

& Innovation during COVID-19









This report was produced by the International Finance Corporation and the SME Finance Forum for the G20 Global Partnership for Financial Inclusion under Italy's G20 Presidency. The report presents a stocktaking of various cases and examples that highlight policy and regulatory approaches as well as private sector initiatives in G20 and non-G20 countries. The report is not intended to be an analysis or evaluation of any particular model. Cases are presented for illustrative purposes only and do not constitute an endorsement by the International Finance Corporation or the G20 Global Partnership for Financial Inclusion.









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LIST OF ACRONYMS

AGI	Alibaba Global Initiatives		
Al	Artificial Intelligence		
AML	Anti-Money Laundering		
API	Application Program Interface		
BRSA	Banking Regulation and Supervision Authority (Turkey)		
CAGR	Compound Annual Growth Rate		
CBILS	Coronavirus Business Interruption Loan Scheme (United Kingdom)		
CCAF	Cambridge Center for Alternative Finance		
ССВ	China Construction Bank		
CDD	Customer Due Diligence		
CEF	Caixa Econômica Federal		
CFT	Countering the Financing of Terrorism		
CGAP	Consultative Group to Assist the Poor		
CGS	Credit Guarantee Scheme		
DFS	Digital Financial Services		
DS	Data Science		
EAP	East Asia and Pacific		
EIB	European Investment Bank		
E-ID	Electronic Identification		
EMDEs	Emerging Markets and Developing Economies		
E-KYC	Electronic Know-Your-Customer		
FSP	Financial Service Provider		
GDP	Gross Domestic Product		
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH		
GPFI	Global Partnership for Financial Inclusion		
GSMA	Global System for Mobile Communications		
GVC	Global Value Chain		
IFC	International Finance Corporation		
IMF	International Monetary Fund		
IT	Information Technology		

ITC	International Trade Center	
KODIT	Korea Credit Guarantee Fund	
КҮС	Know-Your-Customer	
LAC	Latin America and the Caribbean	
MENA	Middle East and North Africa	
MFI	Microfinance Institution	
ML	Machine Learning	
MSME	Micro, Small, and Medium-Sized Enterprise	
NBFI	Non-Bank Financial Institution	
OECD	Organisation for Economic Co-operation and Development	
ОЈК	Financial Services Authority (Indonesia)	
P2P	Peer-To-Peer	
PBOC	People's Bank of China	
PD	Probability of Default	
POS	Point-Of-Sale	
PPP	Paycheck Protection Program (United States)	
PSP	Payment Service Provider	
QR	Quick Response	
RFB	Federal Revenue of Brazil	
SA	South Asia	
SBA	Small Business Administration (United States)	
SIB	Subscriber Identity Module	
SME	Small and Medium Enterprise	
SSA	Sub-Saharan Africa	
UAE	United Arab Emirates	
UK	United Kingdom	
UNCTAD	United Nations Conference on Trade and Development	
US	United States	
WBG	World Bank Group	
WEF	World Economic Forum	
WSME	Women-led Small and Medium-sized Enterprise	

GLOSSARY OF TERMS

Accredited lender: Any financial institution and company legally authorized to provide individual/commercial loans to borrowers, in some cases as part of a government support program. Accredited lenders have the required financial sophistication, as well as the capacity to take the risks involved with the provision of such loans.

Alternative data: Information collected and analyzed from non-traditional sources. Alternative data used to assess the creditworthiness of borrowers, including micro, small and medium enterprises (MSMEs) and individuals. This information can be gathered from various sources such as cash flows, invoices, personal transactions and bills, and social media activities, among others.

BigTech firms: The largest and most dominant information and communication technology companies by market cap and number of users, such as Alibaba, Amazon, Apple, Facebook, Google, Microsoft, and Tencent. BigTech firms have been increasingly offering digital financial products and services, for example, credits and payments to their customers, including

Blockchain: A type of distributed ledger that organizes data into blocks, which are chained together in an append-only mode

Cybersecurity risk: The potential vulnerability, damage to or loss of critical assets and sensitive information, for example, information technology (IT) devices, programs, and data. Alternatively, it could involve reputational harm caused by a cyberattack or breach of an organization's digital system or network.

Debt moratorium: Legal postponement of debt repayments (for example, installments and fees) for a specific amount of time, which can also be extended. Debt moratoria are generally instituted by governments or central banks with the aim of providing temporary financial relief to borrowers.

Digital financial services: The provision of financial products and services through digital mechanisms and channels. Responsible digital financial services should be safe, fair, consumer-oriented, and compliant with applicable regulatory requirements — including anti-money laundering/countering the financing of terrorism (AML/CFT), consumer protection, cybersecurity, and data privacy.

Digital wallet: Online/mobile device or service, usually a smartphone application, that allows users to perform electronic and contactless, in-store transactions, store funds, and track payment history. Digital wallets directly connect a users' checking account with the encrypted personal banking information to the vendor, thus enabling instant and safe e-payments.

Digitalization of MSMEs: Digital transformation of internal capacity, processes, activities, and skills for MSMEs. It involves the increased or full adoption and use of technologies and data as a small business moves its operations online and begins actively participating in the digital economy.

Digitization: The process of converting information into a digital format.

Disruptive players: Non-traditional financial intermediaries that offer innovative and cutting-edge technology solutions in various areas, such as lending, payments, insurance, and so on. Disruptive players in MSME finance include BigTech/FinTech companies that are entering the space and challenging legacy lenders by designing and delivering new financial products and services for small businesses.

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Distributed ledger technology: Distributed ledgers use independent computers (referred to as nodes) to record, share, and synchronize transactions in their respective electronic ledgers (instead of keeping data centralized, as in a traditional ledger).

Equity crowdfunding: Method used by start-up and early-stage companies to raise capital from a multitude of investors online. This is done through the sale of securities, for example, shares, convertible notes, revenue shares, and so on. Equity crowdfunding platforms allow the general public to directly participate in the early capital-raising activities of startup firms and SMEs that are not listed on a stock exchange.

FinTech firms: Firms offering technology-enabled innovations in financial services that could result in new business models, applications, processes, or products. Such innovations would have a positive material effect on the provision and use of financial services.

Innovation office: A dedicated function within a regulator that engages with and provides regulatory clarification to innovative financial service providers. It may also be known as Innovation or FinTech "Hubs".

Interoperability: The ability for different systems to readily connect and exchange information with one another, such as the ability for a digital financial service account to make specific types of transactions across two or more providers.

Electronic Know-Your-Customer (e-KYC): The remote, paperless process that minimizes the costs and burdensome bureaucracy necessary to conduct traditional KYC procedures.

Loan guarantees: A promise by one party to assume the debt obligation of a borrower if that borrower defaults. A guarantee can be unlimited or limited, for example, making the guarantor liable for only a portion or the totality of the debt.

Micro, Small, and Medium-sized Enterprises: Non-subsidiary, independent firms that maintain revenues, assets, and/or a number of employees below a certain threshold, which can vary across countries.

Open banking: This allows third-party providers to access the financial information of banking customers through Application Programming Interfaces (APIs). Open banking was launched with the aim of providing customers with more tailored and innovative products and services, as well as fostering more competition in the banking industry.

Regulatory sandbox: A formal regulatory program that allows market participants to test new financial services or models with live customers, subject to certain safeguards and oversight

Trade finance: The settlement arrangements available to buyers (importers) and sellers (exporters) that are used to mitigate risks and ensure the terms and conditions of an underlying commercial contract are met.

Traditional lenders: They provide a range of services and products for businesses and consumers that follows a specific model. They generally charge a lower rate of interest than other lenders

Underserved MSME segments: Poor people, people living in remote rural areas, women, and youth.

Vulnerable MSME segments: Elderly people, migrants, and forcibly displaced persons.

EXECUTIVE SUMMARY

The COVID-19 crisis has negatively impacted MSMEs in multiple ways, leading to widespread business closures, loss of sales, liquidity shortages, reductions in employment, and constrained access to finance.

The intensity of the COVID-19 shock has clearly varied among MSMEs. For example, smaller firms, businesses operating in service-oriented industries, women- and youth-led MSMEs, and enterprises in the informal sector have been the most severely affected by the pandemic. On a more positive note, the COVID-19 crisis has accelerated the digitalization of many MSMEs and fostered their participation in digital ecosystems and marketplaces. In response to the emergency, governments have quickly introduced a wide range of policy and regulatory measures to financially support local MSMEs. A few countries have effectively leveraged digital technology and public data sharing to better serve MSMEs through various financing schemes.

Private market participants, including traditional lenders and FinTech/BigTech firms, have played a leading role in assisting MSMEs throughout the crisis. Many players have developed and introduced innovative digital solutions and initiatives in four key areas: lending, payments, insurance, and non-financial services. COVID-19 has started to reshape the market dynamics of the MSME finance ecosystem, acting as a catalyst for the digital transformation of many traditional financial intermediaries. The crisis has highlighted the need for digital, automated, data-driven, and more open operating models, which have become key to adequately optimizing and customizing MSME financing products and channels. The global FinTech industry has been growing during the pandemic, although disparities remain across regions and countries due to persistent barriers and challenges.

The greater provision and use of digital financial tools, services, and channels during the COVID-19 crisis has provided several benefits to MSMEs, including enhanced delivery of financial aid; easier access to financing products and services; stronger operational resilience; and breakthroughs in innovative regulations. Nevertheless, the pandemic has also created or exacerbated some key risks, namely in cybersecurity, financial fraud and scams, the digital financial divide, and potential industry concentration.

COVID-19 has also led to the acceleration of mechanisms to foster greater digital financial inclusion for MSMEs around the world. However, the crisis is still ongoing, and further strategic policy interventions are needed to continue to support the MSME segment and facilitate their recovery.

To build a more conducive, resilient, and inclusive ecosystem for digital MSME finance in the post-COVID-19 era, policymakers and regulators should explore the following menu of policy options, including:

1) LENDING

- Leveraging digital technology for MSME loan disbursement.
- Approving FinTech companies as accredited lenders.
- Changing the eligibility criteria for credit guarantee schemes to incorporate new players, such as FinTech companies.
- Encouraging financial institutions to use alternative and more advanced credit assessment methodologies as an effective complement to traditional approaches.

2) DATA

- Facilitating the seamless sharing of public MSME databases between relevant stakeholders, for example, between public authorities and credit guarantee funds.
- Encouraging non-discriminatory access to MSME information for all market participants, including Non-Bank Financial Institutions (NBFIs) and FinTech companies.
- Supporting lenders in the process of collecting and analyzing gender-disaggregated data concerning their potential and existing clients.

3) NON-BANK FINANCIAL INSTRUMENTS AND SERVICES

- Promoting the delivery of, and facilitating the access to, non-debt financing instruments, for example, equity or quasi-equity for small businesses.
- Encouraging initiatives, including bootcamps and digital hackathons, to better match innovative businesses with potential investors.
- Promoting digital financial literacy, particularly among the most vulnerable segments, to raise MSME awareness of new financial services and intermediaries.

These measures aim to facilitate MSME access to finance during the crisis. Nevertheless, they also need to be adequately integrated into a broader policy agenda for MSMEs that considers the multiple operational and financial challenges that lie ahead during the economic recovery phase.



Introduction & Background

INTRODUCTION

The outbreak of the COVID-19 pandemic has unleashed a massive socioeconomic shock wave, overwhelming innumerable micro, small, and medium-sized enterprises (MSMEs) around the world. Instant and brutal disruptions of business activities have pushed countless MSMEs to the brink of collapse. The insolvency and bankruptcy clocks have also been running down for many small businesses. In addition, the pandemic threatens to widen the persistently large global MSME finance gap (US\$5.2 trillion). In this regard, access to financing mechanisms has become increasingly challenging for struggling MSMEs that seek to obtain short-term liquidity in a convenient and quick manner.

Providing sufficient, timely support to MSMEs affected by COVID-19 is more important than ever in ensuring their sustainability and faster recovery. Small businesses are the backbone of most economies, playing a vital role in creating jobs, generating income, spurring innovation, and attracting investments. Importantly, formal and informal MSMEs represent around 90 percent of all businesses and more than 50 percent of total employment worldwide. They account for 60 percent to 70 percent of the gross domestic product of low-income, middle-income, and high-income countries. Consequently, MSMEs are not only a major driver of global socioeconomic development in normal times, but they are now fundamental to the successful COVID-19 recovery of both advanced and emerging market economies.

Within a context of widespread, stringent lockdowns and social distancing measures, lenders must find new ways to remotely address the urgent financing needs of MSMEs. In this regard, the COVID-19 pandemic has indisputably accelerated the push for digital MSME finance around the world. As a result of the crisis, both traditional providers and disruptive FinTech/BigTech firms have designed and delivered innovative digital financial products and services to better assist vulnerable small businesses. While the fight against COVID-19 is far from over, policymakers, regulatory authorities, and private sector players must thus closely collaborate to build a more robust, sustainable, and inclusive ecosystem for the provision of responsible digital finance to MSMEs for the foreseeable future.

REPORT OBJECTIVES: THE G20 GPFI'S FOCUS ON DIGITAL FINANCIAL SERVICES FOR MSMES DURING THE COVID-19 PANDEMIC

Given the unprecedented scale and intensity of the impact of the COVID-19 pandemic on small businesses worldwide, the G20 Global Partnership for Financial Inclusion (GPFI) under the Presidency of Italy reiterates its commitment to promote innovative, far-reaching, and inclusive digital financial solutions for MSMEs in general and to the disrupted MSME ecosystem in particular.

Relying on a wide range of country-level experiences, this report analyses the growing role of digitalization in supporting MSME access to financial services during the COVID-19 crisis. Thus, the purpose of the report is fourfold: (i) shedding light on whether digital financing innovations have been critical to vulnerable firms in coping with the emergency; (ii) discussing the main benefits and risks related to the wider use of digital financing tools, services, and channels as a result of the crisis; (iii) assessing their untapped potential in the post-Covid-19 landscape; and (iv) paving the way for a more resilient and inclusive financial system.

The report also provides actionable options based on country examples, as well as policy guidelines to effectively promote MSME access to and use of digital financial services, particularly in countries hardest hit by the pandemic.

APPROACH

This report builds on the work done on digital financial inclusion by the GPFI and its partners under previous G20 Presidencies, including the "G20 High-Level Principles for Digital Financial Inclusion" (G20 China Presidency in 2016); the "Digitization and Informality-Harnessing Digital Financial Inclusion for Individuals and MSMEs in the Informal Economy" (G20 Argentina Presidency in 2018); and the "G20 High-Level Policy Guidelines on

Digital Financial Inclusion for Youth, Women and SMEs" and "Promoting Digital and Innovative Financing" (G20 Saudi Arabia Presidency in 2020).

This report is the result of a collaborative effort across the International Finance Corporation (IFC)1, the SME Finance Forum, and various workstreams in the GPFI under the Italian Presidency.

TARGET AUDIENCES

The target audiences for this report include G20 GPFI members and other interested countries; mid-level and senior national and state officials; central bank representatives; financial regulatory and supervisory authorities; financial service providers; and business associations that aim to develop and promote digital financial products for MSMEs. This report is also helpful for development institutions and private sector organizations that seek to facilitate MSME access to digital finance in emerging markets.

SCOPE

This report summarizes and compares the immediate socioeconomic impact of the COVID-19 pandemic on MSMEs in the G20 countries as well as the Emerging Markets and Developing Economies (EMDEs). It reviews and categorizes the various policy and regulatory responses specifically aimed at supporting MSMEs during the pandemic. It also assesses their short- and long-term effects on the financial conditions of the targeted firms. Furthermore, it provides a comprehensive overview and analysis of the various digital financial tools and channels designed and deployed by traditional financial intermediaries/services providers and FinTech/BigTech players to reach and assist affected MSMEs. In this regard, the report also discusses the accelerated digital transformation of the MSME finance ecosystem, as well as the evolving market dynamics between incumbents and new entrants.

Following a thorough examination of the main opportunities and risks related to the accelerated digitalization of financial services during the COVID-19 pandemic, the report evaluates its potential role in bridging existing financial inclusion gaps. It ultimately proposes operational and forward-looking policy options to promote a more resilient and inclusive environment for the digital supply of finance to MSMEs in the post-COVID-19 era.

METHODOLOGY, DATA COLLECTION AND ANALYSIS

The report uses a combination of primary and secondary sources for data collection, analysis, and review. The methodology consists of: (i) desk research; (ii) a collection and review of case studies from financial intermediaries, FinTechs, regulators and ministries of finance; and (iii) consultations with financial industry experts and global policymakers.

Sources include industry reports and surveys, research papers, briefs, articles, and policy/regulatory response trackers. The various case studies collected and analyzed from financial intermediaries and FinTechs highlight how they adjusted their MSME financial operations during the crisis, as well as how policy and regulatory initiatives helped advance digital MSME financing mechanisms during the crisis.



MSMEs during the COVID-19 **Pandemic: Economic Impact & Policy** Responses

2.1 / Dramatic Impact on Small Businesses

MSMES ARE MORE VULNERABLE THAN LARGER FIRMS IN TIMES OF CRISIS

Companies of all types and sizes have been adversely impacted by the massive socioeconomic blow of the pandemic. However, MSMEs are inherently more fragile and less resilient than larger corporations. First, MSMEs tend to be overconcentrated in serviceoriented and consumer-facing sectors - for example, tourism, wholesale and retail trade, accommodations and food, and real estate - that have been directly impacted by restrictive national containment measures. On average, the share of MSME employment in such contact-intensive sectors amounts to 75 percent across Organisation for Economic Co-operation and Development (OECD) countries². Furthermore, MSMEs typically serve a relatively small customer base and have lower cash buffers, which inevitably exacerbates both the demand and liquidity risks in times of financial stress. Critically, MSMEs suffer from limited borrowing capacity and a lack of diversified streams of external financing, such as equity and trade finance. Most MSMEs primarily rely on their own funds and other informal sources such as moneylenders, family, and friends.

Key barriers to traditional bank credit access for MSMEs include burdensome application processes, stringent selection criteria, information asymmetries, costly and inflexible loan terms, and the inability to mobilize the required collateral. Unlike more established firms. MSMEs cannot rely on strong external financial safety nets to weather the COVID-19 storm, thereby pushing them to exhaust internal funds, such as retained earnings, at an alarming rate. Finally, many MSMEs have little to no ability to immediately and seamlessly transit to a remote working environment because their core daily activities rely mainly on human interactions and physical transactions. In this regard, numerous micro and small businesses inevitably struggle to move their operations online due to their difficulties in acquiring or leveraging the necessary digital technologies and tools.

SUPPLY & DEMAND SHOCKS

As the COVID-19 pandemic spread at a staggering rate across the world, MSMEs were simultaneously challenged by severe and unforeseen shocks on both the supply and demand sides. Swift and stringent government-enforced lockdowns and social distancing measures not only significantly reduced labor mobility and availability in most countries, but they also greatly disrupted global supply chains across all economic sectors, thereby leading to acute shortages and/or higher costs of essential intermediate inputs. Within a context of sharp decreases in consumer incomes and spending, MSMEs faced an instant and dramatic drop in the domestic demand for their products and services.

This dual shock has led to several negative impacts for MSMEs:

Business closures:

As most governments quickly imposed lockdowns worldwide, many MSMEs had no choice but to temporarily shut down their business operations. According to the Global State of Small Business Report. 24 percent of small businesses surveyed reported being closed in February 2021 as compared to 16 percent in October 2020, and 29 percent in May 2020. Disparities have been observed across regions and countries, depending on the stringency and length of the quarantine measures³. Although various countries have fully or partially reopened their economies, several downside risks — such as new variants, increases in contagion rates, and delays in vaccine rollouts - could force public authorities to reinforce containment measures, eventually leading to further business closures in the near term. In such a scenario, the shadow of permanent shutdowns will loom over a myriad of MSMEs, and concerns over potential commercial bankruptcies may ultimately turn into a harsh reality.

Drop in sales, cash flows, & investment expenses:

The vast majority of MSMEs experienced a dramatic drop in sales worldwide as a result of reduced consumer demand. Fifty-five percent of small businesses surveyed

in the Global State of Small Business study reported lower sales in January 2021 as compared to the previous year (before the start of the COVID-19 pandemic⁴). As profit margins started to erode, MSMEs still had to cover their fixed operating expenses and meet their financial obligations to creditors and suppliers. Moreover, many MSMEs incurred higher costs associated with the unavoidable transition to remote operations and the reduced availability of vital inputs. Consequently, the persistent and large decrease in sales has intensified the pressure on cash flows and heightened concerns over liquidity shortages.

