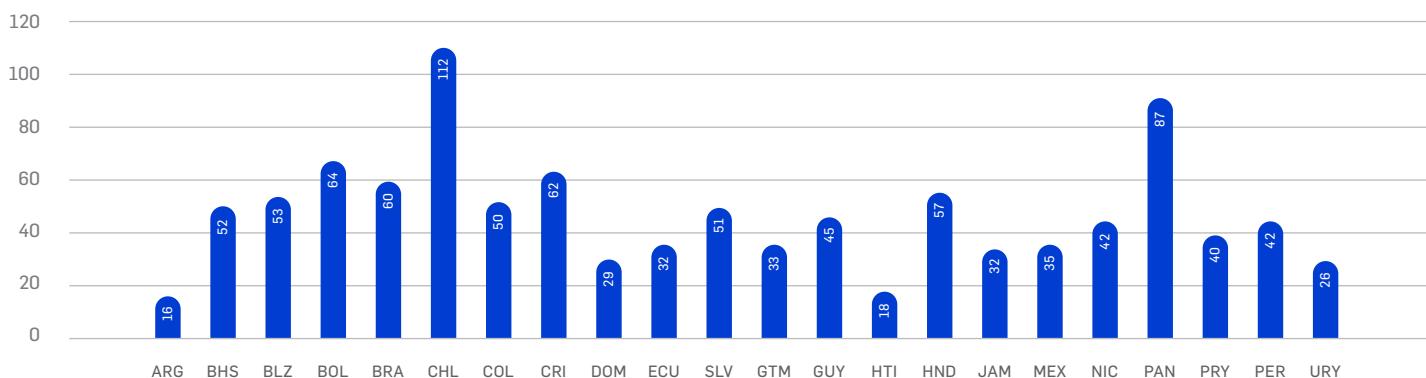


Figure 1: Domestic Credit to Private Sector in Latin America and the Caribbean, 2017 (in percent of GDP)

Source: Author's calculations. Global Financial Development Database, 2019. Note: Data for Jamaica is 2016, the latest available. Note: The most recent version of the Capital Agreement is available at: <https://www.bis.org/bcbs/publ/d457.htm>, retrieved on April 3, 2020

2.1.2. Solvency, Credit, and Liquidity Risks

Given the low level of financial depth in the region, it is important to account for the liquidity and quality of credit within its financial systems.

According to the Basel Capital Accords, solvency is usually measured as the ratio of capital to risk-weighted assets.² The mix varies across jurisdictions in LAC, depending on the regulatory definitions of the variables. Thus, the numbers are an indicator of how much each financial system deviates from its minimum (usually 8 percent).

² See <https://www.bis.org/bcbs/basel3.htm> for more information on the international regulatory framework for banks.

The LAC region appears to be well capitalized, with an average of 16.5 percent, according to consolidated data.³ However, the behavior of banks across the region appears to be procyclical, even with the existence of the novel capital buffers requested by the Basel Committee (Carvallo, Kausman, and Kontbay-Busun, 2015).

Nuguer and Powell (2020) show how capital in LAC financial systems are very procyclical, using an econometric estimation to measure bank capital ratio behavior as an indicator of discipline. The findings show how more discipline implies less bank lending when there are negative shocks. Banks tend to restore their long-term capital ratios, even with the existence of countercyclical buffers. This combination is complicated in periods of expected systemic crisis, among others, because credit tends to deteriorate rapidly in economic downturns.

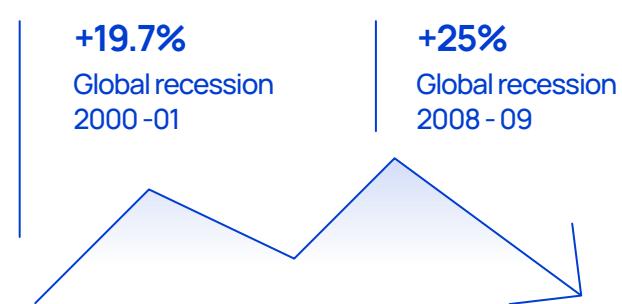
However, understanding the level of enforcement of anti-cyclical buffers in LAC jurisdictions is key, especially since in a crisis such as the one that is emerging across the region's financial systems, more regulation is unproductive. Specifically, the procyclical nature of economic cycles in the region and their high correlation with financial sector flows are worrisome (Ocampo, 2009).

In terms of solvency, credit risk is the variable that affects bank capital the most. The increase in expected losses coming from spikes in the probability of default by borrowers and the decline in the value of guarantees usually has a profound impact on banks' stability.

Although the definition of default and nonperforming loans (NPLs) varies across jurisdictions, when using data from the GFDD (2019) and gathered from financial authorities, the best ratio is bank NPLs to gross loans.⁴ A larger ratio means a larger deterioration of credit within an institution or a system.

The regional average for the close of 2018 was 2.7 percent, while the data for March, 2020 show a marginal increase up to almost 3 percent. Another relevant measure is the ratio of provisions to NPLs, which gives an idea of the hedge of financial systems against credit-executed losses. On average, the region yields 145 percent for 2018, growing up to 155 percent in March, 2020, meaning that delinquent loan losses are more than covered to a greater or lesser degree.

The rates of growth for the consolidated series produces several stylized facts for the 20-year period 1998–2020. First, as expected, NPLs increased in the two most recent periods of global recession—2000–01 (+19.7 percent) and 2008–09 (+25 percent)—and decreased after them, as shown in Figure 2, where the blue-shaded areas correspond to recession periods and the red-shaded area corresponds to a recent increase in NPLs.



³ Data include the ratio of total regulatory capital to risk weighted assets as reported to the World Bank. The countries in the sample are: Argentina, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, and Peru.

⁴ Typically, NPLs are defined as loans that are delinquent in terms of the contractual payments for more than 90 days.

Second, the levels of provisions increased after the recessions to reach maximums two years after them. The lag in the reaction occurred in 2004 (+15.3 percent) and 2011 (10.8 percent). For this indicator, there are both procyclicality and lags in the reaction, self-insurance and discipline are strong in the region, as shown above. Finally, since 2013, credit quality has been deteriorating, measured by the growth of NPLs and a lagged increase in the respective provisions. This situation is worse in small economies with weaker financial systems (see Figure 2). As of March, 2020 the effects of credit deterioration are still to be seen in the region because of payment moratoriums, among other measures (see annex), and the lag in the effect of the pandemic against what has happened in Europe and the United States. It makes sense to expect a level of deterioration for the regional financial system credit portfolio in the months after April, 2020.

Another relevant aspect in the financial sector overview is liquidity. In the short term, liquidity matters because in many LAC jurisdictions, in the months during and after the financial crisis of 2007-2008, it dried up significantly.

The experience of this period shows how the first immediate effect of international crises is restricted access to liquidity from abroad, an effect of increased de-risking and risk aversion. This effect is combined with the adjustment in allocation for the local credit portfolio, the effect of the materialization of liquidity risk, the increase in expected losses of firms and households, and the natural increase in aversion to credit risk (Izquierdo, 2010). In fact, as of this writing, evidence suggests that liquidity is drying up in emerging markets.⁵ As everywhere else in the world, both firms and households are hoarding available cash to face the likely economic downturn, and this has economic and financial consequences. Governments and central banks have been taking measures to mitigate the effects on liquidity in almost every jurisdiction in the LAC region (see Annex). Although there is no rule of thumb for this particular ratio, *ceteris paribus*, a higher ratio of liquid assets to liquid liabilities is preferable in times like these. The regional average ratio of liquid assets to deposits and short-term funding is 31 percent, meaning that for every monetary unit of short-term liabilities, there are 31 cents of assets of similar maturities.

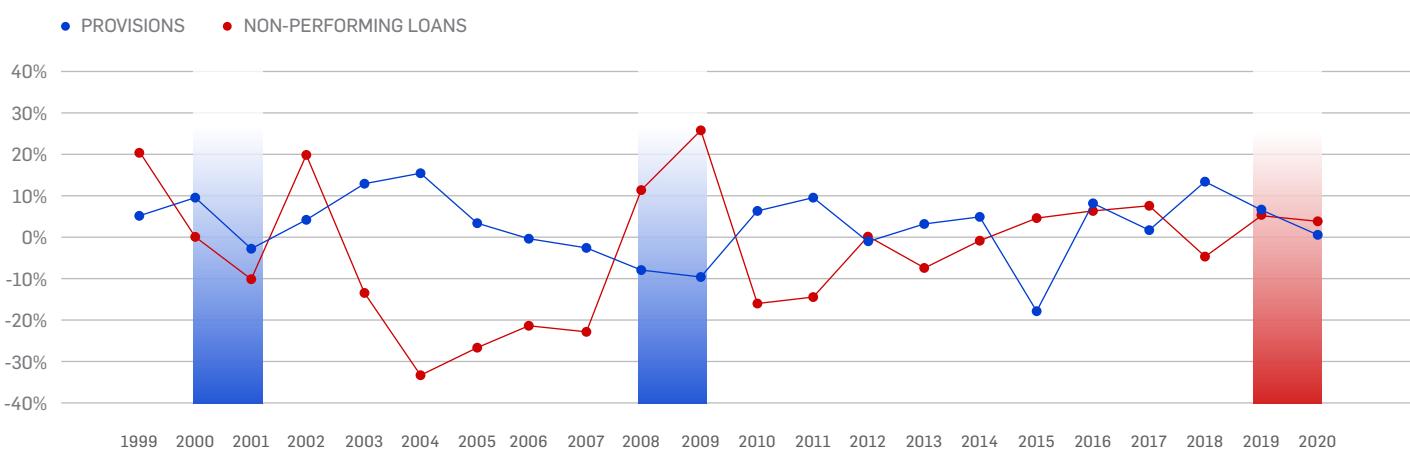


Figure 2: LAC: Non-Performing Loans to Gross Loans, Provisions to NPL, 1999-2020 (Year-to-year growth in percent)

Source: Author's calculations and data. Global Financial Development Database, 2019.
Note: Data for Jamaica are from 2016, the latest available. Data for 2020 are as of March.

