Rethinking MSME Finance in Asia and the Pacific:

A Post-Crisis Policy Agenda

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Foreword

The COVID-19 pandemic has wrought devastation worldwide, including in Asia and the Pacific. The cost has been considerable, whether measured in terms of public health or economic fallout. In a bid to constrain the spread of the coronavirus, national and local governments were obliged to lock down public spaces, forbade business transactions in person, restricted travel, and otherwise interdicted the flow of people, goods, and services globally. The consequences for business have been acute.

While all businesses suffered in varying degrees from these measures, the most vulnerable were the micro, small, and medium-sized enterprises (MSMEs). Given their limited human and financial resources, and heavier reliance on cash flows, MSMEs were generally less well equipped to cope with the dramatic loss of business than larger firms. Access to finance, already a major constraint to MSME development prior to the pandemic, has worsened considerably, even in cases where governments have had sufficient resources to enact emergency policies aimed at keeping their MSME sectors afloat.

Each country in the Asia-Pacific region developed their own strategic policy approach to the COVID-19 crisis, including their policies towards MSMEs, so truly each nation has had a unique experience. Despite this, there have been certain commonalities among MSMEs in the region during the crisis, including (but not necessarily limited to):

- Dramatically curtailed cash flows, revenues, and profits.
- A reduction in employee numbers, both part-time and full-time.
- A movement of transactions from physical locales, such as shops, to online forms of transacting business.
- Constrictions and dislocations in foreign trade.

Indeed, at the time of writing, the economic ramifications of the pandemic, and the virus' impact on communities, continues to be felt. While it is too early to say that COVID-19 is behind us, it is not too early to start envisaging what a post-pandemic business environment might look like. The post-pandemic recovery period presents us with a unique opportunity, should we seek to seize it.

As this volume suggests, there is the potential to 'build back better'; to better align MSME financing towards larger trends and issues that were percolating in the region (and the world) before the pandemic. Although those trends and issues mostly pre-date the pandemic, they were accelerated and/or given greater emphasis by the COVID-19 experience.

In this volume, we identify a number of important areas that policymaking for MSME finance needs to address. They include (but are again not limited to):

a. Digitalization and the rise of fintech: Traditional means of funding from banks and non-bank financial institutions are being challenged by an influx of new, technology-driven business models that are revolutionizing the way MSMEs can better meet their financing needs. Indeed, it is difficult to over-emphasize the extent to which this digital revolution could utterly transform the way that MSMEs transact their business, including how they fund their operations. As such, the field of MSME finance seems destined for a major transformation that will challenge both finance providers and regulators in equal measure.

b. Inclusion and the need for greater sustainability: The pandemic and its aftermath have called into question the optimal means of not only financing MSMEs, but also how such financing can be directed towards meeting the kinds of objectives laid out in the Sustainable Development Goals (SDGs). The unsustainable pursuit of business growth that comes at a deleterious cost to gender equity, social cohesion, the environment, and the existential threat posed by climate change is no longer viable or acceptable.

c. Resilience and a need for more robustness: The COVID-19 pandemic has served as a global stress-test for MSMEs, and pinpointed where weaknesses in the increasingly elaborate network of value chains exist. The recent pursuit of efficiency gains and other means of competitiveness have now been tempered with a realization that value chains and production networks need to be able to withstand 'black swan' and 'white swan' events, and other exogenous shocks.

Understanding and responding effectively to the above trends necessitates a change in the strategic approach of those sovereign government agencies and members of the international development community (including ESCAP), that work to support MSMEs in Asia and the Pacific. It is not just about remaining relevant, but also being of genuine utility to an MSME community that is coming out of a global pandemic in varying degrees of damage and disarray. The potential gains to be derived from the latest advances in finance need to be leveraged, and made real. But care also needs to be taken to ensure that the inevitable risks entailed in any exploration of new innovations are kept within acceptable bounds.

With one eye on the promise of the future, and one eye on the common good, MSME finance in Asia and the Pacific appears poised to begin a new chapter. In this context, it is hoped that this publication can contribute to policy deliberations on MSME financing in the Asia-Pacific region, in the post-COVID era. It can also hopefully serve as a source of useful information and insights for other interested stakeholders, such as entrepreneurs, financial institutions, and researchers.