The lingering uncertainty surrounding the evolution of the health and economic situations has dampened the development of MSMEs. Many small enterprises have used the capital intended for business growth to stay afloat. Without a clear view of their future revenues, MSMEs also had to cancel or delay investments in physical/human capital and innovation. In Europe, almost three in ten MSMEs claimed they might have to postpone expansion projects due to COVID-19⁵. Such pauses in internal investments might negatively affect the growth trajectory of certain MSMEs, as well as threaten to exacerbate the technological divide between small and larger, more resourceful firms.

Reduced employment & wage payments:

Facing a suspension in activities as well as liquidity shortfalls, countless MSMEs were forced to significantly cut their staff costs and readjust their payroll by reducing working hours (for example, by moving workers to part-time schedules), lowering/suspending wage payments,

granting paid/unpaid leave, or laying off employees. By April 2021, 30 percent of MSMEs globally had laid off or furloughed workers as a result of COVID-19, with notable differences across countries. More than half of MSMEs did not plan to rehire former employees in the following six months⁶. As demonstrated by the World Bank, enterprises that endured the largest drops in sales also experienced the greatest reductions in employment⁷.

Constrained access to finance:

Although new aggregate data concerning the impact of the COVID-19 pandemic on the US\$5.2 trillion MSME finance gap (2017)⁸ is still unavailable, MSMEs have clearly been struggling to obtain vital short-term liquidity. The restricted access to bank credit, combined with a reduction in lending by microfinance institutions (MFIs), left many MSMEs with a lack of financing options at the onset of the crisis. According to a Consultative Group to Assist the Poor (CGAP) survey, 74 percent of MFIs curtailed lending due to COVID-19, with 59 percent of respondents experiencing a reduction of more than 50 percent⁹. Furthermore, the pandemic has certainly exacerbated the pre-COVID-19 trade finance gap, estimated at US\$1.5 trillion. This growing gap is especially worrisome given that MSME applications for trade finance tend to be disproportionally rejected¹⁰. Although MSME access to credit has remained difficult in many areas — especially in the EMDEs — the amount of bank loans to small businesses has also increased in several countries, for example, in Europe¹¹ due to swift government interventions.



2.2 / Same Shock Wave, Different Intensity

Although the COVID-19 pandemic has had a vast and enormous impact on MSMEs worldwide, the differences in the intensity of the shock have been noticeable depending on:

Firm size:

Unsurprisingly, smaller enterprises have been hit harder than larger ones. Sixty-four percent of micro companies surveyed by the International Trade Center (ITC) saw their business operations strongly affected by the COVID-19 pandemic as compared to small (60 percent), medium (51 percent), and large companies (43 percent)¹². According to the World Bank, although most businesses had to momentarily close because of the enforced lockdowns, large firms were more likely to reopen six weeks after the peak of the outbreak (89 percent), followed by medium (86 percent), small (82 percent), and micro enterprises (79 percent)¹³. Moreover, smaller businesses have been facing more severe liquidity constraints given their lower cash buffers of generally less than a month, as well as their quasi-absent financial safety nets. With more cash at hand to cover operating costs for a longer period, larger companies have been less prone to falling into arrears (36 percent) as compared to medium (45 percent), small (50 percent), and micro firms (53 percent)¹⁴.

Economic sectors and integration into Global Value Chains (GVCs):

The COVID-19 pandemic has devastated whole economies through multiple ripple effects. However, disparities have been observed across sectors. On the demand side, service-oriented sectors have been disproportionally affected by containment measures. The hardest-hit sectors for European MSMEs by order of magnitude include entertainment and recreation, other services, accommodations and food, education, real estate, and wholesale and retail¹⁵. Conversely, other sectors witnessed an increase in demand, such as electricity, water and waste, agriculture, transport and storage, and construction¹⁶. On the supply side, accommodations and food, mining, entertainment and recreation, other services, and real estate are among the most negatively impacted sectors¹⁷. These simultaneous demand and supply shocks translated into greater business closure rates in the following consumerfocused industries: travel and tourism agencies, hospitality and events, education and childcare, performance arts and entertainment, and hotels, cafes,

and restaurants¹⁸. Notable variations in bankruptcy rates have also been observed: sectors that have experienced the highest increases in MSME bankruptcy rates include accommodations and food, arts, entertainment and recreation, mining, education, and other services¹⁹.

Furthermore, supply chain disruptions have disproportionally impacted MSMEs with great forward and backward participation in GVCs. More specifically, MSMEs operating in export-oriented sectors (for example, automotive and furniture) or industries that rely heavily on the use of foreign inputs (for example, office equipment, electronics, chemicals, petroleum, and plastics) have been more severely affected by the halt in trade activities. On the other hand, MSMEs less integrated into global trade flows have been less exposed to foreign demand shocks and shortages of essential imported inputs²⁰.

Business ownership and gender:

Women-owned/led MSMEs have been hit harder than men-owned/led ones. Sixty-four percent of women-run enterprises surveyed by the ITC claimed to be "strongly affected" by the crisis as compared to 52 percent of men-run or owned firms²¹. Globally, women-owned/ led businesses were more likely to close operations in the weeks following the outbreak of the COVID-19 pandemic. The gender gap in business closures was evident in every region, with the largest discrepancies in North America, Latin America, and Sub-Saharan Africa²². Interestingly, the gender gap in temporary shutdowns was greater in countries that imposed the strictest lockdown measures²³. According to a survey conducted by the International Finance Corporation (IFC) in Sub-Saharan Africa, women-run MSMEs experienced a sharper decline in revenues, with a higher proportion dealing with increased operational costs and disrupted supply chains as compared to men-run MSMEs²⁴. As most MSMEs quickly faced liquidity issues worldwide, a smaller share of women business leaders reported receiving financial assistance within some regions, including East Asia and the Pacific, North America, and South Asia²⁵.

Several reasons explain why women-owned/led MSMEs have been more severely impacted during the pandemic. First, women-run enterprises tend to be smaller and more informal, with little to no cash reserves at hand. In low-income countries, 92 percent of women work informally as compared to 87 percent of men²⁶. Second, they are more concentrated in service-oriented sectors hardest hit by the crisis, such as accommodations and

food, retail and wholesale, non-food manufacturing, and agri-food processing²⁷. Third, due to the enforced lockdowns, women business leaders had to spend more time at home to take care of essential domestic tasks and family activities, as evidenced by the findings of the Global State of Small Business Report²⁸. Consequently, the disproportionate burden of home responsibilities has prevented female entrepreneurs from effectively focusing on their operations as compared to their male counterparts.

Finally, the digital gender divide has clearly limited women's ability to move business operations online

and adopt new technologies and tools as compared to men. Thus, many women-owned/led MSMEs could not participate in online markets and rely on digital sources of revenue to offset the drop in physical sales and services. Indeed, constraints in digital financial inclusion have left women entrepreneurs even more vulnerable during the pandemic. Shifting activities online has been particularly challenging in low- and middle-income countries, where only 54 percent of women use mobile internet, with a gender gap of 20 percent²⁹.

BOX 1: PANDEMIC IMPACTS ON THE GENDER GAP

The COVID-19 pandemic has highlighted and exacerbated longstanding structural barriers and systemic constraints, such as the gender gap in access to finance and domestic care responsibilities. If unaddressed and unprioritized, these gaps can deepen, thus jeopardizing economic growth in the coming years through gaps in productivity.

Financial inclusion gaps. Women-owned businesses comprise 23 percent of all MSMEs and account for 32.4 percent of the MSME finance gap³⁰. East Asia and Pacific (EAP) and Latin America and the Caribbean (LAC) account for the highest share of unmet financing needs at about 45 percent and 22 percent, respectively. Prior to the pandemic, financial constraints were reported higher among women-led MSMEs, that is at 58 percent in EAP and 33 percent in LAC as compared to men-led MSMEs at 42 percent in EAP and 25 percent in LAC³¹. For instance, women-led MSMEs in Latin America discontinued their businesses at the second-highest rate globally, stating a lack of funding as the main reason (73 percent)³². MSMEs, especially those owned by women, have had limited capacity to absorb the shock induced by the COVID-19 pandemic. This is partially due to lower access to financial products and services. Prior to the crisis, women entrepreneurs were already facing various barriers in growing and maintaining their businesses. Financial institutions perceived them as risky borrowers because of the absence of collateral or necessary documentations (for example, proof of identity and credit history)³³. According to the Global State of Small Business report, women-owned businesses were 6 percent more likely to have closed during the pandemic than their male counterparts³⁴. In contrast, women-owned MSMEs in EAP have been disproportionately impacted by the crisis, with 22 percent of businesses closing as compared to 16 percent of male-owned MSMEs³⁵. Also, a lack of financial literacy and lower bank account ownership rates — with gender gaps of 18 percent in EAP and 5 percent in LAC — are the predominant reasons for the large financial gap. Specifically, they prevent women from accessing credit and weaken their ability to repay loans amassed during the COVID-19 pandemic³⁶.

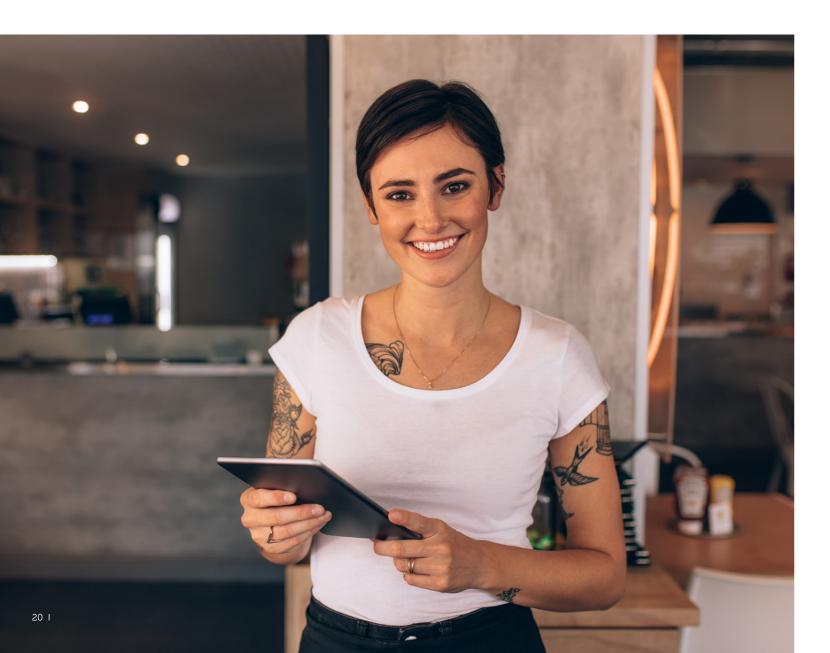
Transforming the unpaid care economy to a more inclusive one. The economic impact of the COVID-19 pandemic has affected entrepreneurial women to a greater degree than men, as they struggle with both business survival and increased household and childcare responsibilities ³⁷. Women entered the pandemic at a higher baseline, working three times more on caregiving and domestic tasks than men³⁸. The time burden of unpaid labor is disproportionately heavier on women than men, especially in Latin American countries, for example, in Chile (69 percent), Ecuador (79 percent), and Guatemala (86 percent)³⁹. According to a World Bank survey, women in Sub-Saharan Africa (SSA) also bear a larger time burden of domestic work than men while also running a business, for example, in Uganda (3x), Malawi (2x), and Togo (2x)⁴⁰. Another study conducted by IFC found that women in Sub-Saharan Africa reported a greater increase in time commitments to domestic responsibilities and childcare due to COVID-19, which has negatively and more acutely affected women-owned businesses (65 percent) than male-owned ones (62 percent). These unacknowledged tasks are sizable and can significantly impact the formal economy as they detract from productivity and output⁴¹. In two Latin American countries, the value of unpaid work is estimated to represent 20 and 23 percent of gross domestic product (GDP) in Colombia and Mexico, respectively⁴². In Sub-Saharan Africa, women work on average 10 percent fewer hours than men⁴³. Liberating women from domestic tasks can therefore propel greater commercial activities⁴⁴.

Youth-led MSMEs:

Youth-led MSMEs have also tended to be more severely affected by the COVID-19 pandemic. For example, they have faced a higher risk of permanently closing (26 percent within three months as compared to 18 percent for nonyouth-led businesses)⁴⁵. On a regional level, roughly 86 percent of youth in the Asia-Pacific region reported being negatively impacted by the COVID-19 pandemic. In this context, the region accounts for 55 percent of the world's youth population (or approximately 660 million people)⁴⁶. In the Middle East and North Africa (MENA), half of surveyed youth-run MSMEs did not expect to survive more than two months as compared to 20 percent of small businesses managed by older leaders⁴⁷. Young entrepreneurs have been less able to cope with the crisis due to their lack of experience and skills, limited networks, low savings levels, and inability to easily and quickly access external sources of funding.

Informality:

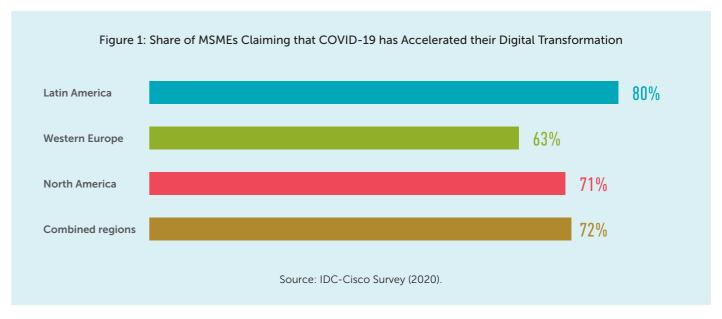
The COVID-19 pandemic has intensified the challenges facing MSMEs operating in the informal sector. Critically, most informal MSMEs work in contact-intensive sectors that have been greatly affected by the pandemic. Given that informal MSMEs are more financially vulnerable than formal businesses, they have been facing heightened insolvency and bankruptcy risks in the current environment. These risks have been clearly exacerbated in developing countries, where the overwhelming majority of enterprises are informal. According to the global survey conducted by the ITC in April and May 2020, 45 percent of unregistered MSMEs feared a permanent closure within six months as compared to 32 percent of registered/formal businesses⁴⁸. As informal MSMEs are not eligible for government relief schemes, they have been relatively excluded from financial support programs, thus leaving them without adequate safety nets to weather the COVID-19 storm.



2.3 / The Digital Transformation of MSMEs: Are Firms Ready for the "New Normal"?

COVID-19 HAS ACCELERATED THE DIGITAL TRANSFORMATION OF MSMES

The lockdowns have pushed MSMEs to quickly move operations online and adopt new digital tools and technologies to maintain business continuity. Although not representative of the rest of the world, responses from 2,030 MSMEs operating in 8 markets - including Brazil, Canada, Chile, France, Germany, Mexico, the United Kingdom, and the United States — show that the COVID-19 pandemic has been a key driver in their accelerated digitalization (Figure 1)⁴⁹. 93 percent of surveyed MSMEs have become more reliant on technology as a result of the crisis, with almost 50 percent expecting at least one-third of their business to become digital in 2021⁵⁰.



Another study conducted by Visa in eight markets including Brazil, Canada, Germany, Hong Kong SAR, China, Ireland, Singapore, the United Arab Emirates, and the United States — shows that more than one in four MSMEs have started to run targeted ads on social media (28 percent) or sold products or services online (27 percent) since the onset of the pandemic (August 2020)⁵¹. By the end of 2020, these percentages rose to 38 percent and 43 percent, respectively⁵². Similarly, 26 percent of MSMEs surveyed in the Global State of Small Business Report said they increased the proportion of their sales made through digital channels, with notable differences across regions, for example, 40 percent in Latin America and 22 percent in Europe⁵³. By April 2021, 55 percent of small businesses worldwide reported leveraging digital tools to communicate with their customers, including 60 percent in high-income countries as compared to 51 percent in middle-income countries⁵⁴.

These findings reflect the higher participation of MSMEs in digital marketplaces, as a growing number of traditional brick-and-mortar businesses have embraced online commerce, especially in China and Latin America⁵⁵. Although available data remains limited, many large-scale e-commerce platforms, such as Alibaba and MercadoLibre, reported considerable increases in the registration and participation of MSME retailers, especially in rural and remote areas. For instance, Alibaba saw a notable surge in first-time users of Taobao Live, a service that allows merchants to engage with customers via a live-streaming channel. In Brazil, the Brazilian Electronic Commerce Association reported that more than 80,000 retailers shifted to online sales between March and April 2020 through several platforms⁵⁶.

CHALLENGES IN THE DIGITAL **TRANSFORMATION JOURNEY OF MSMES**

The whole MSME ecosystem has experienced a vast shift toward digitalization during the pandemic. However, the uptake of digital technologies clearly depends on the firm's size and varies significantly across countries. As illustrated by the World Bank, smaller firms have been much less likely to make greater use of and/or invest in digital solutions than larger ones, including for new equipment, software, and online platforms⁵⁷. The proportion of businesses that have increased their use of e-platforms also varies widely across markets, for example, from 11 percent in Ghana to 81 percent in Indonesia⁵⁸. Moreover, service-oriented sectors that have been most affected by the COVID-19 pandemic encountered greater difficulties in implementing and adopting the necessary digital changes to operate remotely⁵⁹.

Many MSMEs continue to face several key internal challenges in their digital transformation journey. Based on the 2020 Small Business Digital Maturity Study, the top challenges for surveyed MSMEs include a "shortage of digital skills and talents", "cultural resistance to

change", a "lack of budget/commitment", and a "lack of digital technologies"60. Likewise, Singaporean businesses surveyed in the 2020 SME Digital Transformation Study noted the following constraining factors in achieving digital transformation: high implementation cost as the top barrier to digitalization (56 percent), followed by the lack of a digitally skilled workforce (40 percent), the uncertain economic environment (35 percent), the low awareness of government support (30 percent), and not having the right technology partners (28 percent)⁶¹. From a broader perspective, smaller businesses have a lower ability to adapt to evolving regulatory environments, mitigate cybersecurity and data privacy risks, and access quality digital infrastructure (especially in rural and remote areas)62

Although the COVID-19 pandemic acted as a positive catalyst for the digital transformation of many MSMEs worldwide, smaller businesses have lagged larger corporations. Only a minority of MSMEs have reached the most advanced stages of digitalization⁶³. While many of these digital changes adopted by small businesses might become structural, it remains to be seen whether most MSMEs will achieve complete digital maturity and fully integrate online tools and channels as part of their future growth strategy in a post-COVID-19 landscape.

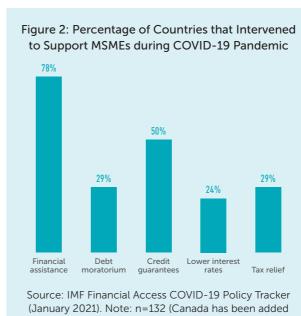


2.4 / Policy and Regulatory Responses **Targeting MSMEs**

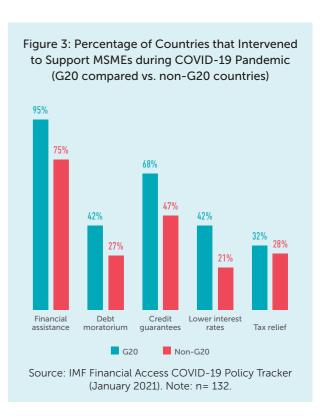
QUICK AND FAR-REACHING GOVERNMENT RESPONSES TO SUPPORT VULNERABLE MSMES

In response to the COVID-19 pandemic, governments around the world have swiftly introduced a wide range of emergency policy measures to help affected MSMEs. Support for small businesses has been mainly provided through the institution of labor support programs, tax waivers/deferrals, debt finance instruments, and structural policies⁶⁴. Specifically, both advanced economies and EMDEs have taken proactive steps to facilitate lending to MSMEs and relieve the financial stress caused by the pandemic. Policies can be categorized as follows: (i) financial assistance; (ii) debt moratorium; (iii) loan guarantees; (iv) tax relief; (v) lower interest rates; and (vi) recapitalization⁶⁵.