⁵ See <https://fas.org/sgp/crs/row/R46270.pdf> for more information.

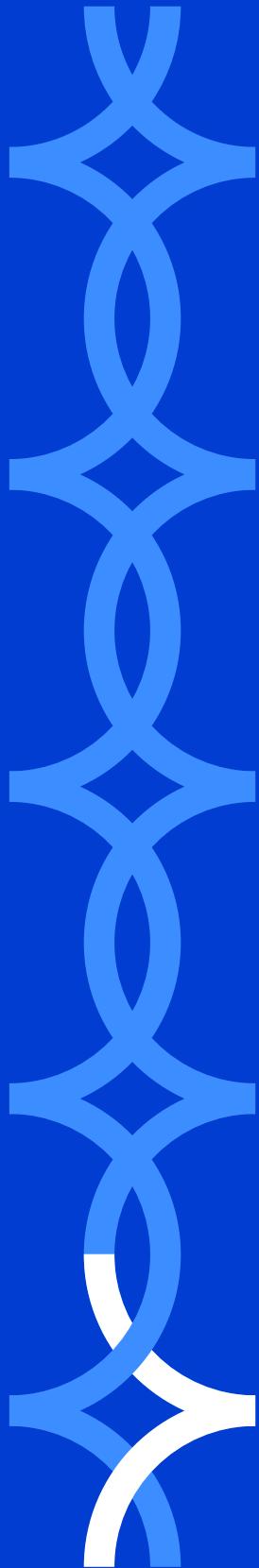
Financial depth is reflected at the microeconomic level through financial inclusion data. The most popular measure of financial inclusion is the percentage of adults with a financial services account.⁶ For the LAC region, this number is 50.9 percent, according to data for borrowing members of the Inter-American Development Bank (IDB).⁷ This means that half the population lacks access to a bank account.

A critical number for the COVID-19 period is the number of bank branches per 100,000 adults. Many governments in the region are using bank branches to transfer subsidies to households and businesses. As a reference, the United States has 31 branches per 100,000 adults, while the LAC region has 16. Figure 3 shows a heat map for the ratios by LAC country. The average number of adults in the LAC region who reported having received government transfers through a bank account was 9.1 percent. This number is close to the percentage of people who received remittances using a formal bank account: 9.3 percent.

These numbers underscore the importance of digitizing financial services in times of crisis. The use of technology by traditional financial intermediaries and Fintech platforms is a powerful tool to increase financial inclusion. Policymakers across the region should be thinking about how to maximize inclusion using digital means to avoid physical contact. Digital onboarding is the first step and should be included in the policymaking agendas in LAC in the context of COVID-19. This process would increase confidence in the ability of governments to accurately identify financial consumers. It requires the same type of reliability obtained in physical processes but using information gathered online.

⁶ The Global Financial Development Database describes this data as: The percentage of respondents who report saving or setting aside any money by using an account at a formal financial institution such as a bank, credit union, microfinance institution, or cooperative in the past 12 months (percent age 15+).

⁷ The list of vulnerable countries is: Bahamas, Barbados, Belize, Bolivia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Suriname, Trinidad and Tobago and Uruguay. The remaining borrowing member countries include Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.



SECTION THREE

Access to Financial Services for MSMEs

3. Access to Financial Services for MSMEs

Financial depth is reflected at the microeconomic level through financial inclusion data. The most popular measure of financial inclusion is the percentage of adults with a financial services account.⁶ For the LAC region, this number is 50.9 percent, according to data for borrowing members of the Inter-American Development Bank (IDB).⁷ This means that half the population lacks access to a bank account.

A critical number for the COVID-19 period is the number of bank branches per 100,000 adults. Many governments in the region are using bank branches to transfer subsidies to households and businesses. As a reference, the United States has 31 branches per 100,000 adults, while the LAC region has 16. Figure 3 shows a heat map for the ratios by LAC country. The average number of adults in the LAC region who reported having received government transfers through a bank account was 9.1 percent.

This number is close to the percentage of people who received remittances using a formal bank account: 9.3 percent. In the COVID-19 crisis this number should have increased. However, many of the transfers to vulnerable populations were physically delivered in bank branches.

These numbers underscore the importance of digitizing financial services in times of crisis. The use of technology by traditional financial intermediaries and Fintech platforms is a powerful tool to increase financial inclusion. Policymakers across the region should be thinking about how to maximize inclusion using digital means to avoid physical contact. Digital onboarding is the first step and should be included in the policymaking agendas in LAC in the context of COVID-19. This process would increase confidence in the ability of governments to accurately identify financial consumers. It requires the same type of reliability obtained in physical processes but using information gathered online.

3.1. MSME Financial Limitations

According to the MSME Finance Gap survey (IFC, 2019), total demand from MSMEs reaches US\$2.15 trillion, while total supply of funding from financial institutions is US\$347 billion, according to 2017 data.

Hence, there is a gap of US\$1.8 trillion between demand and supply for funds, equivalent to 41.7 percent of regional GDP.⁸ In other words, financial gap for MSME in the region is 5.2 times the current supply.⁹

⁶ The Global Financial Development Database describes this data as: The percentage of respondents who report saving or setting aside any money by using an account at a formal financial institution such as a bank, credit union, microfinance institution, or cooperative in the past 12 months (percent age 15+).

⁷ The list of vulnerable countries is: Bahamas, Barbados, Belize, Bolivia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Suriname, Trinidad and Tobago and Uruguay. The remaining borrowing member countries include Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela.

⁸ Data available at: <https://www.smefinanceforum.org/data-sites/msme-finance-gap>. Data are estimates and do not include figures for El Salvador.

⁹ The survey collected data from 27,784 firms, of which 27,090 were microenterprises and 1,658 were Small and Medium Enterprises according to the local definition for such firms.



Figure 3: Number of Bank Branches in Latin America and the Caribbean per 100,000 Adults, 2017

Source: Author's calculations. Global Financial Development Database, 2019. (* Data for Jamaica is 2016, the latest available).

These data also reveal that formal MSMEs have a potential demand of US\$1.4 trillion, equivalent to 27 percent of regional GDP. In terms of enterprise size, aggregate data show how approximately 22 percent of microenterprises were constrained against 31 percent of small and medium-sized enterprises (SMEs) (Figure 4).¹⁰ These data underscore the need for financing for MSMEs in the region.

Another important dimension is gender. The data show that 13 percent of the MSMEs surveyed were women owned.¹¹ According to the responses, approximately one-third of women-owned businesses reported being financially constrained, compared to 25 percent for men-owned businesses. The financing gap between women and men is usually significant for cultural, historical, and social reasons across the region, but surprisingly, these results seem to show little difference. Collateral requirements are generally much more stringent for women, and regulatory requirements limit their access to finance (Pailhé, 2014).

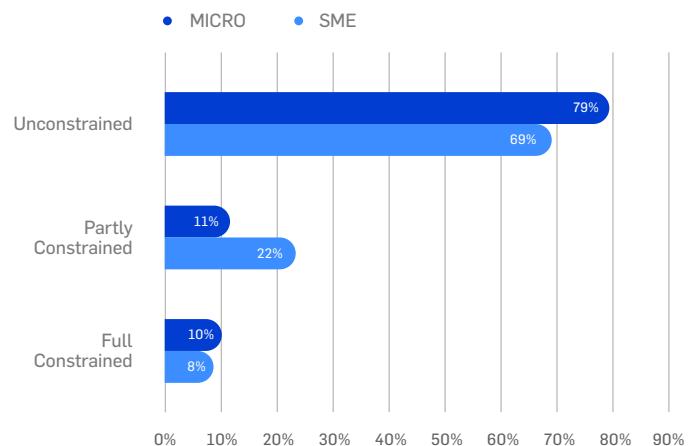


Figure 4: Percent of Financially Constrained MSMEs in Latin America and the Caribbean by Size, 2017

Source: IFC (2019).

¹⁰ According to IFC (2019): In general, IFC puts constrained firms in two categories: (i) Fully credit-constrained (FCC) firms: those that find it challenging to obtain credit (Those that applied for a loan and were rejected; and those that were discouraged from applying either because of unfavorable terms and conditions, or because they did not think the application would be approved); and (ii) Partially credit-constrained (PCC) firms are defined as those that have been somewhat successful in obtaining external financing.

¹¹ It is understood that a company is owned by women if 50 percent is the property of women, or she is the absolute owner or is the person who administers or manages the company. Also, if the company has women's participation in the property and the management or administration.

Further examination of the data reveals other dimensions for LAC firms. For example, GFDD (2019) data show that the share of all firms against small firms (5-19 workers) in the formal sector which have a bank loan or a line of credit are, on average, 54.9 percent and 47.2 percent, respectively.

This is not a significant difference; however, it is important to note that the survey only collected data on formal firms.

Second, the percentage of firms that obtain credit for working capital (short-term) or investment (long-term) purposes varies widely across countries with data. On average, 42 percent of firms get credit for either or both purposes. These results are slightly better than the average reported by the Global Findex in 2014, where only 36 percent of firms financed working capital.¹²

Also, in relative terms, the number does not appear as low, since in Europe, 48 percent of firms finance working capital in the formal financial system. In terms of financing investments, the numbers are similar. The percentages of investment vs. working capital borrowed by countries that were reported in the survey appear in Figure 5 below.

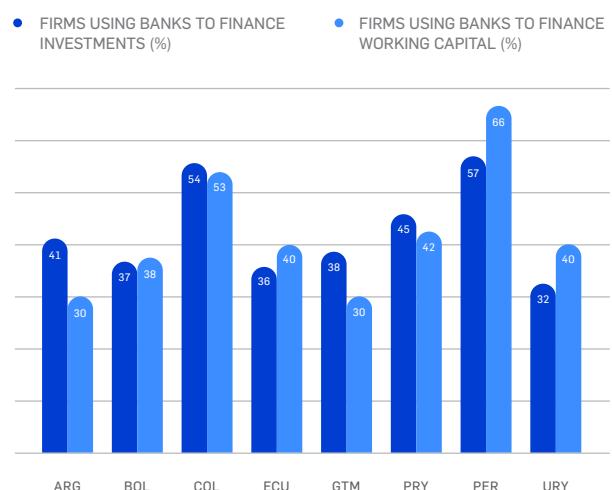


Figure 5: Investment versus Working Capital Financing in a Financial Institution, 2017 (in percent)

Source: Author's calculations based on GFFD (2019).