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Groupings of countries and territories/areas referred to are listed alphabetically as follows:

ESCAP region: Afghanistan; American Samoa; Armenia; Australia; Azerbaijan; Bangladesh; Bhutan; Brunei Darussalam; Cambodia; China; Cook Islands; Democratic People's Republic of Korea; Fiji; French Polynesia; Georgia; Guam; Hong Kong, China; India; Indonesia; Iran (Islamic Republic of); Japan; Kazakhstan; Kiribati; Kyrgyzstan; Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Marshall Islands; Micronesia (Federated States of); Mongolia; Myanmar; Nauru; Nepal; New Caledonia; New Zealand; Niue; Northern Mariana Islands; Pakistan; Palau; Papua New Guinea; the Philippines; the Republic of Korea; the Russian Federation; Samoa; Singapore; Solomon Islands; Sri Lanka; Tajikistan; Thailand; Timor-Leste; Tonga; Turkey; Turkmenistan; Tuvalu; Uzbekistan; Vanuatu; and Viet Nam.

Least developed countries: Afghanistan, Bangladesh, Bhutan, Cambodia, Kiribati, Lao People's Democratic Republic, Myanmar, Nepal, Solomon Islands, Timor-Leste, Tuvalu, and Vanuatu. Samoa was part of the least developed countries prior to its graduation in 2014.

Landlocked developing countries: Afghanistan, Armenia, Azerbaijan, Bhutan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Mongolia, Nepal, Tajikistan, Turkmenistan, and Uzbekistan.

Small island developing States: Cook Islands, Fiji, Kiribati, Maldives, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

East and North-East Asia: China; Democratic People's Republic of Korea; Hong Kong, China; Japan; Macao, China; Mongolia; and the Republic of Korea.

North and Central Asia: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, Tajikistan, Turkmenistan, and Uzbekistan.

Pacific: American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

South and South-West Asia: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, Sri Lanka, and Turkey.

South-East Asia: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Viet Nam.

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References to dollars ($) are to United States dollars, unless otherwise stated. The term "billion" signifies a thousand million. The term "trillion" signifies a million million.

In the tables, two dots (..) indicate that data are not available or are not separately reported; a dash (–) indicates that the amount is nil or negligible; and a blank indicates that the item is not applicable.

In dates, a hyphen (-) is used to signify the full period involved, including the beginning and end years, and a stroke (/) indicates a crop year, fiscal year, or plan year.

Abbreviations and acronyms

AAMO	Asian Association of Management Organizations
ACE	Access, Certainty, and Efficiency
ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
AEC	ASEAN Economic Community
AI	Artificial intelligence
AIF	Alternative investment fund
AIM	Alternative investment market
AML	Anti-money laundering
AMR	Allied Market Research
APF	Accounts payable financing
API	Application programming interface
ARF	Accounts receivable financing
ASEAN	Association of South East Asian Nations
ASENSO	Access of Small Enterprises to Sound Lending Opportunity
B2B	Business-to-business
B2C	Business-to-customer
BCP	Business continuity plan
BDS	Business development service
CAGR	Compound annual growth rate
CamDX	Cambodia Data eXchange
CBDC	Central bank digital currency
CEIC	CEIC data
CFI	Corporate Finance Institute
CFT	Combating the financing of terrorism
CGCs	Credit guarantee corporations
CLIC	Circular, lean, inclusive, and clean
CNBC	Consumer News and Business Channel
COVID-19	Coronavirus Disease of 2019
CWE	Catalyzing Women's Entrepreneurship
DESA	Department of Economics and Social Affairs, United Nations
DFI	Development finance institution
DJSI	Dow Jones Sustainability Indices

EC	European Commission
ECGC	Export credit guarantee corporation
EIB	European Investment Bank
eKYC	Electronic know-your-customer
EMI	Equal monthly instalment
EP	Europe Parliament
ERIA	Economic Research Institute for ASEAN and East Asia
ESCAP	Economic and Social Commission for Asia and the Pacific
ESG	Environmental, social, and governance
EU	European Union
EVV	Electric vehicle
EXIM	Export-import
EY	Ernst & Young
FCA	Financial Conduct Authority
FI	Financial institution
FMO	Dutch Entrepreneurial Development Bank
FTSE	Financial Times Stock Exchange
FX	Foreign exchange
GDP	Gross domestic product
GIIN	Global Impact Investing Network
GLEIF	Global Legal Entity Identifier Foundation
GPN	Gerbang Pembayaran Nasional
GSMA	GSM Association
HKMA	Hong Kong Monetary Authority
ICC	International Chamber of Commerce
ICT	Information and communication technology
IFC	International Finance Corporation
IFEC	Investor and Financial Education Council
ILO	International Labour Organization
IMARC	IMARC Group
IMF	International Monetary Fund
IoT	Internet of things
IPO	Initial public offering
ITC	International Trade Centre
ITU	International Telecommunication Union