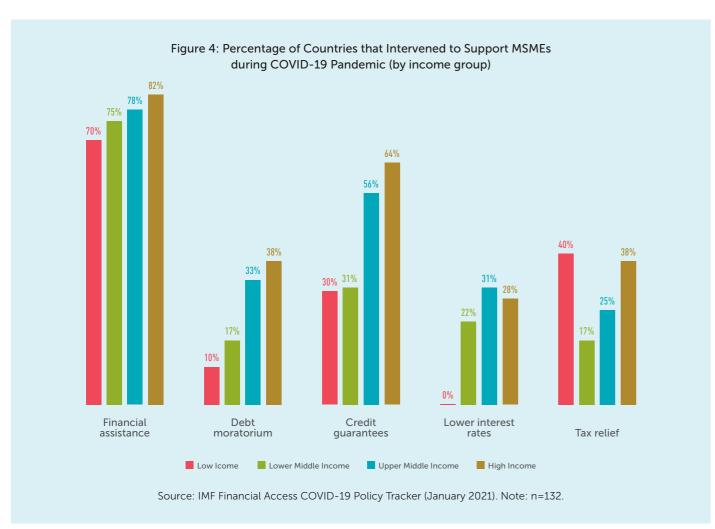
According to the International Monetary Fund (IMF) Financial Access COVID-19 Policy Tracker covering 131 jurisdictions worldwide, financial assistance represents the main type of MSME-targeted interventions, with 78 percent of countries having implemented at least one measure in this area (Figure 2)66. Initiatives related to loan guarantees constitute the second most prevalent category of policy actions undertaken by governments (in 50 percent of countries), followed by debt moratoriums and tax relief (29 percent each), and lower interest rates (24 percent).



As shown in Figure 3, a higher share of G20 countries have intervened in each area of support as compared to non-G20 states. Figure 4 shows that the level of government intervention increases by income group category in all support areas, except for tax relief, which was adopted equally by low-income and advanced countries. Financial assistance measures were almost equally used across countries in all income group categories, whereas credit guarantee schemes and debt moratorium initiatives were more popular among the upper-middle income and advanced groups.



to the analysis).





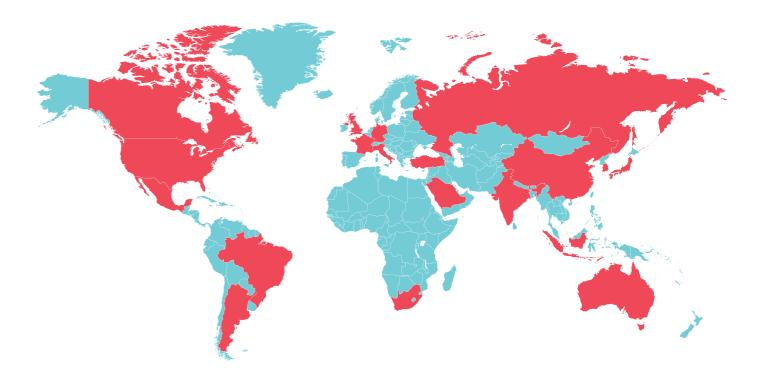


Table 1: G20 Countries - Areas of Intervention (non-exhaustive list)

Countries	Financial Assistance	Debt Moratorium	Loan Guarantees	Tax Relief	Lower Interest Rates	Recapitalization
Argentina	Χ	Χ	Χ	X	X	
Australia	Х		Χ	Х		
Brazil	Х	Х	Х			
Canada	X		X	Х	X	
China	Х	Х	Х		X	
France	X		Χ			X
Germany	Х		Х		X	
India	X		X			X
Indonesia	Х	Х	Х	Х	X	
Italy	X	Х	Х	Х	X	X
Japan	Х		Х	X	X	
Mexico	Х	X				
Republic of Korea	Х		Х		X	
Russia	Х	X	Х	X	X	
Saudi Arabia	Х	X	Х			
South Africa	X			Χ		
Turkey	Х			Χ	Х	
United Kingdom	X	Х	Χ		X	
United States	Х		Х			
Total	19	9	16	9	11	3

Source: IMF Financial Access COVID-19 Policy Tracker and case studies completed by G20 members.

(i) Financial assistance

Countries have provided financial assistance to MSMEs through bank/non-bank lending, grants, subsidies, and equity capital. Many governments launched new loan schemes for MSMEs under concessional terms, for example, interest-free and/or uncollateralized. Some also increased the amount of funding available through existing lending programs. While most countries relied on traditional financial intermediaries to administer the loans, others did not hesitate to enable the participation of non-bank lenders, such as FinTech companies and crowd-funding platforms. Some credit lines have also been opened for MSMEs operating in specific service sectors, including tourism and transport. In addition to debt finance, several governments offered direct cash flow support to MSMEs through various types of grants, subsidies, and emergency/solidarity funds.

(ii) Debt moratorium

To ease rising concerns over loan repayments, several governments and central banks have introduced a debt moratorium for MSMEs. Grace periods granted to small businesses affected by the COVID-19 pandemic have varied in length, usually ranging from three to twelve months.

(iii) Loan guarantees

Many countries have launched, expanded, and enhanced Credit Guarantee Schemes (CGS), thus giving banks and other lenders greater leeway in providing loans to the MSME segment. Several governments have markedly increased — and, in some cases, almost tripled — the amount of funding available for MSME loan guarantees. A few have taken the unprecedented step of raising state-backed loan guarantees of up to 100 percent. Given the importance of unlocking and delivering loans in a fast, adaptive, and unbureaucratic way, newly eligible institutions — for example, FinTech firms and MFIs — have also been added to CGS. Other effective actions benefiting MSMEs include the extension of the scope of some CGS, as well as the fast-tracking of administrative procedures.

(iv) Tax relief

To ease the cash flow pressure on MSMEs, numerous governments have offered a form of tax relief by temporarily lowering rates or waiving payments. Such measures have applied to corporate, income, and value-added taxes. MSMEs have also benefited from deferrals of tax payments, which have been extended to more than a year in a few cases. Some tax policies also targeted certain sectors that have been severely affected by COVID-19, such as tourism, retail, and aviation.

(v) Lower interest rates

A few monetary authorities have cut interest rates with a view to boosting bank lending to local MSMES. As indicated in Table 2, central banks have adopted various approaches to unlock the provision of MSME loans through a reduction in lending rates. In the same vein, some ministries of finance offered calibrated interest subsidies for MSME loans.

(vi) Recapitalization

Governments have also used non-debt financing instruments to help SMEs meet their urgent capital needs. For instance, special vehicles have been developed to facilitate access to equity funding for viable start-ups and SMEs that have been financially hit by the COVID-19 pandemic.

As highlighted in Table 2, several countries have effectively relied on digital technology and public data sharing to reach out to and serve MSMEs through various financing schemes.

Table 2: Selected Government Interventions Leveraging Digital Technology and **Public Data**

Country	Area	Description
Argentina	Financial assistance	The Central Bank established the MSMEs Plus line for MSMEs not reported in the Credit Registry, but which have access to a public guarantee fund (for example, <i>El Fondo de Garantías Argentina</i> [FOGAR]). Both the Central Bank and the Ministry of Production shared their relevant databases — that is, the Debtors' Database of the Financial System and the MSME Database, respectively — to ensure the availability of data about small businesses that qualified for this credit line.
Brazil	Financial assistance	The government launched an emergency monthly aid program aimed at supporting individual micro entrepreneurs, informal workers, and unemployed citizens. By leveraging digital technology — that is, the creation of digital savings accounts by the state-owned bank <i>Caixa Econômica Federal</i> and using large databases (for example, federal revenue and social security) — the relief scheme for Brazilian Real (BRL) 254.2 billion (US\$ 49.3 billion) effectively reached 68.2 million beneficiaries, including 5 million micro entrepreneurs.
Brazil	Loan guarantees	Brazil initiated a credit guarantee program, <i>Pronampe</i> , to support the distribution of loans to MSMEs. The loans disbursed to MSMEs through the scheme amounted to BRL 37.5 billion (US\$ 7.3 billion). As part of <i>Pronampe</i> , the Federal Revenue of Brazil (RFB) provided micro and small companies with an electronic letter certifying their data on annual gross revenues and capital stock to facilitate the credit analysis for interested applicants. The RFB also sent this information about MSMEs to the financial institutions enrolled in the program. The reliable and easily accessible data reduced the asymmetry of information between creditors and borrowers, thereby contributing to the high effectiveness of the scheme, which was mainly carried out online.
Colombia and Peru	Loan guarantees	Colombia and Peru changed the eligibility criteria for CGS, incorporating MFIs, cooperatives, savings and loans associations, and FinTechs to target and cover more vulnerable segments (for example, very small and micro enterprises, as well as smallholder farmers in rural areas).
Italy	Loan guarantees	Italy substantially increased the amount allocated by the Central Guarantee Fund for SMEs and widened the range of its eligible beneficiaries. New schemes were created, including a guarantee with a 100 percent coverage ratio for loans of up to EUR 30,000 (US\$ 35,462). The digitalization and integration of procedures between banks, service providers, and the public administration facilitated the streamlining and automation of the granting of guarantees for loans under EUR 30,000. As of mid-August 2021, the total amount of loans disbursed under the public-guarantee scheme reached approximatively EUR 140 billion (US\$ 165.5 bn).
United States	Loan guarantees	The Department of the Treasury and the Small Business Administration (SBA) started the <i>Paycheck Protection Program</i> (PPP) to provide loan guarantees and forgiveness to small businesses. The program enabled US lenders — including several FinTechs — to quickly deliver loans to MSMEs affected by the pandemic. Such emergency loans, guaranteed by the SBA, helped MSMEs cover qualifying payroll and utility expenses, as well as rent or mortgage payments. By May 2021, the PPP delivered 11.2 million loans to small businesses across the country, totaling US\$788.1 billion. A total of 5,470 lenders participated in the program, including 40 FinTech firms and other state-regulated lenders.

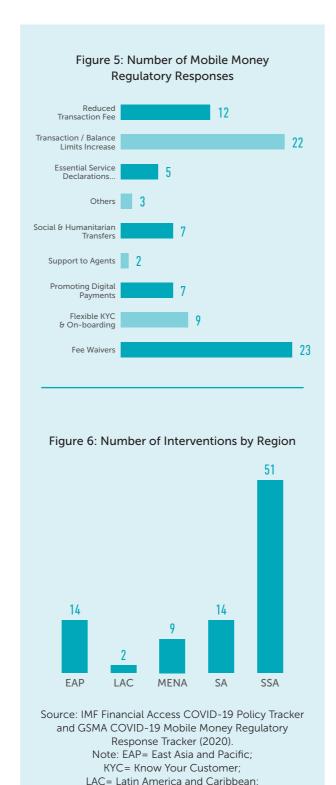
Source: Collection of case studies from G20 countries (except for Colombia and Peru⁶⁷).

PROACTIVE REGULATORY MEASURES TO FACILITATE THE WIDESPREAD USE OF DIGITAL FINANCIAL SERVICES

Within a context of widespread lockdowns and socialdistancing measures, central banks and other financial regulatory/supervisory authorities have implemented new regulations to promote the use of digital financial services (DFS), including mobile money. While most regulatory actions have applied to the wider financial sector, a notable share of initiatives have been directly targeted to support FinTech providers. More than one-third of regulators surveyed in the 2020 Global COVID-19 FinTech Regulatory Rapid Assessment Study have adopted at least one measure specifically targeting the FinTech sector, with the majority of such regulations dealing with digital payments/remittances⁶⁸. Many of these regulatory initiatives have directly or indirectly impacted MSMEs, enabling them to maintain their business operations in a new digital and cashless environment. Other regulations also sought to accelerate and simplify MSME access to online credit.

Based on the IMF and Global System for Mobile Communications (GSMA) trackers covering 34 countries, the majority of regulatory interventions sought to waive/reduce transaction fees and increase transaction/balance limits (Figure 5). Sub-Saharan Africa accounts for the majority of implemented measures, thus demonstrating the very proactive role played by African regulators across the region (Figure 6).

Many central banks have temporarily lowered or waived transaction fees, either partially or fully, to promote the use of electronic payments via multiple channels, for example, online, mobile, and point-of-sales (POS) terminals. In this regard, merchants have benefited from suspensions in fees on payments made through various contactless methods, including POS devices and Quick Response (QR) codes. Charges were also reduced or removed on mobile money transactions. In a few instances, suspensions of fees applied to transfers made between banks and mobile money accounts.



Furthermore, several central banks have lifted limits on digital transactions. As a result, customers have enjoyed increases in single, daily, monthly, or even annual limits associated with contactless and mobile payments. Similarly, ceilings on account balances and e-wallets have been raised, with a focus on mobile money platforms.

MENA= Middle East and North Africa; SA= South Asia: and SSA= Sub-Saharan Africa.

The regulatory measures targeted MSMEs, among other businesses. However, all these measures have clearly helped small businesses perform their essential daily transactions in a cashless way. Some central banks have also authorized or eased remote, electronic customer identification and verification procedures to facilitate the digital enrollment of new customers. Another set of measures has enabled the remote onboarding of individuals and businesses during the COVID-19 pandemic, such as: authorizing the use of digital identifications (IDs); accepting e-copies of documents as identity evidence; e-signatures; and simplifying Customer Due Diligence (CDD) checks via facial recognition and other technology. Regulatory support for e-CDD practices - particularly the use of digital identity solutions for customer identification and verification at onboarding — has been particularly helpful

for MSMEs operating in high COVID-19 stringency jurisdictions, where strict lockdowns abruptly put a halt to in-person loan applications and approval processes. Additionally, a few countries have facilitated and/or reduced the fees associated with authorization and licensing processes for new business activities. Finally, some governments launched regulatory sandboxes to test innovative digital financial services and business models under the supervision of competent authorities.

BOX 2: REGULATORY RESPONSES TO THE COVID-19 PANDEMIC IN AFRICA

Many African countries have been at the forefront of the regulatory response to the COVID-19 pandemic, especially when it comes to the effective promotion of digital financial services (DFS) — foremost among them, mobile money.

Central banks quickly reduced/waived fees on digital payments and transfers, and increased limits on e-/mobile transactions and balances. Several countries, such as Ghana, Kenya, Lesotho, Mozambique, and Zambia, temporarily removed charges on electronic/mobile money transactions up to a certain amount. Kenya, Liberia, Rwanda, and Togo also suspended fees on transfers made between bank accounts and e-/mobile wallets. Furthermore, numerous countries — including Botswana, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, and Tanzania — raised single, daily, and monthly ceilings on mobile transactions and accounts.

In addition to nimble e-payment and mobile money regulations, some countries — such as Côte d'Ivoire, Ghana, Guinea, Senegal, and Togo — adopted a more flexible, risk-based approach to customer identification and verification requirements for the opening of digital accounts, as encouraged under the global AML/CFT standards established by the Financial Action Task Force⁶⁹. In some cases, authorized e-KYC practices for entry-level mobile accounts included the use of existing Subscriber Identity Module (SIM) registration details, without the need to provide additional information or documents. Value and/or other functionality limits of the entry-level mobile accounts further mitigated potential illicit finance risks.

Finally, some regulators have strengthened their support to the FinTech sector during the pandemic. For instance, Ghana and Nigeria postponed plans to tighten the regulatory rules for FinTech providers, for example, by imposing higher minimum capital requirements. Playing a leading role in the region, Ghana has taken a wide range of actions to enhance its national DFS landscape, including the launch of three forward-looking policy initiatives: the Digital Financial Services Policy, the National Financial Inclusion and Development Strategy, and the Cash-Lite Roadmap⁷⁰.

KEY ISSUES ON POLICY APPROACHES

Since the crisis is ongoing, finding substantial data and evidence to properly evaluate the short- and long-term effects of policy and regulatory measures implemented over the last year remains challenging. Thus, it is too early to provide a credible assessment of such effects. While government support has helped avoid MSME bankruptcies, debt moratoria and subsidies are still in place in many states. It remains to be seen whether — and to what extent — countries will face an insolvency or bankruptcy crisis, when and if a massive number of small businesses fail to repay their debts to creditors. Nevertheless, some areas of improvement have emerged in terms of the scale, effectiveness, inclusiveness, and targeting of interventions. The following key observations are from the first wave of policy and regulatory support:

(i) Disparities in the level and availability of financial assistance across countries

There is a clear disparity in the level of government support to MSMEs between wealthier and poorer countries. Richer nations have tended to provide more financial relief to small businesses as a response to the COVID-19 pandemic⁷¹. According to the IMF, support specifically targeted to small and medium-sized enterprises amounted to 4 percent of GDP in G20 advanced economies as compared to 0.7 percent in G20 emerging markets (as of July 2020)⁷². Government responses in the EMDEs have been severely constrained by limited fiscal space, mainly due to high and unsustainable sovereign debt, rising borrowing costs, and out-of-control public spending.

(ii) Variations in the effectiveness of financial aid programs

Direct financial assistance programs, for example, emergency loans and grants targeting MSMEs, have been more effective in countries with an extensive and robust digital financial infrastructure already in place at the national level. A recent study has underscored the importance of strong payment, identification, and data systems for the proper delivery of economic disbursement schemes at scale. The most successful

government programs have shared three key attributes: seamless digital payment channels, an electronic identification system with broad population coverage, and relevant data linked to the IDs⁷³. Conversely, countries lacking some of these structural features have launched less ambitious programs with limited scope and delivery results⁷⁴.

(iii) Insufficient reach and communications concerning policy interventions

Overall, MSMEs have been less likely to receive government support than larger firms. Critically, many MSME-targeted interventions have only reached businesses operating in the formal sector, thus leaving ineligible informal firms without assistance. This issue is especially prominent in EMDEs with greater levels of informal employment. Moreover, a substantial share of MSMEs in the EMDEs cited the lack of awareness of available measures as a reason for not obtaining financial support — including 39 percent in Sub-Saharan Africa; 35 percent in Latin America; 33 percent in South Asia; and 30 percent in the Middle East and North Africa⁷⁵. Thus, many governments have seemingly failed to effectively communicate the availability of relief programs accessible to local MSMEs.

(iv) Lack of government support to MFIs and other NBFIs

Governments have mainly provided liquidity support to banks at the expense of MFIs and other non-bank financial institutions (NBFIs) upon which countless MSMEs rely on in EMDEs — especially women-led, youth-run, and informal firms. According to the Global Microscope 2020, less than half of the countries that launched liquidity facilities for banking institutions also included MFIs⁷⁶. In many jurisdictions, NBFIs remain largely or totally unsupervised by central banks. This prevents them from receiving the regulatory assistance offered to commercial banks and other financial intermediaries during the COVID-19 pandemic.

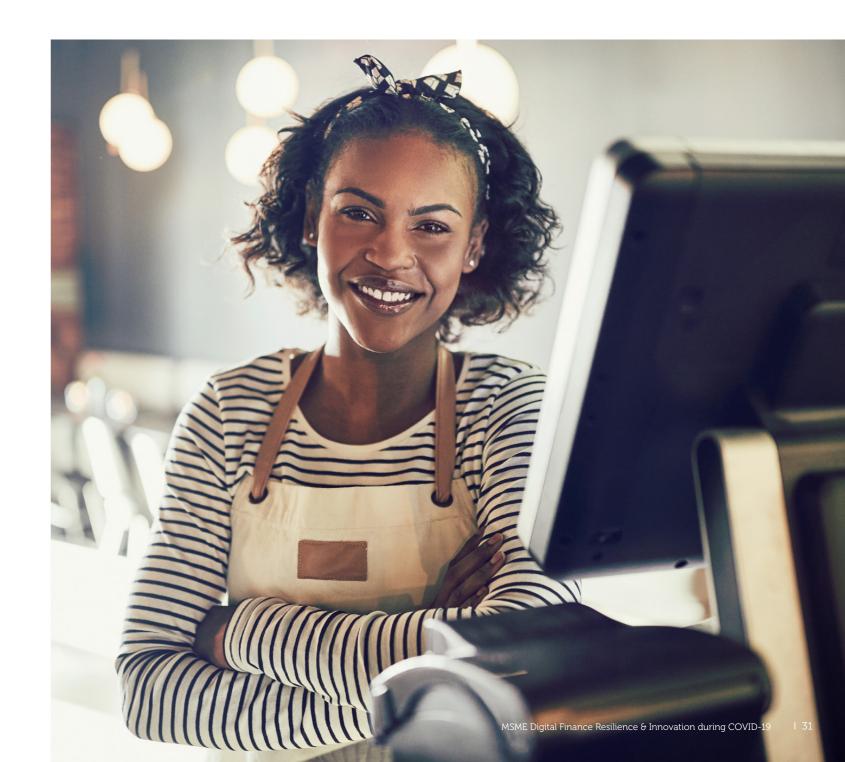
Viewed as a severe risk at the start of the crisis, the liquidity crunch that was supposed to hit MFIs and NBFIs has not actually materialized. A joint survey conducted by the CGAP and Symbiotics shows that the liquidity position of MFIs slightly improved from April 2020 to March 2021⁷⁷. Without adequate financial backing from public authorities, some might not be able to maintain their liquidity levels as they become stuck in an unexpected vicious circle. Specifically, many have

granted a debt moratorium to their borrowers, including MSMEs, but they have not been given a debt moratorium by their own lenders.