¹² Data available at World Bank (2018).

Global Findex Database.

<https://globalfindex.worldbank.org/archives/2014-global-findex>, retrieved April 24, 2020.

3.2. Alternative Sources of Financing

There are few alternative sources of financing for MSME in the region besides the formal banking sector. The obvious alternative is capital markets. However, except for some attempts in Brazil, Jamaica, Peru, and more recently Colombia, no junior exchanges or marketplaces exist in the region.¹³ Capital markets help mitigate macroeconomic shocks and its consequences in the credit channels. However, capital markets in LAC lack of depth and liquidity and this document will not go further.

It is essential, however, to highlight the possibilities coming from fintech. The First Global Alternative Finance Market Benchmarking Report, by University of Cambridge, supported by IDB, shows important findings in terms of alternative finance/crowdfunding as a possible market for MSME financing (Cambridge Centre for Alternative Finance, 2020). First, the total volume sought by these fintech platforms, in terms of originations, was US\$1.81 billion, small in comparison to the demand gap, but significant. Second, the LAC region reached the steepest year-to-year growth among the six geographical regions included in the analysis, with an annual growth rate of 173 percent against the previous year's volume (US\$663 million). In fact, for the last six years, LAC origination had an average annual growth rate of 147 percent. Third, the region has focused on the business sector, with 60 percent of alternative finance market activity financing MSMEs, mainly. This share looks more appealing in monetary terms and number of fundraisers financed: \$1.08 billion were raised to finance 217,000 projects across the region. The study gathered statistics disaggregated by gender and found that more than a third of the fundraisers were businesses led or owned by women.

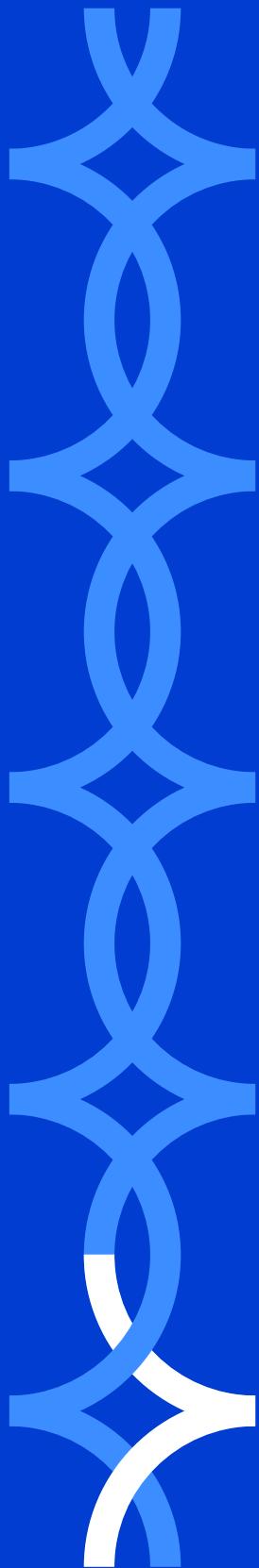
¹³ The most recent initiative in Colombia allows MSMEs to issue junior bonds to finance their activities. Details are available at <https://a2censo.com/>.

3.3. The Demand Side: Agency Problems and Informality

MSMEs have several characteristics that impede their access to financing in the LAC region (IDB, 2017). The main barriers identified were the lack of a physical real estate or pledge guarantee, the lack of a solidarity firm or guarantor, low company formalization, and poor credit scores. Non-existent or inadequate secured transactions law, the lack of a collateral registry, and the lack of guarantee funds exacerbate these barriers. The problem is even greater if the guarantees required for MSMEs to obtain commercial loans (provided there are clear rules in place in the country) are higher than 100 percent.

Informality also affects the price of borrowing for MSMEs. MSMEs pay interest rates usually well above the average placement rates in the financial system. Borrowers lack financial statements or business plans and frequently on taxes. SMEs in the LAC region prefer informality, which limits the amount of information they can disclose to lenders and other counterparties. This raises the cost of financing. The lack of information creates the perception of a lack of transparency, among other issues, and the financial sector charges higher rates or denies access to financial services to avoid adverse selection. This situation is also reflected in screening and loan monitoring, creating the perception of moral hazard by MSMEs.

Informality and agency problems leave MSMEs with few opportunities beyond internal financing or the choice of obtaining resources outside the formal financial system. Finally, their small scale and not belonging to a value chain further increase the barriers to financing for these enterprises.



SECTION FOUR

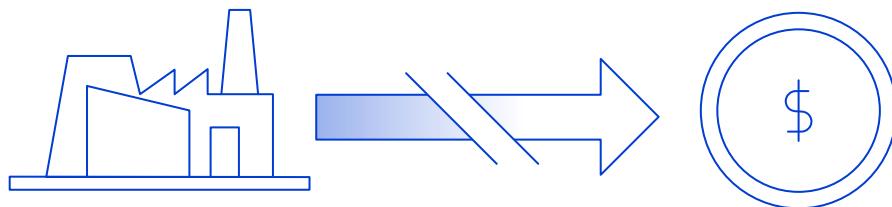
Economic and Financial Crises and MSMEs

4. Economic and Financial Crises and MSMEs

Consolidated data for the region show how the financial sectors are relatively shallow in terms of servicing the real economy in LAC countries. It was also shown above how, although capitalization is robust, their aggregate behavior with respect to credit risk is procyclical. This has profound implications for economies given the amplification and propagation of the business cycles, or the "financial accelerator," described by Bernanke, Gertler, and Gilchrist (1998). Finally, financial systems in LAC countries are relatively liquid thanks to the lessons learned from the 2008–09 financial crisis by many banks, mainly in small jurisdictions. However, that layer quickly disappears in a crisis, as some jurisdictions saw during the GFC.

With respect to the servicing of the MSME sector, the region's financial systems lack reach in the "last mile," reaching to the final subjects of credit. First, the financing gap is significant with respect to regional GDP. Second, at the micro-level, the system does not serve MSMEs well, and if the MSME is woman owned, the failure is even greater. More than half of all MSMEs do not have access to the formal financial sector in the best of times. This situation does not account for a crisis. Thus, it is relevant to understand what happens to MSME financing during and after financial crises. Unfortunately, there is scant academic and empirical literature on the topic.

Under this scenario, the distress of the real sector, especially among MSMEs, is expected to worsen. The COVID-19 emergency is having severe consequences for the financial systems, which have responded on a massive scale throughout the world. Given the evident and enormous connection between the financial and real sectors, distress is already occurring in weaker financial institutions and industries.



There is a vast literature on the impacts of financial crises on the real economy in general. Less has been written on the impacts of financial crises on MSMEs, more specifically in the LAC region. Bernanke (1983) showed how credit becomes more expensive and harder to get for the real sector in crises where debtors are distressed or go into bankruptcy. As he pointed out, households, farmers, and small businesses are the hardest hit. The main cause for such a situation appears to be that information asymmetries increase in crises, with an attendant retrenchment in the supply of credit. This created a vicious circle, where the diminished lending capacity of the financial sector plunged the economy into prolonged recessions and economic crises. Bernanke demonstrated how this effect lasted for almost a decade after the great depression, throughout the 1930s (Bernanke, 1983).

A theoretical model by Bernanke and Gertler (1990) defined financial fragility as a situation where entrepreneurs who need to fund projects (potential borrowers) have low wealth relative to their size, which, they explain, may occur in a prolonged recession. In such circumstances, information asymmetries are exacerbated, since the firms will hold much more information about their projects than potential lenders, affecting their willingness to evaluate projects and hence to finance them. Firms may then reduce their investments, amplifying the downward effect on productivity and increasing the costs of lending. Additionally, collateral is lost to the extent that lenders will not disburse resources. Thus, the retrenchment in financing reinforces the recession.

The policy implications of the paper were that, assuming that it is possible to identify types of fundraisers, in such a situation, a central planner, that is, a government agency, could redistribute endowments via lump-sum taxes in the form of a debtor bailout. The logic behind the intervention is that the transfer increases borrowers and reduces agency costs, which caused the vicious circle mentioned above. In line with this policy implication, delivering loans or the bailouts through financial institutions transfers the credibility on the screening and monitoring to them from the government. This is a suitable alternative. However, these transfers do not deal with the moral hazard problem of excessive risk-taking after the money is delivered.

Bernanke and Gertler (1995) describe the situation of small businesses when the credit channel is affected. First, they show that large firms increase their short-term borrowing in moments when credit is scarce because they have access to commercial paper markets and other short-term lending. Small enterprises do not have this advantage, and they respond by cutting costs and inventories first to respond to the shocks when short-term borrowing closes for them. In fact, besides larger volatility in inventories, SMEs are more credit-dependent than large firms and might incur larger transaction (i.e., the need to establish new financial relationships) and financial costs (i.e., higher costs for higher perceived risks). From the standpoint of monetary policy, their evidence suggests that easing the conditions would have a beneficial effect on access to credit in the medium term, even for small firms. What the authors call the "bank-lending channel" is mechanism for transmitting such effects.

Kiyotaki and Moore (1997) propose another theoretical model where potential borrowers (i.e., firms with projects in an inter-temporal setting) lose the value of their collateral amid a downturn in output. In such scenarios, output shocks cause credit restrictions, which in the end amplify the effect of a recession. Hence, maintaining the ability to offer collateral is a crucial element for borrowers in economic downturns. Iacovello (2005) developed the model further, confirming this phenomenon in other markets.