JFC	Japan Finance Corporation
JICA	Japan International Cooperation Agency
JPM	J.P. Morgan
JPY	Japanese yen
KCCI	Kyoto Chamber of Commerce and Industry
KLSE	Kuala Lumpur Stock Exchange
KPMG	Klynveld Peat Marwick Goerdeler
KUR	Kredit Usaha Rakyat
KYC	Know-your-customer
L/C	Letter of credit
LDC	Least developed country
LEAP	Leading Entrepreneur Accelerator Platform
LGBTQIA	Lesbian, gay, bisexual, transgender, queer, intersex, and asexual
mai	Market for Alternative Investment
MAS	Monetary Authority of Singapore
MAVCAP	Malaysia Venture Capital Management Berhad
MESDAQ	Malaysian Exchange of Securities Dealing and Automated Quotation
MFI	Micro-finance institution
ML	Machine learning
MSCI	Morgan Stanley Capital International
MSME	Micro, small, and medium-sized enterprises
MTEP	Malaysia Tech Entrepreneur Program
Nasdaq	National Association of Securities Dealers Automated Quotations
NBFC	Non-banking financial company
NBFI	Non-bank finance institution
NDID	National Digital ID Limited Company
NFT	Non-fungible token
NPL	Non-performing loan
NRPS	National Retail Payment System
NZBA	New Zealand Bankers Association
OBR	Online business registration
OECD	Organisation for Economic Co-operation and Development
P2P	Peer-to-peer
PDR	People's Democratic Republic

PEF	Pandemic Emergency Financing Facility
PoS	Point of sale
PPP	Paycheck protection programme
PRI	Principles for responsible investment
PTI	Pacific Trade Invest
PwC	PricewaterhouseCoopers
RCEP	Regional Comprehensive Economic Partnership
SaaS	Software as a service
SARS	Severe Acute Respiratory Syndrome
SBA	Small Business Administration
SBP	State Bank of Pakistan
SDGs	Sustainable Development Goals
SEBI	Securities and Exchange Board of India
SEC	Securities and Exchange Commission
SIM	Subscriber identity module
SME	Small and medium-sized enterprise
UIDAI	Unique Identification Authority of India
UK	United Kingdom
UN	United Nations
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
US	United States
WILD	Wasteful, idle, lopsided, and dirty

CHAPTER I
Introduction

Masato Abe, Nick Freeman, and Mike Troilo[1]

"We expect the world of SME finance to have fundamentally changed by 2030. A significant and transformational shift has already taken place over the last 10 years in which innovative FinTech companies, challenger banks, specialist digital SME lenders, E-commerce players and aggregators [...] offer a range of solutions to meet the diverse financing needs of SMEs of all sizes. By 2030 we expect much bigger shifts to have taken place including: the continued adoption of digitisation [...] which will [...] substantially reduce the time and cost to serve SME borrowers [while] streamlining [...] the SME credit ecosystem in which non-financial institutions take over the provision of many of the products and services that traditionally were the exclusive domain of financial institutions."

Nadia Sood (2020).

1. Authors are listed in alphabetical order. Luciana Milani Baglioni, Aoqi Leng, Clara Robert, and Tai Lo Yeung provided valuable research assistance to this chapter.

1. The aim of this book

The COVID-19 pandemic has brought about economic carnage across much of the micro, small, and medium-sized enterprises (MSME) sector in Asia and the Pacific. Cash flows have been devastated, and balance sheets badly impacted (Deloitte, 2020; ITC, 2020). Not all MSMEs will survive the tumult of 2020-21 (Díez and others, 2021). The pandemic was certainly not welcome, but the dislocation caused does provide us with an opportunity – a mindful moment – to re-evaluate our approach towards MSME finance in the region. Even prior to the pandemic, the provision of financing to MSMEs was undergoing substantial change, as innovative new products and services were being tested and launched by a cadre of start-up innovators and so-called 'disruptors' (ADB, 2020a; ASEAN Secretariat, 2017; Fouejieu, Ndoye, and Sydorenko, 2020). The provenance and process of that change pre-dates COVID-19 and will undoubtedly persist after the pandemic has abated. For this reason, this book seeks to be forward-looking in its orientation in an uncertain world, and attempts to shed light on the future of MSME finance in Asia and the Pacific, after the economic crisis triggered by the pandemic is behind us.