(v) Moral hazard

Emergency relief schemes have so far helped to prevent the materialization of a pervasive bankruptcy crisis. In most cases, governments, banks, and other lenders have applied quite loose criteria to accessing loans provided under concessional terms. It has also been difficult to distinguish between viable and non-viable borrowers amid the crisis. Thus, governments and credit guarantee institutions must thoughtfully balance the need to approve and cover more MSME loan applicants with

the responsibility to maintain an appropriate risk limit. Therefore, to mitigate risks related to moral hazard and over-indebtedness, the exit from such lending schemes should be carefully calibrated in terms of coverage and timing.





The Supply of **Digital Financial Services to MSMEs: Private Sector Initiatives** and Evolving **Market Dynamics**

3.1 / Private Sector Interventions in Response to COVID-19

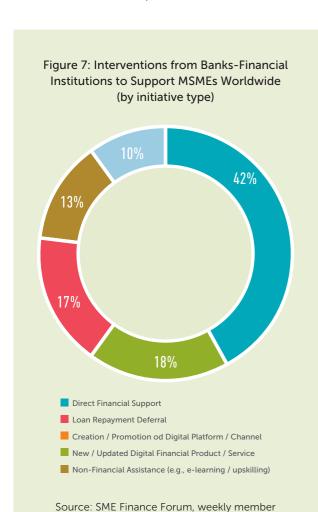
As governments and central banks came to the rescue of MSMEs worldwide, private market participants also took decisive steps to address the vital needs of small businesses during the pandemic. Commercial and development banks, microfinance institutions, as well as FinTech and BigTech companies, have developed and/or adopted a broad set of initiatives, solutions, and channels to support affected MSMEs in both advanced and less developed economies. Unsurprisingly, FinTech and BigTech firms have positioned themselves at the forefront of innovation in the fight against the adverse impacts of the COVID-19 pandemic by proactively and effectively facilitating MSME access to and use of digital financial services.

3.1.1 / Traditional Financial Intermediaries

Traditional lenders, such as banks and MFIs, have introduced various measures to assist their MSME customers during the COVID-19 crisis.

Based on interventions captured by the SME Finance Forum, almost 40 percent of initiatives carried out by commercial and development banks took the form of serving MSMEs remotely and without discontinuities, some banks have digitalized their product and service offerings and/or leveraged new online platforms and channels. Actions undertaken by traditional financial intermediaries can be categorized as follows: (i) lending and other financial support; (ii) payments; (iii) insurance, and (iv) non-financial support.

direct financial support to MSMEs (Figure 7). To keep



briefs March-September 2020.

Note: A total of 60 interventions were captured.

(i) Lending and other financial support

Several commercial and development banks have swiftly provided lending and cash flow support to MSMEs during the pandemic. A few institutions have launched new loan facilities/credit lines or special liquidity funds for MSMEs. Small businesses have also benefited from leniency measures, such as debt restructurings and deferrals of installment repayments offered by banks and MFIs, generally ranging from three to six months. According to CGAP Global Pulse Survey of Microfinance Institutions, nearly two-thirds of MFIs issued moratoria or restructured loans for their clients (including MSMEs)78. Furthermore, some banks have taken advantage of their advanced digitization stage to streamline and fast-track their MSME loan application process online. Others have been able to effectively leverage available data about their MSME customers - including genderdisaggregated information — to quickly provide them with the most suitable type of financial assistance needed.

BOX 3: DBS SINGAPORE

At the onset of the crisis, DBS SME Banking proactively implemented a comprehensive set of relief measures to support Singaporean MSMEs negatively impacted by the severe economic shock.

First, DBS sought to address the short-term liquidity needs of MSMEs in a quick, seamless, and digitized manner. The main measures included the deferral of principal repayments (initially up to the end of 2020), the creation of new digital and bridging loans, and the introduction of online solutions for trade financing. The bank effectively managed to digitize and speed up the entire credit journey, making loans available within two days. The SME Banking Unit also simplified the documentation requirements for applicants (for example, only asking for bank statements, notices of tax assessment, and credit bureau scores)⁷⁹.

Second, DBS went beyond liquidity and loans to provide non-financial assistance to MSMEs operating in the struggling sectors. The bank partnered with the Singaporean government and two FinTech firms, Oddle and FirstCom, to launch a Digital Relief Package for the food and beverage industry. The initiative has enabled small businesses to increase their revenues by creating an online food ordering site within three days — and with significantly lower delivery rates⁸⁰.

Moreover, DBS has enhanced its e-training efforts through the launch of the Online SME Academy. This series of free virtual classes featuring industry practitioners has helped thousands of local MSMEs upgrade their business capabilities amid the pandemic⁸¹. The bank has also released the Covid-19 SME Business Resource Guide, which shares practices and insights on how to best maintain business continuity during the crisis⁸².

(ii) Payments

Some banks have created new digital payment solutions and/or channels for MSMEs, thus allowing them to keep performing business transactions online. Several institutions have also introduced electronic checks, and in some cases discounts on e-checks. These have been made available through their digital platforms. E-checks have brought various benefits to MSME customers, including a safer and more efficient way to process checks, lower fees/charges, improve traceability, and minimize technical errors and rejections via electronic validations. Other banks have also temporarily increased limits on contactless payments.

(iii) Insurance

Several banks have introduced or extended insurance coverage for MSMEs during the COVID-19 pandemic. Occasionally, they have joined forces with their insurance partners. Other institutions have offered new digital insurance platforms for MSMEs, leveraging advanced technologies such as artificial intelligence and machine learning.

(iv) Non-financial support

Going beyond finance, many institutions have offered non-financial assistance to affected MSMEs, mainly through the delivery of digital platforms/tools and the organization of e-learning activities (for example, workshops, webinars, and online classes). In this regard, several banks have strengthened their e-training and mentoring efforts to help MSMEs upgrade core digital skills. They also offered critical guidance on how to best maintain business continuity amid the crisis.

BOX 4: INTERVENTIONS FROM PRIVATE SECTOR INSTITUTIONS TO SUPPORT WOMEN-OWNED MSMES DURING THE PANDEMIC

A plethora of banks have taken multiple actions to support women-owned SMEs (WSMEs) in sustaining and growing their businesses during the COVID-19 crisis.

Following a quick survey of WSME customers conducted by its Women's Banking Unit called TARA, Bangladesh's BRAC Bank implemented a broad set of measures, such as a three-month moratorium on loan repayments, a 9 percent reduction in interest rates, and the provision of a working capital facility. TARA's WSME clients also received access to an emergency cash facility that was introduced via bKash, the bank's popular mobile financial service.

In the Dominican Republic, Banco BHD Leon responded to women entrepreneurs' needs by deferring debt repayments (90 days), lowering interest rates on new commercial loans, and eliminating late fees (60 days). The bank also offered various incentives and concessions for credit card users, including 0 percent for cash advances, a waiving of late payment fees, a 20 percent cashback on delivery services and pharmacy receipts, and zero interest for three months on supermarket bills⁸³.

In Ghana, Annan Capital Partners teamed up with the Women's Empowerment & Investment Group and GUBA Enterprise to establish the COVID 19 Stimulus Fund, investing approximately US\$2,500-5,000 in local women led MSMEs⁸⁴.

To support businesswomen affected by the pandemic, Banco Santander Argentina organized a series of online talks on relevant topics through their YouTube channel⁸⁵. BMO Financial Group of Canada provided webinars and podcasts for WSMEs on various subjects, for example, access to capital and cash management, business planning, tax implications, and entrepreneurship during COVID-19. Similarly, Vietnam Prosperity Joint Stock Commercial Bank created many virtual training programs concerning the advantages of e-commerce and how to move business operations online for WSMEs⁸⁶. In Nigeria, Access Bank's Womenpreneur Pitch-a-thon program is a platform that aims to improve financial literacy and business management skills for women entrepreneurs. It too saw a surge in the number of mobile application subscribers (81,000 sign-ons) and workshop participants (6,000) during the COVID-19 pandemic⁸⁷.

3.1.2 / FinTech/BigTech Companies

FinTech and BigTech companies have also played a leading role in assisting MSMEs during the crisis, especially by leveraging their advanced digital capabilities and massive reach.

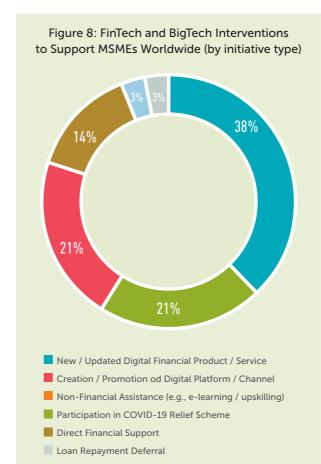
The SME Finance Forum's data shows that the delivery of new or updated digital financial products/services represents nearly 40 percent of FinTech and BigTech interventions targeting MSMEs (Figure 8).

Interestingly, one in five initiatives involved participation in a government relief scheme. From a broader

perspective, FinTech/Big Tech actions can be classified as follows: (i) lending and other financial support; (ii) participation in COVID-19 relief schemes; (iii) payments; (iv) insurance; and (v) non-financial support.

(i) Lending and other financial support

Many FinTech lenders have made changes to their onboarding criteria, offering debt repayment holidays, or reduced interest rates for their customers, including MSMEs. Similarly, some bigger financial services and e-commerce players temporarily suspended business loan repayments to ease the cash flow pressure on



merchants impacted by supply chain disruptions and lower consumer demand. A few FinTech and BigTech companies have provided direct financial aid to MSMEs, for example, through the offering of cash grants or online advertising credits. Several crowdfunding platforms have also initiated programs and campaigns to offer concessional loans or donations to the small business community.

Source: SME Finance Forum weekly member briefs,

March-September 2020 Note: A total of 58 interventions were captured.

(ii) Participation in COVID-19 relief scheme

A number of FinTech companies have played an active role in the implementation and delivery of various COVID-19 relief schemes. Several FinTech lenders have directly participated in the disbursement of government assistance funds. Other FinTech firms have deployed their digital technology and advanced credit decision capabilities to help banks and other lenders better manage and quickly screen a massive number of business loan applications. Moreover, some FinTech players have enabled small businesses to easily apply for

loans through their online portal, thus acting as viable intermediaries between MSMEs and lenders under government programs.

(iii) Payments

Various FinTech players have released new digital payment tools to enable MSMEs to process transactions within a context of social-distancing measures. Partnerships between FinTech firms and established payment service providers (PSPs) have also helped broaden the range of contactless payment options available to MSMEs. Additionally, some players have reduced/waived fees and/or increased limits on online/ mobile transactions and transfers.

(iv) Insurance

InsurTech companies responded to the COVID-19 crisis by enhancing benefits, providing new/additional coverage, reducing/waiving commission fees, and lowering insurance premiums, among other measures. Several InsurTech players also eased payment conditions or granted grace periods.

(v) Non-financial support

A couple of BigTech companies have started online educational programs to empower MSMEs and share best practices regarding how to effectively navigate through the crisis and seamlessly adapt to the rapidly evolving digital economy. Other prominent technology players have also offered their no-code development platform or launched a new e-commerce service to help MSMEs migrate their operations and sales online during the pandemic.

Table 3 provides a comparative overview of the main initiatives and innovative solutions implemented by traditional financial institutions and FinTech/BigTech companies in four vertical areas: lending, payments, insurance, and non-financial services. The vast majority of these interventions have successfully leveraged digital technologies, tools, and channels to address the urgent business and financing needs of MSMEs worldwide.

Table 3: Private Sector Initiatives/Solutions to Support MSMEs during COVID-19 - Selected Examples

Area	Type of Intervention	Traditional Financial Intermediaries	FinTechs/BigTechs
			• In the US, many FinTech companies, such as Kabbage, Square, Finastra, and Intuit , participated as lenders as part of the Paycheck Protection Program (PPP).
		• Various Banco Bilbao Vizcaya Argentaria (BBVA) units launched credit lines to support local MSMEs, amounting to €25 billion in Spain, €640 million in Peru, and €29 million	 Facebook offered US\$100M in cash grants and advertising credits to assist MSMEs in thirty countries through its Small Business Grants Program⁹¹. In Europe, Wisefund has offered crowdfunded loans from €10,000 to €250,000 to European MSMEs that experienced a 25 percent or more
	Direct financial support	in Argentina ⁸⁸ . • The European Investment Bank (EIB) allocated €200 million to UniCredit to provide lending to Italian MSMEs and mid-cap firms across all production sectors ⁸⁹ . • In the US, Goldman Sachs rolled	drop in sales during the COVID-19 pandemic ⁹² . • BorsadelCredito.it (Italy) has developed ad-hoc products for Italian SMEs, including Cash Anti Covid-19 and Cash Anti-Covid Phase 2, which are, respectively, the short- and long-term loans designed to cover companies' current expenses and post-lockdown recovery phase.
LENDING		out a US\$275 million Small Business Stimulus Package, including US\$250 million in emergency loans and US\$25 million in grants ⁹⁰ .	The Emirates Development Bank (United Arab Emirates- UAE) has collaborated with the Dubai-based peer-to-peer platform Beehive to provide SMEs with 30 million Dirhams (US\$8.16 million) in loans to expand the crowdfunding offerings by including institutional investors. The initiative facilitates the delivery of loans to SMEs seeking to expand or increase working capital. This is being done as part of an overall push to offer more funding options to local small businesses.
		• Maybank (Malaysia) released its SME Digital Financing solution, an end-to-end online lending program that allows MSMEs to obtain a loan in less than ten minutes. It does so with minimal information and no documentation required for existing clients ⁹³ .	
	Streamlining and automation of credit approval process	• Swiss banks, in collaboration with the authorities and the Swiss National Bank, managed to provide 125,000 loans to MSMEs between March and May 2020. The extensive use of digital platforms and software robots enabled the swift and efficient processing of loan applications at scale, with up to 12,000 applications on a daily basis.	 Temenos⁹⁴ (Switzerland) and Lendio⁹⁵ (US) have delivered digital platforms to streamline Paycheck Protection Program (PPP) loan applications for small businesses. Plaid (US) sought to speed the credit approval process and gave lenders access to its data on small business payrolls⁹⁶.
		• Emirates Development Bank has been working on account opening and servicing for SMEs. An International Bank Account Number is generated within minutes, and a full KYC is done within 48 hours. SME loans are processed via a mobile app.	

	Reduction of bureaucratic and documentation burdens	• InJapan, HokkokuBank computerized a key certification procedure for small businesses applying to obtain special credit guarantees. The electronic system drastically reduced the time to process paperwork and issue the certificate, that is, from 120 minutes to 5 minutes/case and 5 hours and 33 minutes to 1 hour and 53 minutes/case, respectively.	Bottomline (US) tailored its account opening software to help lenders, enabling them to digitally collect all the required information about MSME applicants ⁹⁷ . Appian (UK) deployed its Low-Code Automation Platform to fast-track eligibility assessment and document verification under the Coronavirus Business Interruption Loan Scheme (CBILS) ⁹⁸ .
	Enhanced evaluation of MSME cre- ditworthiness	DenizBank A.Ş. (Turkey) introduced a new robotized credit evaluation system to pre-assess potential loan customers by analyzing internal and external databases (for example, personal and commercial credit ratings, tax information, and so on).	• Modefinance (Italy) co-developed an augmented algorithm based on artificial intelligence (AI) and macroeconomic indicators to estimate the impact of the COVID-19 pandemic on companies' performances with three different scenarios (positive, neutral, and negative). The algorithm also simulates how the impact will affect SMEs' creditworthiness and probability of default. The solution has been used by banks and other FinTech companies.
SLN	New digital payment solutions	Banco de la Provincia de Buenos Aires (Argentina) relaunched Cuenta DNI, an e-payment solution designed for many types of customers, including MSMEs. Cuenta DNI became the first digital wallet to interoperate with other applications, that is, sharing the same Quick Response (QR) code with other wallets such as BNA+ and ValePei, under the 3.0 Transfer System established by the Central Bank of Argentina. Hong Leong Bank (Malaysia) introduced Tap On Phone, a low-cost contactless feature that enables MSMEs to easily accept mobile payments from customers ⁹⁹ .	 PayPal (US) added a QR code feature to its mobile Business App, making it easier for micro and small merchants to accept touch-free payments¹⁰⁰. FinTech firm Zaggle (India) has partnered with Visa to develop innovative digital payment solutions for local MSMEs and startups, including the Founders Card, a credit card specifically designed for Chief Executive Officers of small businesses¹⁰¹.
PAYMENT	Integration of payment tools with social networks and other digital channels	CaixaBank (Spain) released two digital payment solutions — Social Commerce and PayGold — allowing physical retailers to manage online purchases via social networks and messaging applications ¹⁰² .	Clip (Mexico) launched a new mobile payment application, Pagos a Distancia Clip, allowing MSMEs to easily process credit/debit card transactions by sending a simple link to buyers via social media, email, or text ¹⁰³ .
	Increase of contactless payment limits	• ING (Netherlands) doubled the limit on contactless payments from €25 to €50 per transaction ¹⁰⁴ .	Safaricom (Kenya) temporarily waived fees on all peer-to-peer (P2P) transactions of less than US\$10 made through M-Pesa and more than doubled daily transaction limits for users of the mobile application ¹⁰⁵ .

SANCE	Introduction or extension of insurance plan/ coverage	Siam Commercial Bank (Thailand) has offered a special COVID-19 insurance package for small business owners and their employees ¹⁰⁶ . Both of DBS's (Singapore) General and Life Bancassurance partners, Chubb and Manulife, respectively, introduced and enhanced MSME coverage against business disruptions caused by the COVID-19 pandemic ¹⁰⁷ .	Small business InsurTech Huckleberry (US) has launched the Pandemic Business Interruption plan, offering coverage to MSMEs in the hardest hit sectors, such restaurants, retail stores, barbers and beauticians, and childcare services ¹⁰⁸ .
INSURANCE	New digital products	• ICICI Lombard (India) has launched an online business insurance platform for small businesses, with the goal of reaching 63.3 million MSMEs across the country. Powered by Al, machine learning (ML), and other advanced technologies, the new digital facility has optimized key insurance services, for example, purchase or renewable of products, policy endorsement, and claim registration ¹⁰⁹ .	As part of an intervention to support MSMEs impacted by the COVID-19 pandemic in the Philippines, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has partnered with a BigTech firm to develop a digital application offering users a comprehensive risk management system. The application enables MSMEs to enter data and produces a personalized risk profile, as well as a plan for business continuity.
NCIAL SERVICES	E-Training and learning	• TBC Bank (Georgia) has provided online training sessions to 2,000 small businesses on various topics such as crisis management, financial planning, and marketing communications ¹¹⁰ .	 The Khalifa Fund (UAE) and four partners (Amazon, Microsoft, noon.com, and Etisalat) co-ran the E-Empower initiative, an online educational program aimed at providing extensive training and support to Abu Dhabi-based MSMEs and startups¹¹¹. By April 2021, the initiative attracted 1,200 MSMEs, which were able to access various e-training materials, leverage cloud-based digital tools, and increase their market exposure. Tala provided evergreen financial educational content, accessible on the Tala Blog and the inapp Learning Center. The firm also proactively notified app users about financial education options through push notifications. It also offered one-on-one financial coaching and launched courses on business growth, budgeting strategies, and savings techniques¹¹².
NON-FINANCIAL SER	Workshops and webinars	• First Bank (Nigeria) hosted several virtual SME Clinics to provide strategic guidance to MSMEs concerning their business and financial management practices during the crisis ¹¹³ .	• Paypal (US) organized webinars geared toward SMEs on how to navigate ¹¹⁴ and optimize ¹¹⁵ their business online.