Moving over to the empirical side, the Organisation for Economic Co-operation and Development (OECD) (2009) collected data on SMEs from its members globally to evaluate the effects of the great financial crisis on their financing. The first important finding was the expected decline in the demand for goods and services produced by firms, followed by delays in financial obligations and defaults, insolvencies, and bankruptcies. The study mentions that in countries such as Denmark, Italy, Ireland, Norway, and Spain, the insolvency rate for SMEs was more than 25 percent. This is not surprising, since in countries such as Spain more than 80 percent of firms reported having difficulty accessing finance. Small loans for working capital not only required higher collateral than before the crisis but had increased spreads over the rates paid by large firms. In some cases, the difference was more than 250 bp in a scenario where monetary policy was consistently easing. In other words, risk, both real and perceived, offset the effects of the monetary policy. SMEs responded in three ways: by reducing costs, seeking liquidity (including by delaying payments, among other strategies), and postponing investment. Government responses focused first on facilitating cash flow. Among other measures, they implemented accelerated depreciation to reduce income taxes, tax credits, tax cuts, deferrals, and refunds.

Exporting countries who answered the survey mentioned the creation or strengthening of export financing or guarantee facilities. Guarantee schemes were the most widely used instrument in times of the great financial crisis, both public and private, with some proportion of public resources (e.g., in the case of Greece).

Valuable experiences emerged of firms on the verge of bankruptcy emerged in countries such as France. A scheme of using "mediators" who helped to resolve differences amicably between firms and banks to reach agreements to delay payments or even request new funding. The numbers show how, until 2009, the scheme saved 60,000 jobs in 8,000 firms, 90 percent of which were MSMEs with fewer than 50 employees. Some of the proposals in the document included the possibility of easing factoring and invoice trading, and temporary sales of assets to financial institutions, among others.

Chowdhury (2011) shows the response of countries such as China, India, and the United States and some European countries in terms of SME financing during and after the 2008–09 crisis. In addition to the experiences of many OECD countries, this study highlighted the vital role of the Credit Guarantee Trust Fund for Micro and Small Enterprises (CGTMSE) in India in covering the increase in collateral requirements that accompanied the crisis. Another critical point is the support provided to MSMEs to create accounting, construction, and business sales plans to obtain credit, which are complementary measures.

Economists at Princeton University (Brunnermeier et al., 2020) suggest using Kuzarbeit, a mechanism that allows firms to pay wages to employees and repay debt obligations (specifically short-term obligations) at fiscal cost. Many countries in Europe have already adopted this approach. They also propose a scheme where the European Central Bank (ECB) lends to the European Investment Bank (EIB), which acts as a first-tier bank to lend to MSMEs with cash issues. The loans are made at below-market interest rates, and tax authorities collect repayments to reduce transaction costs. EIB issues bonds to the ECB, which in turn can be re-sold to the market to fund the operation to provide liquidity.

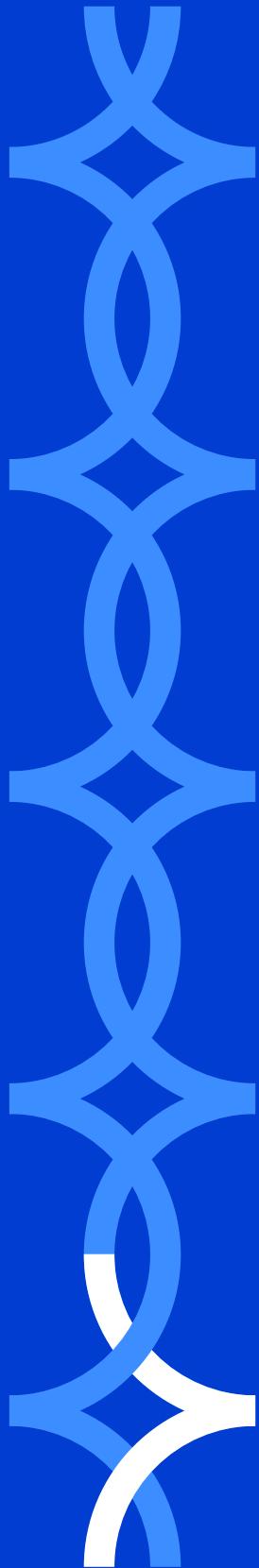
On the epidemic, Acharya and Gopal (2020), writing about the Paycheck Protection Program, propose targeting those in need first, including MSMEs, with the idea of replacing income for a period of time for private-sector firms with fewer than 500 employees, as if the crisis had not occurred, so that they can pay employees and maintain demand. Such a solution comes obviously with a fiscal cost. It is important to prioritize the most affected sectors (i.e., those considered non-essential). Examples are the “mom and pop” shops, hair salons, local restaurants, among others. This should be implemented through the largest distribution network possible, including through fintech and other financial institutions.

The current level of economic uncertainty is high throughout the world, and the LAC region is no exception. According to the IMF, a recession is imminent,¹⁴ triggered by a global external shock. The LAC region is familiar with the consequences of such a shock or “sudden stop.” The shock is expected to strike regional economies hard, given their current fundamentals in terms of fiscal and current account deficits and large amounts of public and private external debt.¹⁵ MSMEs are hit harder than large firms in times of crisis, and governments respond in different ways. The annex to this document lists the measures taken by governments and central banks to mitigate the effects of the COVID-19 crisis. It also offers ideas and options and a taxonomy of monetary and fiscal policies for OECD and LAC countries.



¹⁴ Ms. Kristalina Georgieva, managing director of the International Monetary Fund (IMF) delivered a statement following a G20 Ministerial Call on the Coronavirus Emergency indicating that a recession was imminent: "...First, the outlook for global growth for 2020 is negative—a recession at least as bad as during the global financial crisis or worse. But we expect recovery in 2021. To get there, it is paramount to prioritize containment and strengthen health systems—everywhere. The economic impact is and will be severe, but the faster the virus stops, the quicker and stronger the recovery will be..." Available at: <https://bit.ly/IMFRecessionsstatement>.

¹⁵ According to Cavallo (2020): “Latin America has experienced sudden stops in the past. The coronavirus takes the challenge to a new level.” Available at: <https://blogs.iadb.org/ideas-matter/en/latin-america-has-experienced-sudden-stops-in-capital-flows-in-the-past-the-coronavirus-takes-the-challenge-to-a-new-level/>.



SECTION FIVE

The Aftermath and D Day: Firm Restructuring and Resolution

5. The Aftermath and D Day: Firm Restructuring and Resolution

In their acclaimed book on financial crises, Reinhart and Rogoff (2009) describe three aspects of their aftermath for output, employment, and fiscal imbalance. They emphasize the effects of crises on emerging markets, including countries from LAC. With respect to output, using data for real per capita GDP, they show how, except for the 1929 crisis in the United States, emerging markets have larger declines in product output accompanied by longer periods of recession. They indicate that the cause is sudden stops, where foreign capital ceases to flow into the region. The average for real per capita GDP growth was -9.3 percent with a duration of 1.9 years.

The employment situation was not as complex compared that that of developed economies. According to their data, emerging economies have smaller increases in unemployment for shorter durations than the average of 7 percent and 4.8 years. This was more the case in Asia than in Latin America. Finally, they analyzed the increase in public debt after financial crises and found that it grew by 86 percent relative to the year when the crisis began. There was no evidence of a substantial difference between advanced and emerging economies in this respect. These findings create a framework to analyze the restructuring and resolution of companies, first from a theoretical, and then from an empirical point of view.

5.1. Restructuring of Enterprises

The current crisis requires specific measures to keep firms alive and to revive the productive apparatus as much as possible in the aftermath of the pandemic. The scenario of a systemic output slump is not a rule in the economic and policy literature; Miller and Stiglitz (2010) amplified the Kiyotaki model mentioned above, broadened it, and added further ideas to understand the effect on small lenders of an economic crisis and systemic financial instability. Their findings show how the amplification mechanism works against all interests in the economy, and economic and financial crises enter a cycle where one reinforces the other.

They analyze the credit market under a framework with high leverage by borrowers, who have, in turn, less collateral. In principle, relaxing monetary policy solves part of the problem, but the amplification mechanisms diminish its effectiveness over time, mainly because of the agency problems mentioned above.

Interestingly, the policy implications of their findings are useful for the current times. First, they suggest that the idea is to keep businesses working as if they were in non-crisis circumstances. Second, the usual procedure in the United States for distressed firms is to go into Chapter 11 procedures. However, Chapter 11 is, in principle, created as a "micro" figure: it depends on the legal, financial, and operational characteristics of the individual firms that request it. But, what happens when a systemic restructuring is necessary?

To answer this question, Miller and Stiglitz propose a "Super Chapter 11," where the bankruptcy principles are applicable at a macro level to reduce friction and transaction costs. Essentially, this approach requires the existence, or creation, of an agency (government) that could apply the same procedure or group of processes in a single case, mitigating the costs associated with the case-by-case approach. First, the authors propose, initially, that such an agency could execute asset purchases from the firms, reducing their liquidity risks, preventing fire sales, and de-leveraging without insolvency. This initial measure is akin to the previous logical step of relaxing monetary policy to secure liquidity in the markets and would reinforce its effect.

Second, they suggest applying the Super Chapter 11 to firms where the going concern is larger than the alternative user cost, as in the logic behind the regular micro procedure. This means that firms (MSMEs) that are expected to survive may be subject to the "super" procedure. They propose three possible actions for bankruptcy at the macro level:

DEBT-EQUITY SWAP:

Lenders (mainly banks or a government agency) become the owners of the firms' equity. The latter will not have to pay interest on their obligations, and the swap eliminates collateral requirements. This financial operation creates immediate liquidity for the firms.

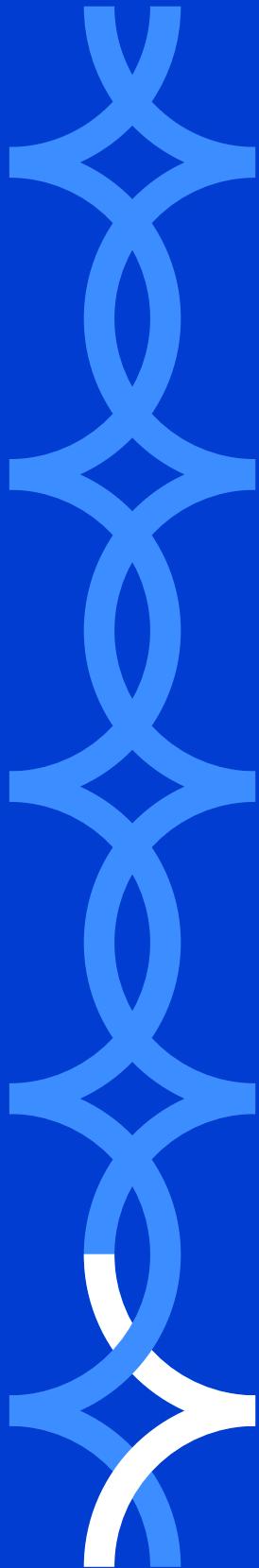
CAPITAL INJECTION:

This action implies that the public agency injects capital in the form of preferential shares or unsecured debt into the firms. In this way, the negative externality of asset sales is eliminated through a reduction in the firms' leverage. Capital injections were tested in the United Kingdom and the United States and proved to be effective in alleviating the liquidity shock at the firm level. Evidence shows firms repaid the financing they got using this mechanism.

LOAN WRITE-DOWNS:

This would enable firms to continue working without the obligation of having to repay their loans in full. The government assumes part of the debt and the borrower repays the other part at a lower interest rate. The condition is that the loan is converted into a recourse loan, where the agency can collect assets besides the original collateral in case of nonpayment, to reduce agency problems. The payments are made in subsequent periods.

The good news is that the authors show how these actions were implemented one way or another in the United Kingdom and the United States. For example, capital injections were successfully applied in the United States following the 2008–09 crisis. One final caveat: governments must be sure to implement measures that benefit the financial sectors and do not reach the "last mile."



SECTION SIX

Insolvency Frameworks in Latin America and the Caribbean

6. Insolvency Frameworks in Latin America and the Caribbean

Civil law is the most frequent legal tradition in the LAC region, for historical reasons. Although many LAC countries adopted such legislation, it is applied differently depending on the country. This is the case for insolvency and resolution frameworks for firms across the region.

Without any loss of their fundamental characteristics, it is possible to explain insolvency regimes across LAC jurisdictions. First, the idea of insolvency regimes is to protect credit and to recover and preserve the production and employment that firms create. Second, laws cover two main procedures: reorganization (restructuring) processes and resolution (judicial liquidation) of the firms. The former aims to preserve the viability of firms and to regularize their credit and business relationships. Reorganization implies that enterprises reach agreements with counterparties that include operational, administrative, asset or liability restructuring and that they wish to remain in business. The latter process pursues the prompt and orderly liquidation of the individual firm, using its assets to honor its debts. Third, these legal acts are necessary because they aim to preserve good faith between society and firms. These regimes establish frameworks for firms in distress to proceed in case they are needed legally, with the understanding that any action against them is considered misconduct, illegal, and sometimes criminal. Fourth, insolvency regimes are designed to apply at the level of the individual firm, rather than at the scale of a group of firms; they do not contemplate for systemic risk. Hence, no systemic procedures are considered in the legislation anywhere in the LAC region, and there is no possibility of performing an action like the Super Chapter 11 described above. Thus, the more governments in LAC countries avoid massive insolvencies of companies, the better.

Several measures may be useful to understand the effectiveness of insolvency regimes. The World Bank's Doing Business 2020 includes a ranking to rate insolvency resolution, measuring the time, cost, and outcome from applying local regulations. The ranking includes 168 countries and regions. The LAC region in the 110th place, while high-income countries from OECD, as a group, are 28th. Leaving aside the technicality of the number for the ranking, four measures are useful to understand the gap for LAC (Table 1).

Region	Time (years)	Cost (% of estate)	Recovery (cents on the dollar)
LAC	2.9	16.8	31.2
OECD (High Income)	1.7	9.3	70.1

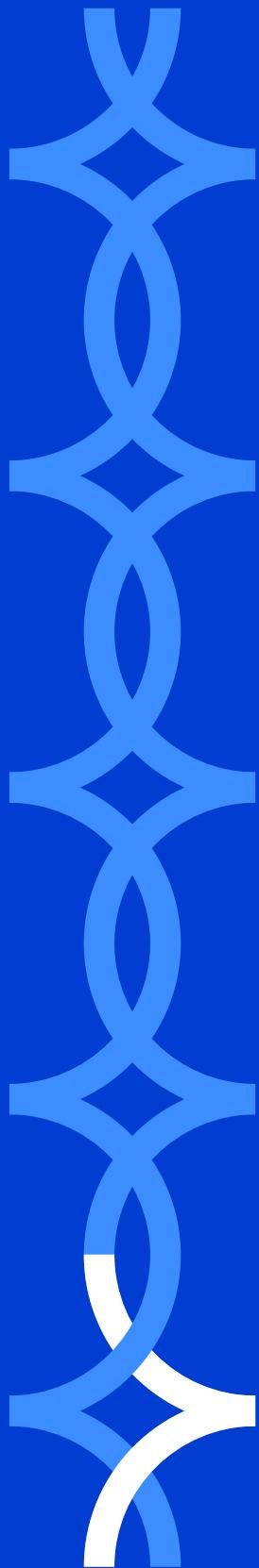
**Table 1: Latin American and the Caribbean vs. OECD Countries:
Resolving Insolvency**

Source: Authors' calculations based on World Bank (2019).

The numbers speak for themselves. First, resolution processes take an average of 2.9 years in the LAC region, from the moment when the process began until it finished with a decision by the respective legal authority. It takes twice the time in LAC countries for a parallel process to be completed in more advanced economies. Second, the cost of the estate used to advance the process is relatively high in the LAC region, meaning that the legal, operational, and financial expenses absorb a large part of the entrepreneurs' efforts (if the process comes to a resolution). Finally, the recovery rate is low in the region. Just as occurs in financial sector transactions, a "haircut," or reduction, in the value of debts is expected to occur, which in the region is above two-thirds of the total.

This means that creditors receive 30 cents on the dollar after the process if there is an agreement. The reality in the LAC region is that many firms are informal, and making use of these legal instruments is nearly impossible for them.

Without data on times of crisis, it is difficult to extrapolate conclusions about what happens in the region. Moreover, the vast informality of firms in the LAC region mentioned in Section 3 may or may not play in favor of LAC economies. One thing is certain: avoiding insolvency procedures through policy measures is preferable to resolution of the real sector. In conclusion, a review of the insolvency regimes, including the possibility of performing large-scale restructuring and other procedures, is an option that governments in LAC should consider. It is urgent that policymakers prepare for the fallout from the COVID-19 economic crisis to come.



SECTION SEVEN

Some financial instruments for SMEs in Latin America and the Caribbean in COVID-19 times

7. Financial Instruments

MSMEs struggle to access financing instruments in non-crisis times. During financial or economic crises, or both, financing for MSMEs becomes even scarcer, sometimes reduced to no access to traditional lenders. All of the measures proposed below assume that financial supervisor/regulator will allow countercyclical buffers to be used for credit when applied to private banks. In all cases, the idea is to mitigate damage to the economy, reverse the measures when needed, create sunset clauses, draft clear regulations that allow no room for confusion (e.g., about the types of firms that are eligible), and enable firms to survive as if there were no crisis or to help them prepare to face it. Below are a number of policy instruments that should be considered.

The list is a pecking order¹⁶ including monetary and fiscal measures, based on the literature explored in previous sections. The fiscal measures include a battery of financial instruments that governments could use before, and after, reopening the economies. The text does not focus on the fiscal consequences of the measures, which are subject to scrutiny, depending on the situation for each country. The proposals are based on experience and include unorthodox measures found in the existing literature. It is important to highlight that a combination of monetary and fiscal policies is preferable to no action at all. From no point of view is this intended to be a guide but rather recommendations on instruments that could work in the region.

7.1. Central Banks: Monetary Easing

Central banks can create or increase liquidity in the economy through orthodox mechanisms such as cutting the monetary interest rates, purchasing public debt, or cutting the interest rate in the discount windows. Innovative policy measures can amplify the effect of traditional ones. The following measures are susceptible of being amplified by innovations.

REPURCHASE AGREEMENTS:

With the acceptance of corporate bonds, securitizations, and commercial paper to offer more liquidity. This is focused on large-sized firms.

SWAP LINES FROM LOCAL LAC BANKS TO THE UNITED STATES:

With the U.S. Federal Reserve, guarantee more liquidity by exchanging holdings of U.S. Treasury securities for overnight dollar loans.

BACKSTOP FOR BRIDGE LOANS (SEE BELOW):

Central banks could act as the backstop for fiscal measures, implying coordination with the respective authorities.

GUARANTOR FOR MICRO AND SMALL (MSE) ENTERPRISE LOANS:

Issue money to lend to local governments within LAC countries or through a national development bank or a government agency to disburse targeted loans for MSEs, with tenures up to five years and at subsidized rates.

¹⁶ In finance, pecking order refers to the increase in the cost of financing as asymmetries in information increase. This logic should be followed here.

7.2. Financial Instruments/Measures (pseudo-fiscal and fiscal)

For the sake of simplicity, it is assumed that a measure that involves the private and public sectors, with some spending for the latter, is a pseudo-fiscal measure.

The following proposals assume the existence of functioning national development banks or the creation of a governmental agency for transition enabling (GATE), which will be in charge of the post-pandemic (can be a trust or special purpose vehicle (SPV) within the national development bank or even the central bank). The delivery of resources through private banks and other financial institutions, including fintechs (which will be just mobilizers of resources), will be set under conditions by the government agency. All of the measures imply fiscal cost. The focus is the financial instruments. The measures are described as schemes for the ease of adoption to each country's circumstances. Finally, in all cases, clear definition of the final users of the measures should be written with no ambiguity in the corresponding administrative acts (laws, decrees, rules, etc), as the operational rules to avoid resource diversion.

Targeted bridge loan¹⁷ (gap financing) facility:

○ SUBJECTS:

Offered to MSEs which were credit subjects before the pandemic, through the GATE, acting as a second-tier financial institution, and delivered through financial institutions and Fintechs.

○ OBJECTIVE AND TENOR:

Short-term loans (up to 24 months), with the option of being revolving lines of credit, upon conditions e. and h., below.