NANCIAL SERVICES	E-commerce platforms	The pan-African bank Ecobank has partnered with Google to improve the presence of MSMEs online, including a free website, business promotion features, and increased visibility through the Google Search/Maps ¹¹⁶ .	 African FinTech company Flutterwave launched Flutterwave Store, an e-commerce portal for MSMEs where merchants can showcase and sell their products online¹¹⁷. SumUp (United Kingdom) created SumUp Online Store, which allows MSMEs to easily create their digital stores and accept payments through social media channels¹¹⁸. In Latin America, Airtm launched the Airtm Directory, a place within the Airtm platform where MSMEs can list their business information and promote their product/service catalogues to its 1 million+ user base.
NON-FINANC	Challenges and hackathons	Santander (Brazil) organized its first online hackathon, which aimed to find solutions for SMEs with a focus on data and analytics ¹¹⁹ . The African Development Bank and its partners hosted a 72-hour online #AfricaVsVirus global hackathon to develop innovative solutions for COVID-19. The challenge is part of the bank's strategy to support young African entrepreneurs, especially women and WSMEs ¹²⁰ .	Wefunder (US) organized the Fight the Virus Challenge, a three-month accelerator program for startups that sought to prepare each participant for an online demo day, with US\$1 million of potential capital raising at stake. Accepted companies received US\$50,000 in immediate funding with no charges and zero percent equity fee. In addition, they benefitted from mentorship relationships and networking activities ¹²¹ . Fintech Galaxy (UAE), in collaboration with the GIZ, organized Yallah Fintech, the Arab world's first regional digital hackathon and innovation challenge for financial inclusion. Fifteen innovative technology companies and start-ups participated in a one-week bootcamp and benefitted from business training and networking opportunities with potential investors.

3.2 / Changing Market Dynamics and New Innovations: State of Play of the MSME Finance Ecosystem

The COVID-19 pandemic is set to profoundly reshape the MSME finance landscape. Although it is still too early to claim that a structural change in bank-FinTech relationships is in motion, the impact of the pandemic has paved the way for closer collaboration between the two financial groups.

Widespread pandemic lockdowns have also forced MSME lenders to hastily readapt their strategies in a digital environment. Traditional financial intermediaries immediately faced a tremendous challenge as to how to best meet the urgent and rapidly evolving needs of their MSME clients in a quick, flexible, and contactless way. Consequently, many institutions had no other choice but to accelerate the digitization of the full customer journey. In this regard, COVID-19 has definitely acted as a catalyst for the digital transformation of the MSME banking ecosystem. Thus, as serving MSMEs through digital means has become the "new normal", legacy lenders have started to enhance their technological capabilities to gain a decisive edge in dealing with clients. Furthermore, the crisis indisputably represents a leap forward for MSME adoption of FinTech solutions worldwide, However, there are remain notable disparities across regions and countries due to various structural barriers.

3.2.1 / Legacy Lendersvs. Disruptive Players:Towards More Cooperationor Competition?

The pandemic has seen the formation of many new partnerships pertaining to the delivery of digital financing solutions to MSMEs, foremost among them emergency credit. In most cases, FinTech companies leveraged their digital platforms and cutting-edge features to help banks simplify and accelerate their loan application and approval processes, as seen in section 3.1.2. Given that many online, end-to-end solutions have been delivered to lenders under specific government programs, one question arises: are such partnerships only contextual or will they endure in a post-COVID-19 landscape?

Although not fully representative of partnership trends at the global level, a brief assessment of recent market dynamics in the US and the UK might provide some preliminary answers. In the United States, many local banks did not have the technological capacity to process an increasingly large volume of MSME loan applications under the PPP. Consequently, many of them embraced FinTech firms as key implementation partners to digitalize, optimize, and streamline lending processes for small businesses. Thus, bank-FinTech partnerships have played a significant role in the fast delivery of credit to thousands of MSMEs across the country. By successfully unburdening the administration of PPP loans, many FinTech providers have clearly become an essential intermediary between traditional lenders and MSMEs

during the pandemic. This newly entrenched position in the MSME finance ecosystem is not likely to change anytime soon, thus certainly opening the door for more sustainable partnerships in the future — especially when it comes to digital lending.

In the United Kingdom, many MSMEs had already tapped into alternative sources of emergency capital (for example, online marketplaces) before the government launched its support scheme for local businesses. However, the Coronavirus Business Interruption Loan Scheme (CBILS) has apparently not led to more collaborations between legacy lenders and disruptive players, which operate in an open and competitive MSME lending market¹²². Interestingly, one of the most notable partnerships under the CBILS involved two FinTech challengers, Starling Bank (digital bank) and Funding Circle (P2P lending marketplace)¹²³. This association demonstrates the more prominent role played by UK FinTech lenders, which can now directly serve the financing needs of a considerable number of MSMEs outside the umbrella of large, established banks, that is, the nine largest banks in the UK, known as the Competition and Markets Authority (CMA9).

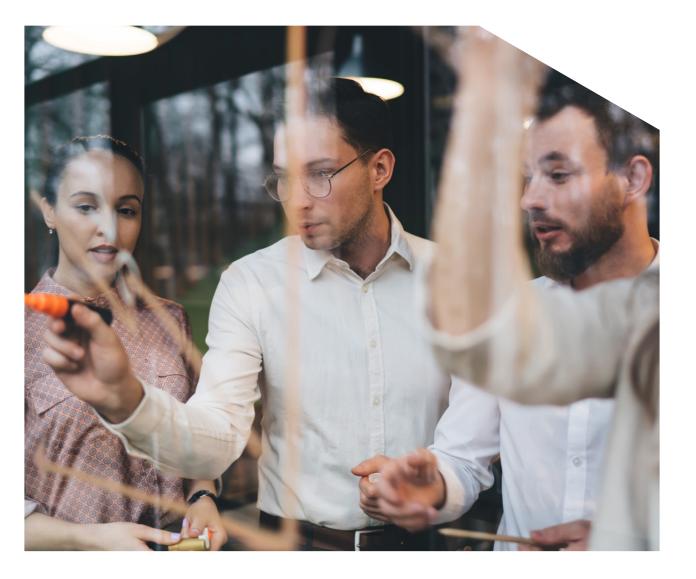
Although such partnerships have not yet become a common phenomenon, the pandemic has clearly highlighted the potential complementarity between banks and FinTech players operating in the MSME finance landscape. First, FinTech companies can effectively help overcome several shortcomings in bank's digital infrastructure and processes — shortcomings which have been blatantly exposed by the COVID-19 pandemic. New challengers bring distinct characteristics, such as

their cloud-native approach, their customer-centric model, their advanced analytics, and AI/ML capabilities, as well as their digital identity solutions. These characteristics have led to an easier, faster, cheaper, and more transparent lending model for MSMEs.

By joining forces with innovative FinTech firms, legacy lenders have the opportunity to considerably simplify and enhance the various critical aspects of their online lending process — from assessing credit risk to managing remote client claims. Second, banks can provide their FinTech counterparts with more capital and greater distribution access. Given their relatively limited scale, many FinTech players that participated in the disbursement of COVID-19 relief funds reached their lending limit more quickly than larger banks. Hence, collaborating with larger financial intermediaries allows FinTechs to deliver their digital financial products and services to MSMEs at scale. In addition, FinTech partners benefit from the banks' extensive compliance systems and well-established reputations among customers.

The foray by BigTech companies into financial services is also likely to reshape the competitive dynamics within the SME digital finance landscape. On the one hand,

the accelerated digitalization of business activities and financial services has laid the groundwork for new, complementary partnerships between BigTech and FinTech players, namely, through the provision of embedded financial services. In this regard, a few BigTech and FinTech firms have already teamed up to support MSMEs during the crisis, for example, Google and SumUp. On the other hand, BigTech companies have also been increasingly perceived as competitors by both banks and FinTechs due to their significant inroads into the payments and lending spaces. BigTechs can leverage their size, scale, and expanding role in the daily activities of MSMEs to achieve greater bargaining power while also interacting and negotiating with both incumbents and new market entrants. Thanks to their significant efforts to support small businesses during the pandemic, some BigTech players have undoubtedly positioned themselves as potential preferred providers of financial services for MSMEs in the post-COVID-19



3.2.2 / Key Technological Disruptions Transforming Traditional Intermediaries

The COVID-19 pandemic has fast-tracked the digital transformation of traditional MSME lenders, increasing the pace of change from years to weeks. The pandemic has also exposed significant technology gaps that had to be quickly closed. Critically, the crisis has highlighted the need for digital, automated, data-driven, and more open operating models, which have become essential to the effective optimization and customization of MSME financing solutions.

Digitization:

As business operations and client interactions went virtual overnight, banks and other financial institutions had to readjust their product/service offerings. Digital engagement with MSME customers was no longer an option. Consequently, most lenders promptly increased their efforts to improve their digital financial

platforms and services for MSMEs. Specifically, lenders have digitized key procedures and services for MSMEs. such as credit risk assessment; AML/CFT customer due diligence; account opening and onboarding; loan servicing; and customer relationship management. According to the latest Member Pulse Survey conducted by the SME Finance Forum (July 2021), many bank/ financial institution respondents have adopted one of these technologies as part of the digitalization of their processes and services: Application Programming Interfaces (APIs) (74 percent); cloud computing (50 percent); AI/ML (40 percent); and blockchain/ distributed ledger technology (18 percent)¹²⁴. Moreover, the COVID-19 pandemic has led to an irreversible shift in client behaviors toward more engagement through online/mobile channels. Based on a survey conducted by Marqeta, 78 percent of MSMEs have become more reliant on digital banking than ever¹²⁵. Thus, offering a first-rate and frictionless digital experience to MSMEs has indubitably become a minimum requirement for banks and other lenders.

BOX 5: THE DIGITALIZATION OF BANKING IN AFRICA DURING THE COVID-19 PANDEMIC: SURVEY FROM THE EUROPEAN INVESTMENT BANK¹²⁶

The COVID-19 pandemic has triggered a shift toward the digitalization of operations, services, and channels among banks operating in Africa. In this context, the European Investment Bank (EIB) conducted a survey of 78 banks, accounting for approximately 30 percent of total banking assets in the region, ¹²⁷ of which 88 percent engage in lending to MSMEs. This highlights the extent of the digitalization efforts undertaken across the African continent as a result of the pandemic.

Several surveyed banks that experienced a deterioration of asset quality in their portfolios were forced to restructure loans, institute debt moratoriums, and tighten credit standards. Against this backdrop and to ensure stable access to financial services, the provision of digital services and new digital innovations were key to supporting individuals and businesses in coping with the shocks generated by the COVID-19 pandemic. The provision of such services also helped to increase

efficiency and transparency, as well as the institution of more robust risk management techniques. Key highlights from the results follow:

A permanent shift:

Most of the surveyed banks reported that the pandemic accelerated their digital transformation, and that this shift will be permanent.

Delivery of online financial services:

Across the continent, two-thirds of banks surveyed have broadened the range of financial services available online because of the COVID-19 pandemic, including 67 percent of respondents in Central and East Africa, 79 percent in Southern Africa, and 60 percent in West Africa. In addition, over half of sampled banks offer digital services that facilitate business activities, including paying suppliers and bills and receiving payments from customers.

Use of digital channels:

Physical transactions still represent the majority of money flows, but surveyed banks reported that approximately 30 percent of transactions now use digital channels. The retail sector is leading the integration of digital transactions, followed by corporate and SME transactions. In addition, banks in Southern Africa reported higher volumes of digital transactions.

Digital transformation of internal processes:

In aggregate, 89 percent of banks claimed that the pandemic has accelerated the digital transformation of their internal processes, with no significant differences between low- and middle-income countries (that is, 86 percent vs. 90 percent).

Investment in technology:

In the same vein, 86 percent of respondents stated that the crisis has led to increased investments in IT equipment and financial technology, with some disparities across regions, for example, from 100 percent in East Africa to 72 percent in West Africa. Over 2021, surveyed African banks plan to spend approximately US\$ 5 million on digital technologies (that is, 1.3 percent of total assets).

Digital engagement with customers:

Nearly 9 in 10 banks surveyed expected the customer shift to digital channels to persist after the end of the pandemic, an expectation that is consistent across regions and income groups.

Bridging digital skills gaps of borrowers:

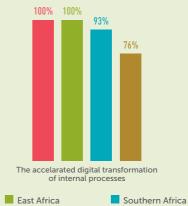
Surveyed banks are aware of a need to help customers integrate into the digital economy. For example, 71 percent of surveyed banks offer some kind of support, advisory service, or training in digital services to their clients.

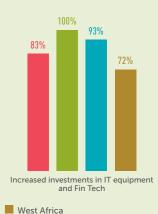
Drivers of digitalization:

Seventy-seven percent of banks reported that improving customer experience for existing customers is the most important driver for digitalization. Over half of the banks cited attracting new customers as the second most important factor pushing them to digitalize, followed by lowering operating costs (44 percent). Facilitating compliance with regulation is ranked as the least important driver.

Figure 9: Share of Banks that Agree (Slightly or Strongly) with the Following (by regional area): COVID-19 Has Led To...



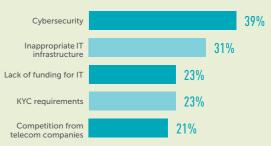


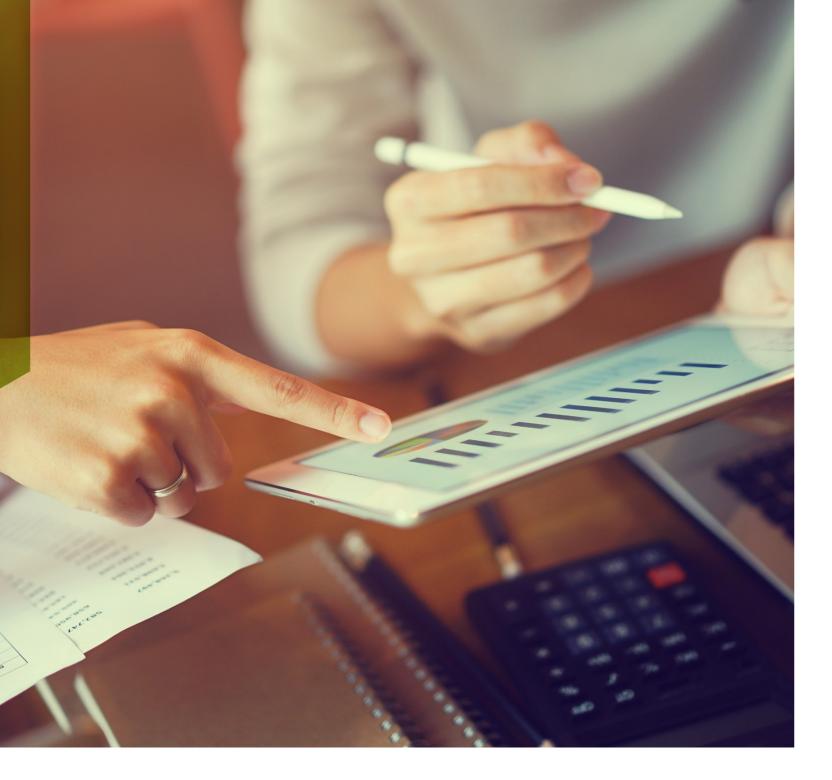


Main challenges and risks:

Banks operating in Africa have increased their digitalization efforts. However, they still have to overcome several challenges. The top five constraining factors include cybersecurity; inappropriate IT infrastructure; a lack of funding for IT; KYC requirements; and competition from telecommunications companies. Critically, the COVID-19 pandemic has heightened concerns over cybersecurity risk, thus pushing banks to take appropriate measures (89 percent of respondents).

Figure 10: Share of Banks that Consider the Following Challenges as Major or Very Severe Constraint to Digitalization¹²⁸





Automation:

As conspicuously evident during the COVID-19 pandemic, obtaining credit within less than a few days/hours has been a matter of survival for countless MSMEs facing acute liquidity shortages. Hence, the crisis has underscored the necessity for legacy lenders to streamline their manual, burdensome, and slow-speed lending processes. Many banks have subsequently embarked on an automation journey with a view to providing straight-through lending to MSMEs. Data from the SME Finance Forum's Member Pulse Survey show that 38.6 percent of banks/financial institutions surveyed have automated five specific MSME operations (including KYC and onboarding, loan application, payment services, customer assistance, and insurance)¹²⁹. Others have not

hesitated to partner with FinTech players to integrate/leverage their cutting-edge automation capabilities.

By adopting disruptive technologies such as artificial intelligence, machine learning, and robotic process automation, many traditional financial intermediaries have been able to expedite their loan processing efforts — a key differentiator for MSME customers. As part of the COVID-19 loan program for MSMEs, many Swiss banks introduced software robots to automate the processing of applications, leading to improvements on a daily basis. For example, fewer human resources were required, and there was a reduced error rate. In this regard, UBS Switzerland developed six robots that processed 24,000 applications on a 24-hour basis — at times representing the efforts of nearly 100 virtual workers¹³⁰.

Data-driven:

The pandemic has clearly emphasized the importance of data analytics for MSME lending, especially in the absence of typical information such as credit scores and repayment rates. As noted, the use of advanced analytics and AI/ML technology has allowed lenders to obtain a more comprehensive and granulated view of their potential and/or existing customers. As a result, many financial institutions have been able to more quickly and accurately assess credit risk and/or adequately respond to the specific needs of their clients during the crisis. For instance, China Construction Bank (CCB) has adopted an exhaustive customer assessment approach based on credit, risk, and scenario profiling. CCB accomplished this through big data integration and multi-dimensional cross verification. The bank also partnered with taxation, industry and commerce, customs, and judicial authorities to fully mine alternative data, enabling it to better analyze credit information. After accurately determining customer target groups, CCB offered tailored products and services through various channels and platforms to match customer needs.

Technologies such as AI/ML help lenders reduce information asymmetry, while also driving greater operational efficiency and freeing up scarce internal resources. At the same time, Al and ML present lack of explainability, potential bias, and other challenges that must be understood and addressed. A survey conducted by the Bank of England shows that 50 percent of UK banks view machine learning and data science (DS) as more important for their future operations since the start of the pandemic. More than 40 percent of surveyed banks claimed that COVID-19 had a positive impact on planned investment in ML and DS applications for credit, for example, in origination, pricing, and provision¹³¹. In the near term, data-driven business models will assuredly become more prevalent as institutions expand their digital and analytics capabilities and obtain access to a wider pool of MSME data.

Open Banking:

More MSMEs have been realizing the value of sharing banking data with a third party via interoperable APIs. In the UK, for instance, the proportion of small businesses adopting open banking solutions surged from 15 to 50 percent in 2020. Among them, 24 percent use open banking products for cloud accounting, 21 percent for cash forecasting, and 18 percent for alternative lending. Interestingly, 90 percent of new adopters in the UK cited COVID-19 as the key driver¹³². According to Marqeta, 76 percent of MSMEs surveyed are eager to connect other business systems and share more data with their bank to obtain quicker loan approvals¹³³. Therefore, traditional lenders should take advantage of this increased interest to further embrace and leverage open banking-enabled

services for their MSME customers. Indeed, 45 percent of executives surveyed by the Economist Intelligence Unit see their current digital business model evolving into a "true digital ecosystem" based on an open banking framework¹³⁴. Nevertheless, the proper development of open banking is contingent on a conducive regulatory framework at both the national and supranational levels.

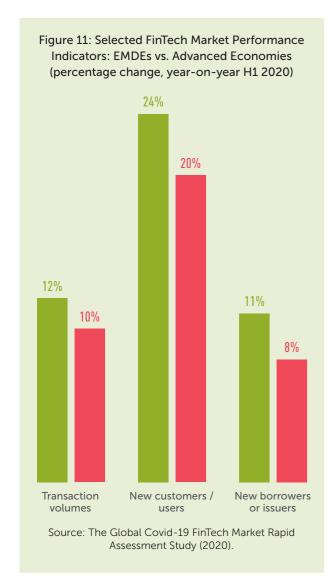
Only a few countries have enforced enabling regulations for open banking, including Australia, European Union member states, India, Hong Kong SAR, China, and the UK. Some emerging market countries, such as Brazil, Mexico, and Turkey, have also increased their regulatory efforts, while others have demonstrated interest, for example, Colombia and South Africa¹³⁵. The Bank of Russia, with the participation of the private sector, has also developed non-mandatory Open Banking Standards (Open API)¹³⁶. In another case, Saudi Arabia's Central Bank issued a new open banking policy, which is set to be fully implemented next year¹³⁷.