○ RATES:

Market or subsidized interest rates, depending on the case. Clear conditions on payments: rates, terms, installments, etc.

○ MOST BENEFITED SECTORS:

Focus on non-essential sectors: Those affected by the pandemic the most and especially those using intensive labor: Hairdressers, mom and pop shops, etc.

○ USE OF PROCEEDS:

Used to cover immediate variable costs up to 4-6 months, mainly human capital (wages), to protect workers. This includes the compromise and the proof that at least 70 percent of the payroll, employed before the pandemic, was paid using the funds and not laid off.

○ BACKSTOP:

The backstop is the central bank. Funded with government funds.

○ LOCAL GOVERNMENTS:

Can be used by local governments to target the aid.

○ SUNSET CLAUSE:

All measures should contain a clause detailing the date and conditions in which the measure expires.

¹⁷ Bridge loans are a common financial instrument used to alleviate short-term payments with a debt instrument. Frequently, rates for these loans are higher than market rates, and they are considered emergency loans from a private sector perspective.

Formal microenterprise facility:

○ SUBJECTS:

Offered to microenterprises (however defined in the jurisdiction), which are formal (already have a credit with a financial institution or pay taxes): Formality pays. GATE acts as a second-tier bank and delivers to beneficiaries through financial institutions and Fintechs.

○ OBJECTIVE AND TENOR:

Long-term loans (up to 60 months), with the option of becoming revolving lines of credit.

○ RATES:

Subsidized rates. Clear conditions on payments: rates, terms, installments, etc.

○ MOST BENEFITED SECTORS:

Focus on non-essential sectors.

○ USE OF PROCEEDS:

Used to cover installments for investment credit. The loan covers 80 percent of each installment (skin in the game). The GATE should use the receipts as proof of the payments.

○ OTHERS:

See conditions f. to h. in Measure number 1.

Super Chapter 11 restructuring facility (one or a mix):

These measures are to be implemented before any restructuring process. When a firm resorts to insolvency regimes, it shows its commitment to remaining in operation and financially recovering. The measures below are meant to be taken before restructuring and can be proposed by policymakers on a large scale, with transaction and agency costs:

ASSETS REPURCHASE LINE (GUARANTEE FUND):

Used to cover immediate variable costs up to 4-6 months, mainly human capital (wages), to protect workers. This includes the compromise and the proof that at least 70 percent of the payroll, employed before the pandemic, was paid using the funds and not laid off.

● SUBJECTS:

Offered to MSMEs, with emphasis on MSEs. Central banks and GATE facilities can be used for this operation.

● OBJECTIVE AND TENOR:

One-year agreement to repurchase investment assets of the companies to be used as government-backed collateral. It operates like a commercial paper repurchase agreement, only on a shorter scale. It will free liquidity via a guarantee.

● RATES AND GUARANTEE COVERAGE:

Market rate and up to 90 percent of collateral to request working capital credit in private banks.

● MOST BENEFITED SECTORS:

Focus on non-essential sectors: those most affected by the pandemic.

● USE OF PROCEEDS:

To maintain the enterprise operations and labor and short-term capital costs covered through new loans.

● OTHERS:

See conditions f. through h. in Measure 1.

PURE RESTRUCTURING LOAN:

Offered to MSMEs, with emphasis on MSEs. Central banks and GATE facilities can be used for this operation.

• SUBJECTS:

Offered to MSMEs. Central banks and GATE facilities can be used for this operation. Offered to MSMEs that were credit subjects before the epidemic which are in financial distress but not declaring insolvency.

• OBJECTIVE AND TENOR:

To protect, guard, and recover the debtor's assets, including revocation of acts and/or contracts made to the detriment of creditors. This is prior to any formal restructuring procedure. Up to 24 months for restructuring.

• RATES AND GUARANTEE COVERAGE:

Market rates plus a spread. Could also be a government-backed guarantee to delay or restructure payments.

• ADDITIONAL CONDITION 1:

Firms present a financial restructuring plan to a government agency which will act as a mediator between the company and the financial sector. The agency should verify expedited minimum rules to enable the funding to be disbursed.

• ADDITIONAL CONDITION 2:

Information about the restructuring is public.

• OTHERS:

See conditions f. through h. in Measure 1.

LOAN WRITE-DOWNS LINE:**• SUBJECTS:**

Offered to MSMEs. Central banks and GATE facilities can be used for this operation. Offered to MSMEs which were credit subjects before the epidemic which are in financial distress but not declaring insolvency. Offered to MSEs which were credit subjects before the epidemic which are in financial distress but do not want to restructure.

• OBJECTIVE AND TENOR:

To allow the firm to continue its operations without having to restructure. Covers long-term obligations and their installments up to 24 months.

• OPERATION AND RATES:

Government agency subsidizes up to 50 percent of the loan, which is bought from the financial institution. The loan is converted into a recourse loan with subsidized rates for the government's share.

• ADDITIONAL CONDITION:

Information about the loan write-down is public.

• OTHERS:

See conditions f. through h. in Measure 1.

CAPITAL INJECTION LINE:

- **SUBJECTS:**

Offered to MSMEs. Central banks and GATE facilities can be used for this operation and will act as SPVs or trust agents.

- **OBJECTIVE AND TENOR:**

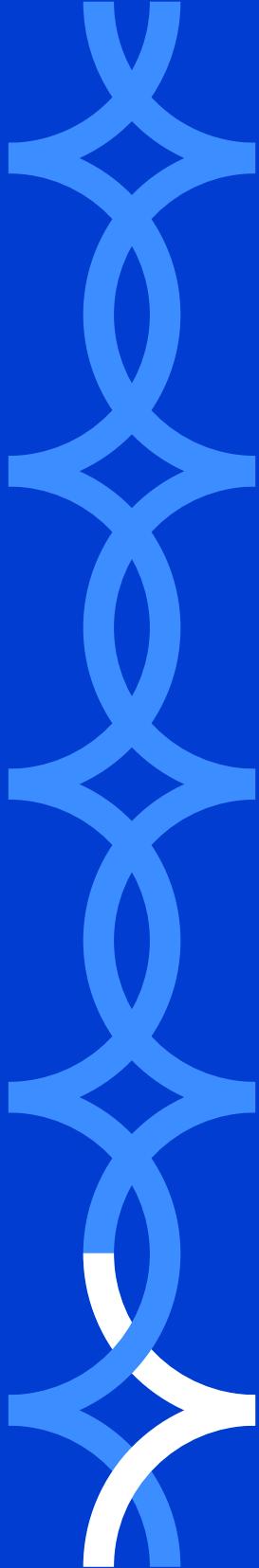
To allow the firm to continue its operations without having to restructure. The liquidity comes from a bond issuance based on potential cash flows from firms. Bond maturities up to 60-months.

- **OPERATION AND RATES:**

Government agency pools similar or same-sector assets (cash flows) in the most standardized fashion: tenors, economic sectors, etc. The cash flows back the issuance of social bonds to be offered to the market with a credit enhancement from multilateral institutions or the government, if applicable. The bonds will be used to inject capital into firms. Firms acquire a loan from the government agency at market rates.

- **MARKET OPERATIONS:**

Central bank can use the titles for liquidity purposes.



SECTION EIGHT

Conclusions

We are living in uncertain times with no precedent in the last century of such global economic and likely also financial turmoil. Policymakers and the financial sector must rise to the challenges ahead. This paper has offered some scenarios of what could happen, some recommendations for the future, and ideas to contribute to the ongoing debate. Creative application of traditional and nontraditional instruments is paramount in these times. Conservation of the productive apparatus should be one of the elements to be prioritized in the minds of those who have a role in avoiding or mitigating the economic effects of the COVID-19 pandemic.

References

ACHARYA, V. AND M. GOPAL. 2020.

Target the Paycheck Protection Program to Those Most in Need. New York, NY: Stern School of Business, New York University. Available at: http://pages.stern.nyu.edu/~sternfin/vacharya/public_html/pdfs/PPP_Comments_Acharya_Gopal_032920_FINAL.pdf?_ga=2.198924332.2099868306.1586382763-553264454.1560193758

BERNANKE, B. S. 1983.

Non-Monetary Effects of the Financial Crisis in the Propagation of the Great Depression. NBER Working Paper No. 1054. Cambridge, MA: National Bureau of Economic Research.

BERNANKE, B. S. AND M. GERTLER. 1990.

Financial Fragility and Economic Performance. *The Quarterly Journal of Economics*, 105(1): 87–114.

_____. 1995. INSIDE THE BLACK BOX:

The Credit Channel of Monetary Policy Transmission. *Journal of Economic Perspectives*, 9(4): 27–48.

BERNANKE, B. S., M. GERTLER, AND S. GILCHRIST. 1998.

The Financial Accelerator in a Quantitative Business Cycle Framework. NBER Working Paper No. 6455. Cambridge, MA: National Bureau of Economic Research.

BRUNNERMEIER, M. K., J.-P. LANDAU, M. PAGANO, AND R. REIS. 2020.

Throwing a COVID-19 Liquidity Lifeline. Princeton, NJ: Princeton University. Available at: <https://scholar.princeton.edu/markus/news/throwing-a-covid-liquidity-life-line>

CAMBRIDGE CENTRE FOR ALTERNATIVE FINANCE. 2020.

The Global Alternative Finance Market Benchmarking Report. Cambridge, United Kingdom: Cambridge Centre for Alternative Finance. Available at: <http://bit.ly/IDBfintechpublications>

CARVALLO, E. 2020.

Latin America has Experienced Sudden Stops in the Past: The Coronavirus Takes the Challenge to a New Level. Washington, D.C.: IDB. Available at: <https://blogs.iadb.org/ideas-matter/en/latin-america-has-experienced-sudden-stops-in-capital-flows-in-the-past-the-coronavirus-takes-the-challenge-to-a-new-level/>.

CARVALLO, O., A. KASMAN, AND S. KONTBAY-BUSUN. 2015.

The Latin American Bank Capital Buffers and Business Cycle: Are they Pro-cyclical? *Journal of International Financial Markets, Institutions and Money*, 36(C): 148–60.

CHOWDHURY, S. 2011.

Impact of Global Crisis on Small and Medium Enterprises. *Global Business Review*, 12(3) 377–399.

GFDD (GLOBAL FINANCIAL DEVELOPMENT DATABASE). 2019.

Washington, DC: World Bank Group. Available at: <https://www.worldbank.org/en/publication/gfdr/data/global-financial-development-database>

IACOVIELLO, M. 2005.

House Prices, Borrowing Constraints, and Monetary Policy in the Business Cycle". *American Economic Review*, 95(3): 739–764.

IDB (INTER-AMERICAN DEVELOPMENT BANK).
2017.

Support to SMEs and Financial Access/Supervision Sector Framework Document. Connectivity, Markets, and Finance Division. Washington, DC: IDB. Available at: <http://www.iadb.org/document.cfm?id=EZSHARE-869060373-14>

IFC (INTERNATIONAL FINANCE CORPORATION).
2019.

MSME Finance Gap. Assessment of the Shortfalls and Opportunities in Financing Micro, Small, and Medium-Sized Enterprises in Emerging Markets. Washington, DC: IFC. Available at: <https://www.ifc.org/wps/wcm/connect/03522e90-a13d-4a02-87cd-9ee9a297b311/121264-WP-PUBLICMSMEReportFINAL.pdf?MOD=AJPERES&CVID=m5SwAQA>

IZQUIERDO, A. 2010.

Después de la Crisis Global: Lecciones de Política Económica y Desafíos Pendientes para América Latina y el Caribe. Washington, DC: Inter-American Development Bank.

KIYOTAKI, N. AND J. MOORE. 1997.

Credit Cycles. *Journal of Political Economy*, 105(2): 211–248.

MILLER, M AND J. STIGLITZ. 2010.

Leverage and Asset Bubbles: Averting Armageddon with Chapter 11? *The Economic Journal*, 120(544): 500–518.

NUGUER, V. AND A. POWELL. 2020.

Policies to Fight the Pandemic. 2020 Latin American and Caribbean Macro Report. Washington, DC: Inter-American Development Bank. Available at: <https://flagships.iadb.org/en/MacroReport2020/Policies-to-Fight-the-Pandemic>

OCAMPO, J. A. 2009.

Latin America and the Global Financial Crisis. *Cambridge Journal of Economics*, 33(4): 703–724.

OECD/CAF (ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT AND ANDEAN DEVELOPMENT CORPORATION). 2019

Latin America and the Caribbean 2019: Policies for Competitive SMEs in the Pacific Alliance and Participating South American countries, SME Policy Index. Paris, France: OECD Publishing. Available at: <https://doi.org/10.1787/d9e1e5f0-en>

PAILHÉ, C. 2014.

Regulación Financiera y Género. El enfoque de género en las operaciones de reforma financiera de la División de Mercados de Capitales e Instituciones Financieras. Discussion Paper No. 347, Washington, DC: Inter-American Development Bank.

REINHART, C. & ROGOFF, K 2009.

This Time Is Different: Eight Centuries of Financial Folly. Princeton, NJ: Princeton University Press.

WORLD BANK. 2019.

Doing Business 2019: Training for Reform. 16th Edition. Washington, DC: World Bank.



Annex 1.

Taxonomy of Monetary and Fiscal Measures in Latin America and the Caribbean^{18 19}

In view of the preponderance of MSMEs in LAC economies, most LAC countries have put specific measures in place to support them. This report focuses on the fiscal and monetary and financial measures introduced to mitigate the economic impact of the coronavirus outbreak on SME businesses. Measures addressed to deal with public health are not included in the annex, nor are measures related to the labor market, such as actions to facilitate telework, shorten working hours, or temporary layoffs and sick leave. The following list of measures is for illustrative purposes. It is divided into monetary and fiscal measures.

I. Monetary Measures

The primary focus of monetary measures, or quantitative easing, is sustaining short-term liquidity. Nearly every central bank in the LAC region is reducing interest rates and legal reserve requirements or injecting liquidity by buying up public and private debt instruments (bonds). Some have also supported special lines of credit to financial institutions to finance and refinance SMEs affected by the pandemic. Most financial authorities in the region have also approved transitory forbearance or provisioning for NPLs.

Some examples of monetary and financial policy measures that have been taken are the following:

BRAZIL:

- The National Monetary Council authorized the Central Bank to provide loans to financial institutions guaranteed by debentures acquired between March 23 and April 30, 2020, under a Special Liquidity Temporary Line.
- The Council also authorized collection of a special guaranteed term deposit from the Credit Guarantee Fund as a means of collecting deposits and ensuring the solvency of the credit system.

¹⁸ The information in this Annex comes from Refinitiv and Reuters (www.reuters.com) and the web pages of official entities in Chile: <https://www.bcentral.cl/web/banco-central/buscar?categoria=Prensa/Nota%20de%20Prensa;Colombia>; https://www.banrep.gov.co/es/noticias-y-publicaciones-tipos?combine=&tipo%5B%5D=11064&feed_me=, and Peru: https://www.bcrp.gob.pe/publicaciones/nota-semanal/resumen-informativo.html.

¹⁹ Contribution by Olver Bernal, currently senior consultant at the Connectivity, Markets, and Finance Division of the Inter-American Development Bank.



CHILE:

- The Central Bank twice reduced its reference interest rate by 75 and 50 basis points, respectively, moving its level from 1.75 percent to 0.50 percent.
 - The Central Bank also announced the increase of the bank's bond purchasing program to a limit of US\$5 billion and the creation of a conditional credit facility providing a special financing line to banks, with incentives for refinancing loans to households and companies.
 - Simultaneously, the same institution announced the activation of a liquidity credit line. Both credit lines are for up to 3 percent of the banks' commercial and consumer portfolio. Simultaneously, the Financial Markets Commission allowed special treatment in the establishment of provisions for deferred mortgage loans, the use of mortgage guarantees to safeguard SME loans, and adjustments in the processing of goods received in payment and margins in derivatives transactions.
-

COLOMBIA:

- The Central Bank took measures to inject permanent liquidity into the economy. These include:
 - Repurchase of about CO\$10 trillion (US\$2.5 billion) of private securities issued by credit institutions with remaining maturities of up to three years.
 - Repurchase of the Colombian government bonds denominated in pesos.
 - Reduction of the legal reserve requirement on checking and savings accounts from 11 percent to 8 percent. The same measure applied for up to 18 months maturity fixed-term deposits from 4.5 percent to 3.5 percent.
 - The Central Bank also reduced its reference interest rate by half a percentage point to 3.75 percent. At the same time, the repurchase agreement quota against private debt was increased from CO\$5 to CO\$8 trillion (US\$1.25 billion). The total liquidity quota was increased to CO\$20 trillion (US\$5.0 billion), which can be recomposed between the repos against private debt and those against public debt, according to market demand.
 - The Central Bank increased the portfolio of securities accepted in its liquidity operations.
 - Simultaneously, the supervisory authorities allowed a 12-month suspension of provisioning on credit, among other measures.
-

PERU:

- The Board of Directors of the Central Reserve Bank agreed to reduce the benchmark interest rate by 100 basis points from 2.25 percent to 1.25 percent.

- The Central Bank also reduced the overnight deposit rate to 0.15 percent and the direct security/currency repo and rediscount operations to 0.50 percent.
 - Simultaneously, the Central Bank reduced the legal minimum reserve requirement rate in soles from 5 percent to 4 percent and the minimum checking account requirement in soles from 1.0 percent to 0.75 percent.
 - The Central Bank also reduced the reserve requirement rate for foreign currency obligations with average terms equal to, or less than, 2 years with foreign financial institutions from 50 percent to 9 percent.
 - The Superintendence of Banks issued a notification allowing financial institutions to modify the terms of their loans to households and firms affected by the COVID-19 outbreak without changing the classification of the loans. These operations have to satisfy well defined conditions, including a maximum modification period of six months.
-

II. Fiscal Measures

Measures with direct and indirect fiscal impact to ease short-term liquidity constraints take the form of direct payments or other direct subsidies to MSMEs, mainly to safeguard employment. Those with direct fiscal impact are direct cash transfers, temporary tax breaks, payment moratoriums and deferrals, tax cuts or refunds (both value-added tax (VAT) and income or corporate taxes), among others. Indirect fiscal measures include the transitory reduction or support to employers' social security contributions, the deferral of public utility payments, and support to special funds to support SMEs via national development banks or other government agencies. The following are some examples of these measures:

BRAZIL:

- Temporary tax breaks and credit lines for firms with the aim of protecting employment and a 50 percent reduction in social security contributions through "Sistema S" for 3 months (US\$400 million).
 - Public banks are expanding credit lines for businesses and households, with a focus on supporting working capital (announcements add up to over 21-22 percent of GDP).
-

COLOMBIA:

- The national tax authority deferred the deadlines for filing tax returns for direct taxes and for paying them.



- Local authorities extended the deadlines for filing returns and paying municipal taxes, including a three-month moratorium to pay VAT, corporate income taxes, and customs duties.
 - The Ministry of Finance announced the creation of a new COP12 trillion (US\$3 billion) special guarantees program to mitigate the impact of COVID-19 on the Colombian business sector. Through this program, the government will guarantee SME loans serving liquidity requirements to pay for personnel and fixed costs.
-

GUATEMALA:

- The tax authorities issued guidance extending the deadline for filing certain tax returns in response to the COVID-19 pandemic. They also introduced an exemption for taxes on loans to donations, while accelerating the return of tax credits of Q2.6 billion (US\$340 million), tax credit refunds to exporters (freeing up to 0.2 percent of GDP), a one-quarter deferral of selective tax payments, and a one-quarter deferral of social security contributions.
-

PERU:

- The Peruvian Customs and Tax Authority has extended the annual Income Tax filing and payment deadline for fiscal year 2019. The new deadlines are between June 24 and July 9, 2020.
 - The government approved a three-month extension for submitting income tax returns for MSMEs and is granting flexibility to firms and households in the repayment of tax liabilities. These tax measures are estimated to provide temporary relief on the order of 0.5 percent of GDP.
 - The government has approved the creation of a 300 million soles (or 0.04 percent of GDP) fund to help qualified SMEs to secure working capital and/or refinance debts.
-

URUGUAY:

- The Executive Branch has deferred the payment of the minimum VAT of February and March to be paid to the Directorate-General for Taxation in six equal, consecutive, and interest-free installments, starting in May.
- Payment of employer contributions from owners and partners of personal companies corresponding to March and April is deferred: 60 percent can be paid in six installments starting in June.
- The Central Bank will make available a credit line with soft conditions for US\$50 million, to small and medium sized enterprises.