The COVID-19 pandemic has inevitably accelerated the push to digital financing. However, some evident gaps remain between the banks' existing digital offerings and MSMEs' evolving preferences and needs. Most MSMEs remain frustrated with their digital banking experiences, citing a lack of advanced features, difficulties in understanding the differences between products, as well as extra costs to access specific services¹³⁸. As an increasing number of small businesses switch to innovative alternative lenders, banks must strengthen their digital arsenal and offer more value-added, flexible, and personalized products and services to maintain their market shares of MSME lending. In this regard, more than half of MSMEs recently surveyed by Banking Circle said they had looked elsewhere to find more suitable banking solutions¹³⁹.

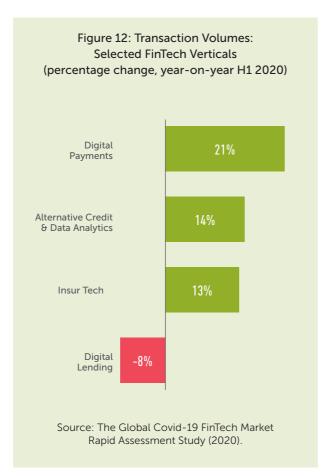
Failing to deliver the "last mile" of online/mobile services could potentially lead to the progressive banking disintermediation of MSME finance in the foreseeable future.

3.2.3 / The Uneven Growth of the FinTech Sector

The global FinTech industry has been on the rise during the COVID-19 pandemic, as demonstrated by a joint study between the Cambridge Center for Alternative Finance (CCAF), the World Bank Group (WBG), and the World Economic Forum (WEF). In aggregate, FinTech transaction volumes grew by 11 percent on average across all regions and verticals in the first half of 2020. The numbers of new customers/users and borrowers/issuers increased by 22 percent and 10 percent, respectively. FinTech companies operating in EMDEs also reported higher average growths in three indicators as compared to advanced economies (Figure 11)¹⁴⁰.



All FinTech verticals directly relevant to the MSME segment experienced an increase in transaction volumes, except for digital lending (Figure 12). MSME-focused lending activities experienced a small decline in volume and the number of transactions (that is, -4 and -5 percent, respectively).



Digital payment companies in particular have greatly benefited from the major worldwide shift away from cash usage. The boom in e-commerce activities, coupled with conducive policies and regulations, has driven the surge in global online/mobile payment transaction volumes. Notably, growth in transaction volumes across high stringency markets was two times greater than in low stringency ones in 2020 (that is, 29 vs. 14 percent)¹⁴¹. Given the rapidly increasing number of merchants and consumers that now favor touch-free payment options, financial service providers (FSPs) and specialized Fintech players are set to enjoy continued growth in this vertical. Finally, the digital payments market is expected to grow at a compound annual growth rate (CAGR) of 13.7 percent over the next five years¹⁴².

Although most FinTech sectors seem to have globally expanded during the pandemic, their growth remains constrained in some regions and countries due to several key barriers. Many FinTech firms suffer from a lack of access to an extensive and robust national digital infrastructure, specifically, internet and telecommunications connectivity, an e-ID system, and so on. Moreover, many countries do not have an enabling regulatory and legal framework in place to foster the development of the FinTech industry. Conversely, some jurisdictions continue to overregulate FinTech players, thus stifling growth and innovation in verticals, such as digital lending and payments. Low levels of digital and financial literacy also contribute to

the limited adoption of FinTech solutions, particularly among the most vulnerable groups, such as women and refugees. Finally, deeply rooted patriarchal norms are preventing women from independently accessing and using financial services in some countries.

Although their direct impact on the growth of various FinTech verticals remains extremely difficult to quantify, such structural and persistent constraints can help to explain disparities across regional and local markets before and during the COVID-19 pandemic.





The Digitalization of MSME Finance: **Opportunities** and Threats **Created by the Pandemic**

4.1 / Digital Financial Services for MSMEs during COVID-19: Benefits and Risks

The COVID-19 pandemic represents a clear turning point for the entire MSME finance ecosystem. The digital transformation of the full customer journey is now proceeding apace.

The accelerated and widespread use of digital financial services has provided multiple benefits for MSMEs. However, it has also created or exacerbated some key risks across countries and markets.

4.1.1 / Benefits

The increased delivery and adoption of digital financial tools, services, and channels during the crisis has positively impacted MSMEs in various ways.

ENHANCED DELIVERY OF FINANCIAL AID

Digital financial platforms and channels have facilitated the distribution of government relief funds to MSMEs in various countries.

The participation of FinTech players in the disbursement of some emergency loan programs has allowed them to reach out to small businesses not served by traditional lenders. By leveraging their advanced technological capabilities to support banks, FinTechs have also significantly enhanced the management and screening of business loan applications, that is, from digital customer identification/verification procedures to credit decision making. Although dependent on some key infrastructure pillars and regulatory enablers at the national level, digital financing mechanisms and instruments have proven to be a powerful tool for the effective delivery of financial aid to MSMEs. Looking beyond the COVID-19 pandemic, FinTech firms can potentially help governments further broaden their reach, refine their targeting, and increase the efficiency of any future fiscal stimulus aimed at assisting MSMEs.

EASIER AND CHEAPER ACCESS TO FINANCING PRODUCTS AND SERVICES

By leapfrogging the digitization of MSME finance worldwide, the impact of the COVID-19 pandemic has enabled an increasing number of small businesses to access and use essential financial products and services in a fast, convenient, and affordable way. Cutting-edge technologies and big data analytics have streamlined/automated credit approval processes, and lowered loan rates and collateral requirements.

Crucially, the ability of FinTechs to collect and analyze alternative data has expanded the scope of eligible MSME applicants, many of whom lack traditional financial documentation, resulting in the systematic denial by established lenders. The pandemic has also spearheaded the digital onboarding of clients, thus removing burdensome physical paperwork procedures. Moreover, many MSMEs have benefitted from reductions in fees associated with some digital financial services, for example, contactless payments and online/mobile transfers — albeit temporary in many cases.

STRONGER OPERATIONAL RESILIENCE

The use of digital financial products and services has directly contributed to strengthening the operational resilience of numerous MSMEs globally. Many small businesses have been able to obtain credit quickly and remotely through online platforms, thereby alleviating the intensifying liquidity pressures. Others have continued to perform their daily transactions

with suppliers and customers by adopting contactless payment methods. In addition, several AI-/ML-powered applications and open banking solutions have allowed MSMEs to markedly improve their accounting and cash flow forecasting capabilities, thus providing them with a clearer — and even real-time — picture of their present and future financial performance. In sum, digital financial tools have helped many MSMEs maintain business continuity during the pandemic. At the same time, they have also sowed the seeds for greater adaptability and flexibility in the post-COVID-19 pandemic era.

flexible, risk-based customer identification/verification; other CDD requirements, and so on. Furthermore, the majority of regulators jointly surveyed by the CCAF and the WBG launched new or accelerated plans for regulatory innovation initiatives related to digital infrastructure (72 percent); RegTech/SuperTech (58 percent); innovation office (56 percent); and a regulatory sandbox (52 percent)¹⁴³. Hence, the pandemic has provided a unique opportunity to fast-track key regulatory reforms in specific areas, for example, e-ID, interoperability, and mobile money.

BREAKTHROUGH IN INNOVATIVE REGULATIONS

The COVID-19 pandemic and the subsequent transition to online activities and interactions have led many regulators to pursue a more enabling and innovative approach to digital finance.

At the onset of the crisis, many central banks introduced a wide range of regulatory measures to encourage the use of digital financial services, for example, higher limits and lower/waived fees on online/mobile transactions; Reforms have positively impacted MSME adoption of digital financial products and services.



4.1.2 / Risks

The accelerated digitization of financial services during the COVID-19 pandemic has also created or amplified several risks that threaten the stability, integrity, inclusiveness, and competitiveness of the MSME finance ecosystem.

CYBERSECURITY

Thepandemichas exacerbated pre-existing cybersecurity concerns among all stakeholders. In this context, 78 percent of regulators that responded to the CCAF-WBG survey perceived cybersecurity as the top increasing risk in the FinTech industry due to the COVID-19 pandemic (with 90 percent in advanced economies as compared to 73 percent in EMDEs)¹⁴⁴. Critically, cybersecurity risk has already materialized among digital financial providers. On average, FinTech companies have faced a 15 percent increase in cybersecurity breaches since the start of the crisis¹⁴⁵. Furthermore, digital security attacks have

disproportionally targeted some sensitive economic sectors. A few weeks after the COVID-19 outbreak, the five industries most subject to such attacks were retail services, media and entertainment, hotel and travel, high technology, and gaming¹⁴⁶.

The surge in malicious activities online threatens to widen the cybersecurity divide between large and small businesses. Unlike more established enterprises, MSMEs did not have the know-how and technological resources (for example, virtual private networks, multifactor authentication tools, anti-malware software, and so on) to securely transition to a remote working environment, thus making them more vulnerable to hackers. MSMEs that experience cybersecurity breaches can become a platform for cyber-criminals to exploit their connections with many larger companies in the supply chain. Likewise, the digitalization of business operations has created new data processing and compliance issues for MSMEs, especially when it comes to the proper and secure use of personal information. The inadequate protection of private, sensitive data remains one of the main cybersecurity challenges facing MSMEs during the COVID-19 pandemic¹⁴⁷.



FINANCIAL FRAUD AND SCAM

The COVID-19 pandemic has led to a proliferation of fraudulent/predatory activities and scams related to the use of digital financial services, especially in EMDEs. In particular, some countries - India, Nigeria, and the Philippines among others — have experienced a sudden surge in fake or counterfeit lending applications, which massively appeared at the onset of the crisis. Bolstered by thousands of fake enthusiastic reviews, many applications either charged fees while offering no actual services or phished sensitive personal data from gullible users¹⁴⁸. Also, some fraudsters falsely claimed to be from offices administering government-backed loan schemes for MSMEs, for example, the SBA in the US. 149 As such, they requested an upfront fee or valuable information from business owners. The global boom in e-commerce sales has also been accompanied by a multiplication of fraud activities affecting merchants, including those MSMEs that recently moved their operations online. Consequently, the relentless rise in fraud and scam cases worldwide might severely undermine MSME trust in — and subsequent reliance on - digital financial products and services.

DIGITAL FINANCIAL DIVIDE

The pandemic clearly threatens to exacerbate the divide between MSMEs that can access/use digital financial services and those that cannot. Specifically, the increased digitization of lending, payment, and other relevant products and services might further leave behind certain groups of underserved MSMEs that cannot easily access and use them — including women, youth, rural residents, refugees, and those working in the informal sector. Although there are no data available yet, the COVID-19 pandemic could potentially widen some longstanding gaps (for example, between men and women, urban and rural areas, and young and old) when it comes to the delivery and adoption of digital financial instruments and channels. The magnitude of such increasing gaps assuredly varies across regions and countries, and largely depends on several structural factors, such as the scale and robustness of the digital financial infrastructure, mobile ownership rates, internet and telecommunications connectivity, the level of digital and financial literacy, and so on.

INDUSTRY CONCENTRATION

Although various potential scenarios could materialize, the COVID-19 pandemic has raised the prospect of future market concentration in MSME digital finance - potentially undermining competition objectives that seek to benefit consumers. Recent years have seen a surge in the number of FinTech players in this sector. This has arguably helped to improve market competition with attendant positive effects on financial inclusion. Yet, many FinTech companies operating in key verticals, such as lending and payments, have seen their financial position deteriorate due to the pandemic. The crisis has also tempered their outlook about future fundraising activities. As the whole FinTech industry faces an unprecedented resiliency test, some leading players may choose to consolidate their position and/ or grab a lion's share of the digital lending and payments markets at the expense of smaller, less resourceful providers. Looking beyond digital finance, the pandemic also poses an existential threat to many traditional providers, for example, small banks and MFIs, that might be permanently replaced by these disruptive players.

4.2 / Bridging Financial Inclusion Gaps

The forced adoption of contactless payment methods for in-store transactions, coupled with the vast transition to online/mobile platforms and marketplaces, have contributed to the digital financial integration of a massive number of MSMEs. For instance, data from Square concerning a few selected countries highlights a surge in the share of businesses that accept 95 percent or more in card payments when compared to before the pandemic: for example, from 8 to 31 percent in the US; 10 to 60 percent in the UK; 9 to 48 percent in Canada; and 6 to 36 percent in Australia¹⁵⁰. According to Visa's latest Back to Business Study conducted in November 2020, 39 percent of small businesses started to accept new digital methods of payment as compared to 20 percent in June 2020¹⁵¹.

The pandemic has also accelerated the pace of innovation concerning the integration of e-commerce tools and payment functionalities with social media platforms, thereby enabling a new array of micro and small merchants to easily process transactions digitally, for example, through pay-by-link services. Given their unparalleled scale and reach, big e-commerce marketplaces and established social networks have quickly emerged as preferred platforms for online/mobile transactions during the crisis. As such, they have acted as a driving force in the digital financial inclusion of MSMEs, especially in the EMDEs.

Some government assistance programs have led to the opening of new digital bank accounts among recipients, including MSMEs. Such schemes have either incorporated banks with operational digital capacities or FinTech players in the delivery of financial support. For instance, as part of the emergency monthly aid program launched by the Brazilian government, stateowned bank Caixa Econômica Federal (CEF) created mobile-based savings accounts for beneficiaries who were previously unbanked. CEF quickly processed applications from 25.1 million Brazilians, including almost 10 million who had opened the digital account to receive their monthly payments. In Indonesia, the Pre-Employment Card program provides subsidized online training and additional cash benefits to job seekers, informal workers, and MSMEs in collaboration with digital/FinTech partners. This program enabled the financial inclusion of nearly 1.4 million recipients who did not have a bank or an e-wallet account prior to being enrolled.

The COVID-19-induced implementation of multiple enabling regulatory initiatives also had a positive, catalytic effect on the digital financial inclusion of MSMEs

in various countries. By relaxing e-KYC requirements and allowing remote account opening during the crisis, several developing countries have unlocked access to credit and payments solutions that were previously out of reach for many small businesses. Similarly, regulatory measures that lowered/waived fees and/or increased limits on digital transactions and transfers have enhanced the value proposition of such services for users, thus promoting the greater adoption of online/ mobile payment applications among MSMEs. Several EMDEs have proactively developed a more conducive regulatory environment for the access to and use of digital financial services. However, the pandemic has also plainly exposed many shortcomings that still need to be addressed in order to reach and integrate more MSMEs in the foreseeable future. These include a weak payments infrastructure; a partially or non-digitized national ID system; and poor consumer data protection standards, among others.

By harnessing alternative pools of data unavailable to banks and other lenders, FinTech/BigTech companies can also help to expand the scope of credit provisioning. This could be achieved with a view to serving MSME groups that usually lack proper financial documentation, such as women, youth, refugees, and informal segments. The impact of COVID-19 pandemic has pushed the case for open data sharing between key stakeholders, for example banks and FinTech/BigTech firms. As such, it could pave the way for more advanced and inclusive underwriting processes. As demonstrated by the UK, the pandemic has led to the massive adoption of open banking solutions by MSMEs. Although at a nascent stage, the development of open banking ecosystems offers potential for the financial inclusion of traditionally excluded categories, especially in EMDEs where public credit information remains absent or very limited.

Importantly, the promotion of digital information-sharing practices must be done in tandem with strong data privacy and competition rules. Of the 55 developing countries covered in the 2020 Global Microscope, only 22 have a comprehensive system in place to effectively protect financial data for individual applicants¹⁵². Such rules must be adequately enforced to fully and safely realize the potential of data-driven digital solutions as a compelling alternative to traditional credit approval procedures.



4.3 / Policy Implications for Digital MSME Finance: Building a More Resilient and Inclusive Ecosystem

The accelerated digitization of finance has played an essential role in facilitating MSME access and use of key financial services and products during the COVID-19 pandemic.

The boom in e-commerce activities, the widespread adoption of digital tools and advanced technologies, and the greater adoption of open banking platforms have enabled the financial inclusion of many MSMEs around the world. Nevertheless, the crisis has also exacerbated some challenges and risks that need to be tackled to build a more resilient and inclusive ecosystem for digital MSME finance in the post-COVID-19 era. Specifically, policymakers and regulators should explore and/or pursue decisive and forward-looking actions to properly mitigate pre-existing risks related to the use of digital financial services, which have been amplified as a result of the pandemic. Ideally, they would incorporate these measures into a comprehensive MSME policy agenda that addresses the various operational and financial challenges facing small businesses during the economic recovery phase. The design of such interventions could benefit from private-public dialogues to better understand the specific needs of MSMEs. This will help tailor and develop more targeted approaches.

Drawing on selected public interventions and the main observations from the impact of the pandemic thus far, this section discusses policy avenues that can potentially contribute to developing a conducive and safe environment for the digitization of MSME finance beyond the crisis.

1) Lending

The COVID-19 pandemic has threatened to widen the digital finance divide at the expense of women, youth, rural, and informal MSME groups. Leveraging digital technology for identifying/verifying eligible recipients and MSME loan disbursement has proven to be an effective way to better integrate these underserved segments into financial aid programs. Governments can closely coordinate with state-owned banks and other lenders to encourage the opening of online/mobile savings accounts through which previously unbanked recipients would receive the aid. Beneficiaries

could then use these newly opened digital accounts to transfer money and make payments, among other financial services.

In the same vein, some countries have not hesitated to approve FinTech companies as accredited lenders under COVID-19 relief schemes.

By deploying their advanced technology and credit decision-making capabilities, FinTechs can greatly help streamline and enhance MSME loan approval procedures. Crucially, FinTech firms can reach out to and serve MSMEs that typically struggle to access credit from traditional lenders. Therefore, governments should consider including more FinTechs as delivery partners when launching emergency loan programs. Likewise, policymakers could change the eligibility criteria for credit guarantee schemes to incorporate new players, such as FinTechs, as some governments have done. This would facilitate the targeting and coverage of the more vulnerable MSME segment.

Finally, governments could consider encouraging financial institutions to move from traditional credit assessments, for example, using immovable collateral and financial statement/credit histories to alternative credit evaluation methodologies. This would entail the analysis of cash flows/invoices or moveable collateral-based lending for greater flexibility to accommodate MSMEs.

2) Data

The COVID-19 pandemic has exposed the lack of strong MSME data systems in many countries, thus hindering the loan approval processes for many small business applicants. In several countries, the government and the central bank have directly shared their MSME databases to ensure the availability of reliable and certified information concerning small businesses applying for a special credit line or guarantee scheme. By fostering the seamless exchange of online MSME data between key stakeholders — for example, relevant public authorities and credit guarantee funds — policymakers can help participating lenders better assess MSME candidates that may qualify for a financial aid program.

Importantly, countries should also encourage non-discriminatory access to MSME information for all market participants, including NBFIs and FinTech companies.

As demonstrated by several examples highlighted in section 2.4, the efficient, transparent, and timely sharing of public MSME data has been a key success factor in emergency loan schemes. Additionally, policymakers should better support lenders in the process of collecting and analyzing gender-disaggregated data for their potential and existing clients. Thus, the aim would be to close the digital financing divide for womenowned enterprises.

3) Non-bank financial instruments and services

Within a context of rising over-indebtedness and a potential insolvency crisis, the COVID-19 pandemic has highlighted the need to deliver non-debt financing instruments. A few governments have launched special funds or vehicles to unlock access to equity capital for start-ups and SMEs. Others have provided tax incentives for firms and individuals investing in equity instruments issued by start-ups and SMEs.

Also, both public and private actors have promoted special initiatives — including bootcamps and digital hackathons — to better match innovative businesses with potential investors. In addition to such interventions and initiatives, governments could design or further develop enabling policy and regulatory environments to facilitate access to a wider range of equity or quasiequity financing instruments for small businesses.

More specifically, public authorities could explore ways to streamline the equity offering process for SME issuers, including the use of online crowdfunding platforms.