Annex 2.

Taxonomy of Monetary and Fiscal Measures in Countries of the Organisation for Economic Co-operation and Development²⁰

I. Monetary Measures

With respect to monetary and financial measures in OECD countries, some central banks have created policies to ease conditions for the financial sector to provide credit, such as interest rates reductions. This has occurred in Australia, Canada, Chile, Iceland, Israel, Japan, Mexico, New Zealand, Norway, Poland, Turkey, the United Kingdom, and the United States. Given the similarity of measures, no details are included here.

Several countries have also put in place credit moratoria to provide grace periods for servicing interest and/or principal on loans. In Italy, for example, payment of loans for SMEs that have experienced substantial losses of revenue have been suspended until September 2020. In Greece, debt collection operations have been temporarily canceled, and banks have allowed payments due in March to be postponed until September. Canada has adjusted regulatory capital requirements to allow deferral of mortgage payments, small business loans, and retail loans, and to treat them as performing loans. In Denmark, the government will cover up to 75 percent of lost revenue for three months for companies with revenues that have declined by more than 30 percent as long as they preserve employment.

II. Fiscal Measures

The OECD countries have also taken measures to help SMEs affected by the COVID-19 pandemic. On the fiscal stimulus side, the measures are mainly focused on short-term liquidity. Cash transfers include temporary measures to ease short-term liquidity constraints, in the form of direct payment or other direct subsidies to SMEs and requirements that they preserve employment. For example, in Australia, employers will receive \$1,500 for payment of wages per retained worker every two weeks. Canada has introduced a similar wage-subsidy scheme to employers for up 75 per cent of wages for 12 weeks, and Ireland has approved a payment up to €410 per employee per week for 12 weeks.

²⁰ Contribution by Sonia Vadillo, a senior consultant in the Connectivity, Markets, and Finance Division at the IDB.



Many countries have implemented a similar scheme to Germany's Kurzarbeit, a program specially designed to preserve employment. Under this scheme, affected businesses are allowed to send their workers home or reduce their working hours, and the government will partially compensate them for the loss of revenues. Spain recently modified its ERTE regulation to ensure that workers temporarily suspended from their jobs because of the pandemic are paid 70 per cent of their salaries. Additionally, most of the OECD countries have approved temporary moratoria or tax deferrals for personal and corporate taxes or social security contributions. In Austria, the due date for the VAT return has been postponed from June to August. In Belgium, payment deadlines for corporate, income, and VAT payment were extended for two months. In Denmark, the government approved a delay in VAT and labor contributions payments, and Hungary approved a delay of social security contributions.

In Iceland, three payments of social security tax and withheld public levies at the source can be postponed for affected businesses until January 2021. Other countries have also opted for a refund or reduction of taxes. This is the case of Latvia, where all outstanding VAT for affected businesses were written off and VAT refunds are being processed 30 days after the due date. In Norway, a reduction in the VAT rate was implemented. The government of the United Kingdom abolished property taxes for businesses in affected sectors for one year, and Greece authorized a 40 percent cut on rents for March and April for affected businesses.

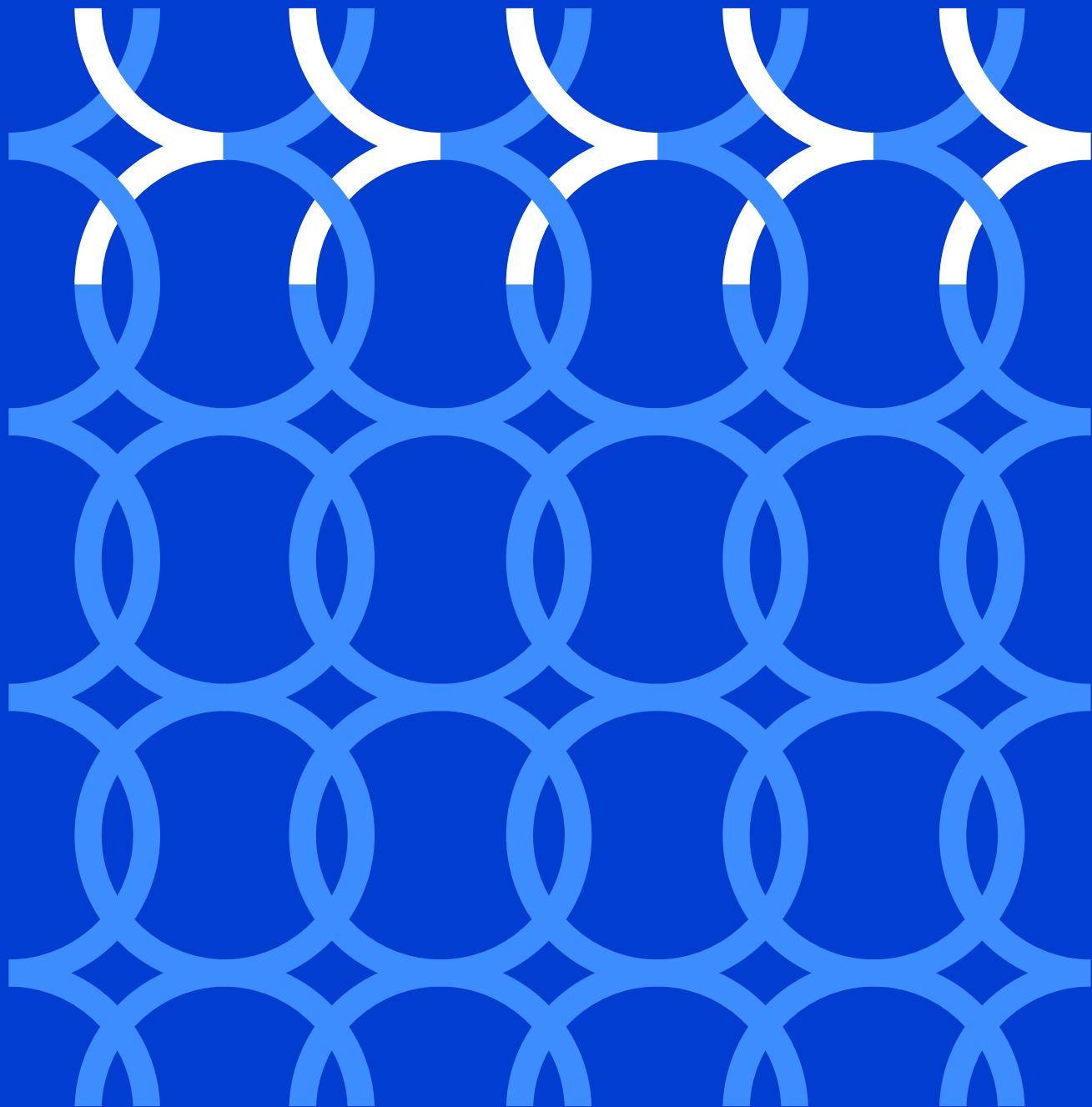
Several countries have also implemented guarantees or credit programs with government support to enable commercial banks to expand lending to SMEs. In Canada, the export credit agency Export Development Canada (EDC) will be providing funding to financial institutions to enhance credit to SMEs. This will enable SMEs to have access to operating credit and cash flow term loans with 80 percent guaranteed by EDC, to be repaid within one year. To implement the program, the government will be increasing its investment in federal lending agencies such as the Business Development Bank of Canada and EDC.

The European Commission approved an instrument known as SURE, which will provide loans to European Union (EU) countries facing a sudden increase in public expenditure to preserve employment. The loans issued by the EU will be financed by recourse to international capital markets. The SURE initiative will provide financial assistance of up to US\$110 billion in total to member states in the form of loans granted on favorable terms. In the United Kingdom, the Coronavirus Business Interruption Loan Scheme (CBILS) supports SMEs with an annual turnover of up to £45 million (US\$56 million) to access loans, overdrafts, invoice finance, and asset finance of up to £5 million (US\$6.22 million) for up to six years. The government will also make a payment to cover the first 12 months of interest payments and any lender-levied fees and will provide lenders with a guarantee of 80 percent on each loan (subject to the pre-lender cap on claims). The scheme is delivered through commercial lenders, backed by the government-owned British Business Bank.



In the United States, the Disaster Loan Program provides small businesses with working capital loans of up to \$2 million to help overcome the temporary loss of revenue they are experiencing. In Greece, a repayable advances scheme up to US\$1.1 billion has been implemented until June 30, 2020. The Independent Authority for Public Revenue will disburse the repayable advances to the companies, with no intermediation of financial institutions.

Some countries have also created special funds to support SMEs, either through fiduciary accounts or SPVs, to provide working capital, refinance debts, and other needs. In France, a special fund worth €4 billion (US\$4.3 billion) was established to provide short-term financing to startups. A similar scheme worth €2 billion (US\$2.2 billion) was created in Germany, where the government is also considering a long-term €10 billion (US\$10.8 billion) fund to help larger startups maintain operations. Emergency or specific lines of credit or soft loans addressed to SMEs affected by the COVID 19 pandemic have also been implemented in most OECD countries, such as the program approved in Spain, where US\$432 million will be provided to SMEs through the public Official Credit Institute (public bank). In Germany, US\$120 billion in loans will be provided to companies affected by the coronavirus pandemic by the state-owned development bank KfW. In the United States, the Small Business Administration offers loans through banks and credit unions to affected businesses with fewer than 500 employees. If the loan is used for payroll, mortgage interest, rent, or utilities in the two months after the money is received, the full amount of the loan will be forgiven as long as they do not cut salaries and maintain employees.



MSME Financing Instruments in Latin
America and the Caribbean During COVID-19

AUTHOR:
DIEGO HERRERA