Going beyond the interventions highlighted in this report, governments could also consider:

- **Developing a robust and extensive digital financial infrastructure** at the national level, including e-ID networks and interoperable payments systems.
- Mitigating cybersecurity, AML/CFT, and fraud risks, from which most MSMEs are not adequately protected. Digital security management in MSMEs must be looked at as part of a larger ecosystem and if not addressed, it can have drastic impact on multiple fronts.
- Strengthening consumer data protection and privacy standards, especially for excluded and vulnerable segments that may be prone to data fraud and identity theft incidents.
- **Promoting digital financial literacy**, particularly among the most vulnerable segments, such as women, youth, rural residents, forcibly displaced persons, and informal MSME groups. Encouraging FinTech and BigTech firms to launch or continue to offer online financial education services including e-training/learning programs, workshops, and webinars to their MSME clients, which will help to enhance their capacity, productivity, and business acumen.
- Fostering a strong and enabling regulatory environment for DFS to ensure innovation and private sector participation.
- Encouraging the closing of the MSME trade financing gap and the higher exclusion of small businesses from GVCs. This would help to open opportunities for market access for the lower tier segments.
- Facilitating MSME access to the digital economy and assisting small businesses with their digitalization process and upskilling. Developing a collaborative and inclusive framework with the support of digital platform providers to enhance MSME participation in online and mobile marketplaces.
- Promoting the development of digital insurance solutions that can be bundled with other financial products with the goal of smoothing out shocks for vulnerable MSMEs.

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ANNEX 1

Public interventions from G20 countries to support MSMEs during COVID-19

Country	Sponsor	Area	Description	Sucess factors	Main challenges/risks	Results
Argentina	Central Bank	Financial assistance	Special line of credit to MSMEs at a maximum annual nominal interest rate of 24% - total amount allocated from March to October 2020: ARS 544 million (USD 5.6 M). Establishment of the <i>MSMEs Plus</i> line for MSMEs not reported in the Credit Registry, but which have access to a public guarantee fund (e.g., Fondo de Garantías Argentina and FOGAR). Introduction of the Financing <i>Line for Productive Investment of MSMEs</i> , pushing banks to grant loans to MSMEs for an amount equal to 7.5 percent of their deposits. Under the scheme, two credit lines were set up for 1) MSMEs purchasing capital goods and constructing productive/commercial facilities (30% interest rate) 2) MSMEs seeking working capital financing (35% interest rate).	Coordination between public sector organizations to make available the data of companies that qualified for this line of credit (BCRA: Debtors' Database of the Financial System and Ministry of Production: MSMEs' Database)	n/a	 Companies reached: 105,536 (August 2020) Firms reached via MSMEs Plus: 5,927 (October 2020) Firms reached via the Financing Line for Productive Investment of MSMEs: 53,737 (December 2020)
Argentina	Central Bank	Lower interest rates	Deployment of a credit line that allowed self-employed workers to request a zero percent interest loan from financial institutions - up to ARS 150,000 (USD 1,548) - which was deposited into their credit card.	Proper identification of independent workers whose income was affected by the pandemic (via different regimes of taxpayers) High penetration of credit cards	n/a	 More than 570,000 interest-free loans were allocated to independent workers - including individuals in the cultural sector Total amount of more than ARS 67 million (USD 691,635)
Argentina	Congress and the Federal Administration of Public Revenues	Debt moratorium and tax relief	Partial waiver of interest and total remission of fines on tax, customs and/or social security debts for micro, small, and medium-sized companies, single taxpayers, and non-profit entities. Measures include (among others): - Refinancing of the debt in terms of up to 10 years (120 installments); - Companies and individuals that have a valid Mipyme Certificate may pay their tax and customs obligations in up to 120 installments, and their contributions and withholdings in up to 60 installments; - Interest rate fixed at 2% per month until May 2021 (variable rate in pesos after that date); - All current or expired payment plans may be reformulated in a single installment.	Sharing of relevant databases between the Ministry of Production and the Federal Administration of Public Revenues to ensure the availability of data	n/a	• SMEs were the main beneficiaries of the intervention, accounting for more than 69.3% of the debt regularized during both stages of the 2020 moratorium
Brazil	Ministry of Finance	Financial assistance	Emergency monthly aid program aimed to support individual micro entrepreneurs, informal workers, and unemployed citizens. Total amount disbursed: BRL 254.2 billion (USD 49.5 bn).	 Leveraging of technology for aid disbursement (creation of digital savings accounts via Caixa Econômica Federal) Use of large databases (e.g., federal revenue and social security) 	• Fraud	 68.2 million beneficiaries, including 5 million micro entrepreneurs 10 million recipients opened a digital savings account

Country	Sponsor	Area	Description	Sucess factors	Main challenges/risks	Results
Brazil	Ministry of Finance	Loan guarantees	Two credit guarantee programs - <i>Pronampe</i> and <i>PEAC-FGI</i> - to support the distribution of loans to MSMEs. Total loans disbursed to MSMEs through these two schemes: BRL 129.6 billion (USD 25.2 bn) - <i>Pronampe</i> : BRL 37,5 billion (USD 7.30 bn) and <i>PEAC-FGI</i> : BRL 92.1 billion (USD 17.9 bn).	Reliable and easily accessible data on MSMEs Information sharing between the Federal Revenue of Brazil and financial institutions Operations carried out online	Financial exclusion and digital divide across segments	Beneficiaries of <i>Pronampe</i> : 217,586 micro enterprises and 299,467 small enterprises
China	People's Bank of China	Debt moratorium	Local banks encouraged to grant a loan repayment deferral for small businesses. PBOC gave lenders a financial incentive equivalent to roughly one percent of the amount of the deferred principal.	Efficient coordination and targeting	n/a	By the end of 2020, banks across the country postponed a total of RMB 7.3 trillion (USD 1.1 trillion) in loan repayments Time extension (on average): 12.8 months
Germany	Ministry of Finance	Financial assistance	The federal government initiated a range of grant schemes to support SMEs during the crisis. Eligible SMEs had to experience a minimum decline in turnover of 30% per month as compared to 2019. Grants have been provided to pay for recurring fixed costs of affected businesses. The maximum amount of aid has been gradually increased from 5000 EUR (USD 5,900) per month in spring 2020 up to 10 million EUR (USD 11.84 M) in 2021. Grants have also covered certain investments in digitalization as well as hygiene measures.	Quick deployment in early crisis phase Continuous adaptation to the changing nature of the crisis (e.g., from liquidity to solvency crisis)	 Availability of data on real-time crisis impact on specific sectors / companies Dynamic and unforeseen nature of crisis Availability of disbursement systems at scale Limitations of EU state aid framework (partly) 	As of July 12th, 2021, 46 billion EUR (USD 54.5 bn) have been disbursed to roughly 2 million beneficiaries across all grant schemes
Germany	Ministry of Finance	Loan guarantees	Extension of the federal guarantees for loans provided by the promotional bank KfW to the corporate sector. The volume of Federal guarantees is unlimited. Several aspects of the programs - e.g., percentage of loan covered by the federal guarantee, use of funds, loan duration, eligibility criteria, etc have been broadened significantly. The KfW instant loan (KfW Schnellkredit) as well as programs for start-ups and non-profit organizations were also added.	Quick implementation in the early phase of the crisis by the promotional bank KfW Support by the banking system (i.e., loan application and administration) Unlimited guarantee volume Adaptation of existing programs and creation of new ones	• Limitations of EU state aid framework	As of July 8th, 2021, 52.5 billion EUR (USD 62.2 bn) of loans were committed to over 137,500 companies
India	Ministry of Finance	Multiple areas	Various interventions including, among others: - Rs. 3 trillion (USD 40.4 bn) Emergency Working Capital Facility for businesses, including MSMEs; - 25% reduction in tax rates and extension of tax compliance dates; - Collateral-free loans to MSMEs with a 12-month moratorium on principal repayment, an interest rate cap, and no guarantee fee.	Comprehensive relief package, with measures spanning across various issues related to financial management (e.g., equity infusion, debt moratorium, credit guarantees, etc.) Quick and coordinated response by multiple entities	Financial exclusion and digital divide across segments	Around 5 million MSMEs were expected to benefit from this relief package (estimated at nearly USD 5.15 billion)
India	Ministry of MSMEs	Non-financial support (credit)	Introduction of a Unique Registration Number for MSMEs via UDYAM Registration Number. This number is linked to the Permanent Account Number and Goods & Services Tax Number. The initiative aims to help MSMEs get better access to credit.	Creation of an effective and elaborated database of MSMEs Filing of Income Tax and GST returns by MSMEs	Encouraging more MSMEs to get registered on the portal	• As of July 2021, 4.09 M units have been registered via the portal
India	Ministry of MSMEs	Loan guarantees	Introduction of the Credit Guarantee Scheme for Subordinate Debt (around Rs. 20 billion or USD 269.8 M) to help eligible MSMEs with stressed accounts. Promoters of MSMEs impacted by COVID-19 have been provided with a credit up to 15% of their stake - with the goal of improving the Debt-to-Equity ratio of the MSME. The government has offered the guarantee on the credit extended to the promoters of such units.	Strong response from banks and MSME promoters Demand-driven scheme	Identification of eligible accounts	• 715 guarantees have been issued, amounting to Rs 758.2 M (USD 10.2 M).

Country	Sponsor	Area	Description	Sucess factors	Main challenges/risks	Results
India	Ministry of MSMEs	Recapitalization	Creation of a fund of funds worth Rs 500 bn (USD 6.75 bn) - with the nomenclature <i>Self Reliant India Fund</i> - to provide equity funding to growing MSMEs. While the government has contributed Rs 100 bn (USD 1.35 bn), Rs 400 bn (USD 5.4 bn) would be leveraged through private equity and venture capital funds.	Strong response from private equity and venture capital funds	• Identification of eligible MSMEs	n/a
India	Ministry of MSMEs	Non-financial support (payments)	Launch of a <i>Special Window</i> (online portal) to monitor the payments to be made to MSME vendors by government departments and public sector undertakings. The portal ensures the timely delivery of payments to cash starved MSMEs. MSMEs have been given the login information and passwords to upload the details of their dues pending with the government departments and public sector undertakings.	Timely and correct uploading of details by MSMEs	Identification of genuine cases as some of the bills may be delayed due to valid administrative reasons	From May 2020 to July 2021, dues amounting to Rs 546.6 M (USD 7.38 M) have been settled by government departments and public sector undertakings in favor of MSMEs
India	Central Bank	Regulatory sandbox	As part of the "Enabling Framework for Regulatory Sandbox" adopted in 2019, a third cohort was announced: "MSME Lending". Under this cohort, innovative firms may come up with smart products using technologies such as Blockchain, Artificial Intelligence, and Machine Learning to deal with the challenges raised by the pandemic and improve access to finance for micro, small and medium-sized enterprises.	n/a	Financial exclusion and digital divide across segments	n/a
Indonesia	Ministry of Finance	Financial assistance	Allocation of IDR 112.44 trillion (USD 7.8 M) to support local MSMEs (as part of the <i>National Economic Recovery Program</i>). The aid took multiple forms: loan interest subsidy, government fund placement in banks, working capital guarantee, micro enterprise grants, cooperatives and MSMEs investment financing, and government-borne income tax relief.	Growing awareness of MSMEs about the existence of the recovery program Experience in distributing financial support through banking channels	Lack of data integration to properly target beneficiaries	 101,010 MSMEs benefited from investment financing 12 million micro enterprises received grants
Italy	Government	Recapitalization	Several benefits added to the Start Up Act program, including: (i) a total of EUR 10 million (USD 11.8 M) in non-repayable grants aimed at purchasing services provided by incubators, accelerators, business angels, and innovation hubs; (ii) an additional EUR 200 million (USD 236.9 M) allocated to the Fund for Venture Capital to support capital investments via equity and debt instruments; and (iii) tax deductions for individuals investing in equity instruments issued by innovative start-ups, among others.	Pre-existing and effective policy framework (<i>Start Up Act</i>)	n/a	Potential beneficiaries: 11,000 innovative start- ups
Italy	Government	Loan guarantees	Increase in the amount allocated by the Central Guarantee Fund for SMEs and widening of the range of its eligible beneficiaries. New schemes were created, including a guarantee with a 100 percent coverage ratio for loans up to EUR 25,000 (USD 29,610) - then raised to EUR 30,000 (USD 35,530).	Digitalization and integration of procedures between banks, service providers, and the public administration	Over-indebtedness and insolvency	• Estimated amount of loans disbursed: EUR 123 billion (USD 145.7 bn)
Russia	Government and Central Bank	Debt moratorium	6-month credit holidays offered, which applied to MSMEs operating in the most vulnerable sectors. The Bank of Russia also circulated recommendations to ease debt restructuring procedures and terms for MSMEs, pushing lenders to grant applicants a debt repayment deferral.	n/a	n/a	By June 30, 2021, banks restructured 101,400 MSME loans (total amount of 936.2 billion rubles or USD 12.8 bn)

Country	Sponsor	Area	Description	Sucess factors	Main challenges/risks	Results
Saudi Arabia	Central Bank and Credit Guarantee Program	Loan guarantees	Joint launch of the Loan Guarantee Program, which provided loans to MSMEs at 4 percent interest rate with 95 percent principal coverage.	Strong integration between the Central Bank and financial institutions Advanced technology infrastructure of the lenders Awareness campaign targeting MSMEs	Over-indebtedness and insolvency	 Loans disbursed through the program amounted to SAR 8.2 billion (USD 2.19 bn), benefiting approximatively 5,000 MSMEs
South Korea	Korea Credit Guarantee Fund (KODIT)	Loan guarantees	Expansion of yearly supply of credit guarantees and widening of eligibility criteria for all companies including MSMEs.	Prompt response Contactless document collection system and credit guarantee product	 Financial exclusion and digital divide across segments 	• In 2020, the total amount of outstanding loan guarantees increased by \$16.7 billion (214,325 new beneficiaries)
Turkey	Central Bank	Financial assistance	Temporary extension of a Turkish lira-denominated rediscount credit option for MSMEs, which could be used via intermediate banks. These credits specifically applied to export and foreign exchange earning services.	n/a	n/a	A total of TRY 10.3 billion (USD 1.21 bn) was extended throughout the program, with a maximum of TRY 25 million per firm (USD 2.93 M)
United Kingdom	Ministry of Finance	Loan guarantees	As of 31 May 2021, over 1.6 million businesses have benefitted from over £75bn (USD 104.5 bn) in government guaranteed loans. This support has been channeled through three schemes, which closed to new applications on 31 March 2021: 1 - The <i>Coronavirus Business Interruption Loan Scheme</i> (CBILS): provision of an 80% guarantee on facilities up to £5 million (USD 7 M), to SMEs with a turnover up to £45 million (USD 62.7 M); 2 - The Coronavirus Large Business Interruption Loan Scheme (CLBILS): provision of an 80% guarantee on facilities up to £200 million (USD 278.6 M), to mid-sized and large businesses with turnover above £45 million (USD 62.7 M); 3 - <i>The Bounce Back Loan Scheme</i> : provision of a 100% guarantee on facilities up to £50,000 (USD 69,659) in order to support the smallest businesses in the UK. On 6 April 2021, the government introduced the Recovery Loan Scheme, a new 80% guaranteed loan scheme to continue to support businesses, particularly SMEs. The scheme has facilitated businesses' access to loans and overdrafts of between £25,000 (USD 34,830) and £10 million (USD 13.9 M), with asset and invoice finance facilities available down to £1,000 (USD 1,393). A number of FinTechs participated in the schemes, which were designed as a market-wide intervention (not purely focused on digital finance).	Schemes built off the rails of previous debt guarantee schemes operated by the British Business Bank (the Enterprise Finance Guarantee) Many lenders in the UK had previously participated in this scheme, thus speeding up the implementation For the Bounce Back Loan Scheme, a fixed interest rate, standardized application, and use of self-certification contributed to the speed at which businesses could access finance with turnaround time for most borrowers between application and receiving funds within 24 hours	n/a	CBILS: 109,000 approved facilities worth over £26 billion (USD 36.2 bn) CLBILS: 753 approved facilities worth £5.5 billion (USD 7.7 bn) Bounce Back Loan Scheme: 1.5 million approved facilities worth over £47 billion (USD 65.5 bn)
United States	Department of the Treasury and Small Business Administration	Loan guarantees	Implementation of the Paycheck Protection Program (PPP) to provide loan guarantees and forgiveness to small businesses. The program enabled US lenders - including several FinTechs - to quickly deliver loans to MSMEs affected by the pandemic. The emergency loans were guaranteed by the SBA and helped MSMEs cover qualifying payroll and utility expenses as well as rent or mortgage payments.	n/a	• Fraud	By May 2021, the PPP delivered 11.2 million loans to small businesses across the country, totaling \$788.1 billion FinTechs and other state-regulated lenders disbursed approximately 1.4 million loans, totaling \$27.0 billion

ANNEX 2

Public interventions from non-G20 countries to support MSMEs during COVID-19

Country	Sponsor	Area	Description	Sucess factors	Main challenges/risks	Results
Spain	Ministry of Finance	Debt moratorium	Introduction of two distinct deferral measures: legal and banking sector moratoria.	Alignment between debtors' needs and credit institutions' interest	Mobility restrictions: difficulty for debtors to obtain the necessary documentation and submit their request for the granting of moratorium	• The two moratoria benefited 220,000 and 215,000 MSMEs respectively
Spain	Ministry of Finance	Loan guarantees	Introduction of two public lines of guarantees to 1) address liquidity issues; and 2) boost investment. • Close and efficient coordination between Bank of Spain and the state financial agency Instituto de Credito Oficial • Over-indebtedness and insolvency		 The first line of credit provided €66 billion (USD 78.1 bn) in guarantees, allowing to mobilize more than €83 billion (USD 98.3 bn) in financing for micro firms and the self-employed The second line delivered €2.8 billion (USD 3.3 bn) in guarantees, securing more than €3.6 billion (USD 4.3 bn) in funding for the two segments As of March 31st, 2021, micro enterprises and the self-employed accounted for more than 98 percent of the financing operations guaranteed under these two programs 	
Spain	Ministry of Finance	Regulatory sandbox	Enactment of the Sandbox Law, which establishes and governs a new legal framework to test technology-based financial innovations under safe conditions.	n/a	n/a	The first cohort has already been launched, with a total of 67 projects received (waiting to be approved)
United Arab Emirates	Ministry of Finance	Tax relief	Cancelled or lowering of multiple government registration and administrative fees in order to reduce the cost of doing business.	Close inter-ministerial coordination Timely implementation of measures	Increased fiscal pressure Need to keep providing support measures to MSMEs for the medium term	Measures have positively impacted the 350,000 MSMEs registered in the country
United Arab Emirates	Dubai Financial Services Authority	Authorization and licensing processes for new products and activities	New MSMEs coming into the Dubai International Financial Center were offered: - More time to complete the application and authorization process. - A 50% reduction in application fees for the remainder of 2020. - In the case of Domestic Funds, a waiver of the registration fee for the remainder of 2020.	n/a	n/a	• 71 local MSMEs benefited from a 50 percent reduction in application fees in 2020

ANNEX 3

Interventions from financial institutions and FinTech/ BigTech firms to assist MSMEs during COVID-19

Country	Institution / Company	Туре	Area	Description	Sucess factors	Main challenges/risks	Results
Argentina	Six banks	Bank	Payments	Introduction of electronic checks - and in some cases discounts on e-checks - which have been made available through the banks' digital platforms.	Efficient advertising campaigns on benefits from using e-checks Benefits include: Safer and more efficient way to process checks Lower fees/charges Better traceability Minimized technical errors and rejections via electronic validations	Cybersecurity Fraud Integration of services with the Argentine Electronic Clearing House	Number of e-checks issued/deposited/ discounted (hundreds or thousands range) and volume of operations (ARS millions range) vary across banks
Argentina	Banco de la Provincia de Buenos Aires	Bank	Payments	Relaunch of <i>Cuenta DNI</i> , an e-payment solution designed for many types of customers, including MSMEs. Cuenta DNI is the first digital wallet to interoperate with other applications - by sharing the same QR code with other wallets like BNA+ and ValePei - under the 3.0 Transfer System established by the Central Bank of Argentina.	Multiple benefits, including: Instant crediting Lower costs Easy and safe onboarding of customers Incentives to increase sales through promotions for 3 million of e-wallet users Reimbursement of transactions made with Cuenta DNI Contactless collection service Webpage with information and tutorials Dedicated call center Promotional brochures in points of sale Participation in business meetings and training courses	Cybersecurity Protection of personal data Fraud	 28,371 customers subscribed through POSNET terminals, crediting their money to the bank and with more than one authorized store 50,788 customers subscribed via LAPOS terminals, accepting payments with cards through QR readers Accumulated volume of consumption at stores amounted to ARS 9.8 million (USD 101,160) - 4.6 million transactions - from April 2020 to March 2021
China	China Construction Bank	Bank	Digital financial inclusion	Implementation of a new business model to enhance digital financial inclusion with 5 key features: 1) batch customer acquisition 2) accurate profile 3) automated review 6 approval 4) intelligent risk control and 5) comprehensive services. The bank reshaped its credit approval process by adopting an exhaustive customer assessment approach - based on credit, risk, and scenario profiling - through big data integration and multi-dimensional cross verification.	 Advanced use of alternative data Establishment of a comprehensive digital ecosystem of products Development of an online business operating model Delivery of services tailored to the specific needs of MSMEs 	Data quality and richness to be improved Relevant policies and regulations on digital financial inclusion to be refined Consumer/fund information security Fraud	 1.96 million micro and small businesses have benefited from the new model In 2020, among the customers served by CCB, 23.5% were first-time bank loan borrowers As of March 2021, women entrepreneurs accounted for 28% of customers of the new digital model, entrepreneurs under 35 years for 22%, and agriculture-related borrowers for 12%
Germany	Fintech Galaxy and GIZ (overseas)	FinTech and Development Agency	Non-financial support	Organization of Yallah Fintech, the Arab world's first regional digital hackathon and innovation challenge for financial inclusion. 15 innovative tech companies and start-ups participated in a one-week bootcamp and benefitted from business training and networking opportunities with potential investors.	Digital format enabled start-ups to present and promote their innovative solutions to a wide public audience of stakeholders Successful partnership between GIZ and Fintech Galaxy	Financial exclusion and digital divide across segments	The three winning start-ups - AnaMeen (e-KYC), Mawelny (digital lending), and FinFlx (digital financial services) - were invited to present their FinTech solutions to central banks and regulators at an event held by GIZ's Financial Inclusion for the Arab Region Initiative

Country	Institution / Company	Туре	Area	Description	Sucess factors	Main challenges/risks	Results
Germany	GIZ (Egypt) - PAFSME Program	Central Bank, Banks, FinTechs, and Development Agency	Non-financial support	Implementation of the <i>Fintech Academy</i> , a 4-month training program for finance professionals and young entrepreneurs that aims at: (i) equipping FinTech enthusiasts with the needed knowledge to kick start their business in the space; (ii) providing entrepreneurs with the knowhow to build and grow ventures. The program includes different FinTech trainings - e.g., digital lending, InvestTech, InsurTech, and regulation technology - and venture building trainings (e.g., product management, marketing, and fundraising), with the support of numerous mentors and speakers.	Partnerships with different stakeholders, including the Central Bank of Egypt, banks, FinTechs and other well-known players Intensive learning experience created through different structures of content and mentoring sessions	• Sustainability of the program	Training of 100 finance professionals on FinTech fundamentals and creation of 15 FinTech startups - 30% of them being led by women - in areas like digital payments and lending
Germany	GIZ (Philippines)	BigTech and Development Agency	Insurance	For the MSME sector in the Philippines: the GIZ-supported intervention includes the development of an application providing users with a comprehensive risk management system. The app offers MSMEs the possibility to enter data and produces a personalized risk profile as well as a plan for business continuity. In addition, there are made-to-measure learning materials regarding risks due to catastrophes and risk transfer instruments. Another part of the measure includes the development of an insurance product covering business interruption which is distributed through the app.	To reach the measure's goals, four work packages were identified: Risk profiling Learning management system Insurance product modelling Integration	Cost of running the platform post project, as the main partner and recipient of the intervention is a public agency	The digital platform is accessible as app or through the website and is already operative as prototype. After completion, the platform is handed over to the Department for Trade and Industry of the Philippines
Italy	Modefinance	FinTech	Alternative Credit and Data Analytics	Modefinance developed - in cooperation with a big international rating agency - an augmented algorithm based on artificial intelligence and macro-economic indicators (Forecasting-StressTest analysis model, For-ST) to assess the impact of COVID-19 on MSMEs' performances with three different scenarios (positive, neutral, and negative) and simulate how it will affect SMEs' creditworthiness and probability of default (PD).	The opportunity to appreciate the effects of the pandemic on financial accounts and companies' liquidity has been a strong success factor for investors and suppliers	n/a	The company provides its 1,000 customers with a reliable tool to predict PDs for a huge number of SMEs Clients - including banks - have benefitted from a better understanding of the effects of the shutdown on revenues, costs, and liquidity ratios across different industries
Italy	BorsadelCredito.it	FinTech	Lending and other financial support	BorsadelCredito.it has developed ad-hoc products for Italian SMEs since the very first days of the pandemic, starting with <i>Cash Anti Covid-19</i> and <i>Cash Anti-Covid Phase 2</i> - which are respectively the short- and long-term loans designed to cover companies' current expenses and their post-lockdown recovery phase. The entire project - called <i>Slancio</i> Italia - has also been into action in 2021. In May 2021, 420 million euros (USD 497.2) were raised through two securitization transactions to support the SME market. BorsadelCredito.it serves as both lender to the real economy and technological enabler for traditional finance.	Speed to deliver cash to SMEs Partnerships with key stakeholders such as banks and other financial institutions Support to all requests Flexibility of the technology	• The high demand for loans required additional human resources (more than 20 people have been added to the Borsadelcredito.it team between 2020 and 2021)	 In 2020, BorsadelCredito.it delivered €75 million (USD 88.8 M) to 504 SMEs (30% of these companies being driven by women) By sector: loans were channeled toward commerce (23% to wholesale businesses, 11.2% to retail), industry (26%), services (18%), transportation (13.6%), and construction (7,6%) In the first quarter of 2021, loans to SMEs accounted for €68 million (USD 80.5 M)

Country	Institution / Company	Туре	Area	Description	Sucess factors	Main challenges/risks	Results
Japan	Hokkoku Bank	Bank	Lending and other financial support	Implementation of an electronic system to computerize a key certification procedure for small businesses applying to special credit guarantees.	n/a	Still some paper procedures to be completed	Drastic reduction in the time to process paperwork and issue the certificate: from 120 mins to 5 mins/case and 5 hours 33 mins to 1 hour 53 mins/case respectively
Japan	Money Forward	FinTech	Equity financing	Direct matching of SMEs affected by COVID-19 with venture capital funds.	Immediate action and communication with target SMEs and VCs	Financial exclusion and digital divide across segments	• 172 SMEs matched with 34 venture capital funds (resulting in 3,000+ meetings)
Saudi Arabia	All banks and NBFIs	Bank and NBFI	Lending and other financial support	All banks and NBFIs granted MSMEs a 15-month deferral of installments repayment. The Central Bank supplied liquidity to FIs to cover installments due to MSMEs.	 Strong integration between the Central Bank and Fls Advanced technology infrastructure of Fls allowing expedited implementation Efficient awareness campaign High demand from MSMEs 	Over-indebtedness and insolvency Properly explain the mechanics and implications of such deferrals to participating MSMEs	Total amount of loan installments postponed: approximatively SAR 125 billion (USD 33.3 bn)
Switzerland	Swiss banks	Bank	Lending and other financial support	Provision of loans to MSMEs in collaboration with the authorities and the Swiss National Bank under the COVID-19 MSME Loan program.	 Extensive use of digital platforms and software robots Simplified formal requirements for contract signing Decentralized nature of the process via channels that customers are familiar with (especially e-mail) 	Errors and delays due to media discontinuity during processing The use of qualified electronic signatures (QES) together with a state-recognized electronic identity (e-ID) would have reduced the workload for the banks with regards to signature verification Cybersecurity	 125,000 loans provided to MSMEs between March and May 2020 Up to 12,000 MSME loan applications where processed daily

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Country	Institution / Company	Туре	Area	Description	Sucess factors	Main challenges/risks	Results
Turkey	DenizBank A.Ş.	Bank	Lending and other financial support	Introduction of a new robotized credit evaluation system to pre-assess potential loan customers.	 Design of a straight-through process without any authorization and paperwork Use of internal and external databases (e.g., personal and commercial credit ratings, tax information, etc.) 	Infrastructure problems due to data collection from multiple databases and the combination of many processes Cybersecurity	Shortening of the loan approval process time to a few minutes 30,000 MSME applicants Total loans allocated: 1.1 billion TRY (USD 130 M)
Turkey	T. Halk Bankasi A.Ş.	Bank	Lending and other financial support	Starting April 2020, T. Halk Bankasi A.Ş. extended credit to 60,000 micro enterprises throughout the pandemic. The bank implemented a digital banking service through which automatic allocation was made without the need to physically come to a branch. The documents requested for credit were quickly approved through digital channels.	Timely implementation of the project Remote communication and effective use of digital channels to process customer information and sign necessary documents	Very short amount of time to test the digital channels	TRY 13.6 billion (USD 1.59 bn) in credit allocated to 60,000 micro enterprises throughout the pandemic: TRY 1.5 billion (USD 180 M) allocated to SMEs and TRY 12.1 billion (USD 1.42 bn) to artisans and craftsmen
Turkey	T. Kalkınma ve Yatırım Bankası A.Ş.	Bank	Lending and other financial support	Development of the Apex <i>Online Application and Monitoring Tool</i> to collect applications online and monitor/report Apex Loan Programs/Facilities implemented through other financial leasing companies or commercial banks. Participating financial institutions provide data on sub-loans to MSMEs via the new online tool. The solution enables financial institutions to upload documents and enter sub-loan specific data, thus helping T. Kalkınma ve Yatırım Bankası A.Ş. monitor, approve, and report sub-loans provided to MSMEs under its apex programs.	Strong experience in apex lending operations Close cooperation with participating financial institutions	Reluctance of personnel of participating financial institutions to use the new digital platform	• The Apex Tool has been live since March 2021 and is expected to significantly increase the bank's capacity in apex lending, hence enhancing the provision of sub-loans via PFIs to thousands of MSMEs
United Arab Emirates	Khalifa Fund	Fund	Non-financial support	The Khalifa Fund and four partners - Amazon, Microsoft, noon.com, and Etisalat - co-ran the E-Empower initiative. The online educational program aims to provide new business channels and various training/technology resources for MSMEs based in Abu Dhabi. Participants were able to access various e-training materials, leverage cloud-based digital tools, and increase their market exposure.	Strong buy-in from the partnering BigTechs Abu Dhabi's business-friendly environment No financial commitments for the participating MSMEs	 Generate awareness of the program to a large base of MSMEs in a short amount of time Significant training efforts to enable MSMEs to maximize the benefits of this initiative and adapt operational models and capacity needs where applicable 	MSMEs attracted to the program: 1200 MSMEs that successfully launched through the BigTech partners: 498

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ANNEX 4

Other policy and regulatory responses specifically targeting MSMEs during COVID-19

Area	Examples
Financial assistance	 As part of a SAR 50 billion (USD 13.3 bn) stimulus package, Saudi Arabia's government provided SAR 13.2 billion (USD 3.5 bn) to SMEs via bank loans. Nigeria launched a N60 billion (USD 146 M) MSMEs Survival Fund, a conditional grant support program with 45 percent of the amount allocated to women-run enterprises. In Chile, the government added \$150 million to its CORFO MSME loan facility, an injection that aimed to provide credit to 180,000 micro and small businesses across the country. In the West Bank and Gaza, the Palestine Monetary Authority launched a \$300 million SME fund, offering soft loans at 3 percent interest rate over one and a half year. In Cambodia, the government delivered loan packages to MSMEs in the manufacturing and agricultural sectors - \$50 million for each.
Debt moratorium	• Several countries such as Malaysia , Thailand , and Qatar granted a 6-month grace period on MSMEs loan repayments.
Loan guarantees	 In Israel, the size of the state loan guarantee fund surged from \$2.3 to \$6.3 billion. New Zealand implemented a NZD 6.35 billion (USD 4.5 bn) Business Finance Guarantee Scheme for MSMEs. MSME loan coverage ratios were increased in several countries including Colombia (up to 80-90%), Singapore (90%), and Morocco (95%).
Tax relief	 The United Kingdom fully waived business tax rates for small businesses in 2020. In Hungary, nearly 80,000 MSMEs - mainly operating in service-oriented sectors - were exempted from the small business tax. Honduras deferred value-added tax payments for MSMEs in non-essential sectors, whose operations have been interrupted during the curfew. Laos exempted micro enterprises from the payment of corporate income tax for a period of three months (from April to June 2020).

Area	Examples
Lower interest rates	 The People's Bank of China cut the interest rate on excess reserves from 72 to 35 basis points in order to encourage banks to allocate funds to local MSMEs. In Russia, the Central Bank expanded the banks refinancing program for enhanced lending to SMEs and gradually reduced the interest rate for banks on its loans aimed to support MSME lending, from 4 percent to 2.25 percent (between April and July 2020). In Egypt, the preferential interest rate on MSME loans has been reduced from 10 to 8 percent. The Central Bank of Kuwait has capped at 2.5 percent the interest rate on bank loans provided to MSMEs. The Monetary Authority of Singapore has incentivized bank lending to local MSMEs by cutting rates to 0.1 percent.
Recapitalization	 In Spain, the government launched a €1bn (USD 1.18 bn) recapitalization fund - managed by COFIDES - to support the balance sheets of medium-sized companies that were viable in December 2019 and have been facing solvency issues due to COVID-19. In France, Bpifrance set up two financing vehicles to unlock access to equity capital for French start-ups and SMEs: the Fund for reinforcement of SMEs (EUR 100 million or USD 118.4 M) and the French Tech Bridge (EUR 80 million or USD 94.7 M). In Poland, the Polish Development Fund has administered a EUR 1.6 billion (USD 1.9 bn) recapitalization scheme through equity and hybrid capital instruments, which has been granted to some large SMEs under specific conditions.
Transaction fees and limits	 Russia temporarily lowered acquiring commissions on non-cash transactions processed by online merchants for certain essential goods (e.g., food, medicines, clothes, daily necessities, as well as clinics and hospitals, medical laboratories, ambulances, and licensed doctors), capping them at 1 percent. Turkish BRSA has taken some actions to facilitate the use of cards and POS/ATM devices for payments, including: increase in contactless transaction limit for card payments to TRY 250 (USD 29.3); frequent sanitization of ATM devices; and push to opt for contactless transactions in the workplace. Portugal more than doubled the contactless transaction limit - from EUR 20 (USD 23.7) to EUR 50 (USD 59.2) - and suspended minimum fees on POS payments for businesses. Likewise, Bangladesh increased daily limits on contactless debit/credit card transactions from \$35 to \$60.
e-KYC requirements and remote onboarding	 In Italy, the Simplification Decree introduced measures to facilitate the online onboarding of MSME customers through the use of the Italian digital public identity. Turkish BRSA allowed public commercial banks to use remote identification methods while enrolling new clients. The Central Bank of Iraq instructed mobile payment providers to facilitate the opening of e-wallet accounts by remotely obtaining personal data.
Authorization and licensing processes for new products and activities	 In Argentina, the Central Bank streamlined the open transfer of electronic credit invoices, thus enabling MSME providers of large companies to draw on a wider range of financing sources. The Financial Services Authority (OJK) of Indonesia introduced a new regulation on securities crowdfunding to improve access to capital for start-ups and SMEs raising funds electronically.

ANNEX 5

Other interventions from traditional financial intermediaries to support MSMEs during COVID-19

Area	Examples
Lending and other financial support	 In Romania, twenty banks committed to lend €3.7 billion (USD 4.38 bn) to MSMEs under the IMM Invest Romania program¹. The EIB issued a €795 million (USD 941.2 M) guarantee to ING to boost new lending to Dutch MSMEs and mid-caps under concessional terms². The Asian Development Bank provided \$1.6 billion in non-sovereign operations for MSMEs to address immediate needs in response to COVID-19³. Three UAE banks - Emirates National Bank of Dubai, Mashreq Bank, and Commercial Bank of Dubai - introduced a 3-month grace period for their MSME clients, with zero interest and fees⁴. Emirates Development Bank signed a Memorandum of Understanding with five banks - First Abu Dhabi Bank, Commercial Bank Dubai, Mashreq Bank, the National Bank of Ras Al Khaima, and the National Bank of Umm Al Qaiwain - that covers credit guarantees and colending programs to ease financing options for SMEs. In September 2020, Emirates Development Bank launched the National Supply Chain Finance platform, which helps businesses gain easy access to working capital amid the coronavirus pandemic. The initiative brings buyers and suppliers onto a fully digitized platform, mitigating risks and making finance easily accessible to MSMES and start-ups that provide products and services to larger companies in the UAE. As such, Emirates Development Bank is injecting liquidity that enables suppliers to gain quicker access to money owed, while buyers get more time to pay off their invoices. ING Turkey has partnered with leading marketplaces and e-commerce players - e.g., Hepsiburada - to offer loans to consumers as an alternative payment option. Customers can find products sold on the marketplaces via ING Turkey mobile application, and complete payments using ING consumer loans. In South Africa, First National Bank collected early data on its customers at the onset of COVID-19, enabling the bank to quickly offer them the appropriate financial aid online⁵.
Non-financial support	• Emirates Development Bank has partnered with Zoho Corporation - a global technology company offering cloud business solutions - to empower MSMEs and start-ups in their digital transformation. Under the partnership, MSMEs will have access to cost-competitive solutions, including Zoho One, an integrated suite of over 45 cloud applications for business management.

ANNEX 6

Other interventions from FinTechs/BigTechs to assist MSMEs during COVID-19

Area	Examples
Lending and other financial support	 Amazon suspended loan repayments for sellers in its marketplace⁶. PayPal allowed small businesses to defer loan repayments with no additional cost⁷. Visa Foundation launched two programs worth \$210 million to support micro and small businesses around the world⁸. Google announced \$340 million in Google Ads credits for small and medium businesses with active accounts over the previous year⁹. After assessing the main operational and financial challenges of more than 20,000 MSME clients, Ant Financial quickly adopted a three-pronged action plan at the onset of the crisis. Firstly, MyBank - an online private commercial bank focusing on SMEs under Ant Group - lowered interest rates by 10-20 percent for 1.5 million mom \$\theta\$ pops shops in Hubei (the epicenter of the outbreak) and 300,000 medical supply dealers nationwide. Secondly, Mybank started a 2 x RM10 billion lending program to facilitate credit access for 8.5 million small and micro e-commerce merchants. The bank not only delivered RM10 bn in interest-free loans to Taobao and Tmall merchants from Hubei, but also disbursed RM10 bn in low-interest loans to businesses outlead the region. Thirdly, Mybank and the All-China Federation of Industry and Commerce launched a Contactless Loans campaign to accelerate the digital transformation of 10 million MSMEs through financing and capacity building support.¹⁰. In Russia, Yandex also started a RUB500 million-program (USD 6.84 M) to facilitate MSME access to online advertising.¹¹. Within the crowdfunding space, Wefunder created the Coronavirus Crisis Loan, which has helped US small businesses crowdfund loans from \$20,000 to \$1 million at reduced interest rate and with flexible repayment terms.¹². GofundMe has partnered with Yelp, Intuit QuickBooks, GoDaddy, and Bill.com to financially support small business owners affected by the crisis. Specifically, eligible MSMEs which have raised \$500+ on GoFundMe have received \$500 matching grant
Participation in COVID-19 relief scheme	 In the UK, Funding Circle has become the third biggest lender under the Coronavirus Business Interruption Loan Scheme (CBILS), giving instant decisions for 50 percent of loan applications submitted by small businesses¹⁵. In Australia, Prospa distributed US\$223 million in state-backed loans to MSMEs¹⁶. Other FinTech firms got involved in government relief programs in multiple ways.

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Area	Examples
Payments	 To encourage the transition towards cashless payments, Razer Fintech waived MDR fees for Malaysian MSMEs joining its #RazerForLife initiative¹⁷. In Mexico, Tribal Credit expanded its payments and financing products to include Tribal Pay, helping customers settle non-card purchases and benefit from extended payment terms.
Equity financing	• As part of its \$800 million commitment to support small businesses worldwide, Google announced a \$10 million investment into a venture capital fund-of-funds advised by the European Investment Fund, which aims to finance around 200 life sciences SMEs ¹⁸ .
Non-financial support	 In the US, Kabbage also collaborated with Facebook to help small businesses sell online gift certificates¹⁹. In Singapore, Huawei offered its codeless development platform - JET Workflow - to local MSMEs for free in order to facilitate their transition to remote operations²⁰. In Tanzania and Kenya, ClickPesa launched an e-commerce shop to help SMEs digitally showcase their products and minimize physical interactions with customers.

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