Clearly, the economic contagion and various policy responses that the virus induced have had a deleterious effect on all kinds of business (Clark, 2020; Díez and others, 2021), both direct and indirect. Beyond the direct impact of having employees and customers contract the virus, the remedial social and economic measures enacted to contain the virus's impact on public health has impacted most business endeavours, including that of financing the MSME sector. For example, credit officers have been able to conduct site visits as part of their due diligence and know-your-customer (KYC) requirements, ahead of lending decisions. And with company closures rising rapidly, the willingness of banks to provide loans to companies has diminished, along with their risk appetite.

As subsequent chapters will illustrate, one effect of the pandemic has been to accelerate a number of trends relating to MSME finance. Those same trends would probably have played out even if COVID-19 had not erupted, but the direction and pace at which they have progressed would almost certainly have been different. This acceleration and dislocation will probably be COVID-19's main legacy on MSME finance in Asia and the Pacific.

The book takes a broadly chronological approach to the topic, and each chapter focuses on different stages of the pandemic's effect on MSME finance in Asia and the Pacific: before, during, after, and beyond. Chapter 2 profiles the state of MSME finance in the region prior to 2020 and sets the stage for what follows. While the time before COVID-19 may seem a long way off now, it only ceased in the first quarter of 2020, and it is important that we re-acquaint ourselves with the pre-pandemic MSME finance dynamic. By the time we get to the final chapter, we can gauge the distance travelled in what has been, at the time of writing, little more than a year – a blink of the eye in normal policy-making terms.

Chapter 3 discusses both: (i) the economic impact of the pandemic on MSMEs and their access to finance; as well as (ii) the policy responses adopted by various governments in the region, essentially during 2020, intended to mitigate that impact. The year 2020 will go down in history as the year of the COVID-19 pandemic, and there is a need to briefly review what precisely has transpired, recognizing that the pandemic continues to evolve in the region in unexpected ways.

Chapter 4 explores what are likely to be some of the trends coming to the fore in the next few years, in the MSME finance space, as the pandemic eases and we shift to what will be a recovery phase, of unknown duration. Views vary widely about what this recovery phase will look like, as well as its tenor; some analysts envisage a fairly rapid economic 'bouncing back', while others forecast an extended period of economic under-performance, or even depression, as the wounds inflicted by the pandemic and the debts incurred in responding to the crisis will hobble the recovery process for some time to come (e.g. ADB, 2020b, 2021; ANZ Bank, 2020; Clark, 2021; Jorda, Singh, and Taylor, 2020; World Bank, 2020). Regardless of the macro-economic back-drop, we anticipate that digitalization-driven advances in MSME finance provision will be significant in the near term, and have the potential to induce some exciting new opportunities – as well as challenges – for business, on both the demand and supply sides of the MSME finance ecosystem. If policymakers and other stakeholders seize those opportunities, they could contribute to the process of economic recovery in Asia and the Pacific, as MSMEs in the region become a more robust and sustainable engine of economic growth.

Chapter 5 seeks to tease out the ramifications of these new trends in MSME finance and extrapolates them to create a sketch of what this field of activity may look like by 2025, and beyond. In doing so, we focus in particular on what this all means, not only for MSMEs and their finance providers, but also for policymakers and development agencies that focus on improving MSMEs' access to finance in Asia and the Pacific. As discussed below and in subsequent chapters, advances in digitalization not only provide an epochal opportunity to overcome some of the key constraints to MSME finance, but also will require policymakers, regulators, and other stakeholders to alter radically the way they approach the issue. For example, the future of finance will be less about money per se, and probably more about data, and how it is employed. We also see a growing emphasis on environmental, social, and governance (ESG) issues for MSME finance, which until now has tended to be more the preserve of large enterprises. We are well aware of the risks of projecting into an uncertain environment as the world of finance continues to evolve, but hopefully our assessment of key signposts of the unfolding future will remain relevant and useful.

Finally, in chapter 6 and before concluding in chapter 7, we offer some specific recommendations and takeaways that hopefully illustrate new and potentially rewarding avenues of intervention for MSME finance in Asia and the Pacific. These 'unlocks' in MSME finance will be shaped by the technology-driven trends now emerging across the region.

All in all, the principal chapters of this volume can be thought of as spanning four distinct phases in MSME finance in Asia and the Pacific, namely: before (prior to 2020), during (2020-01), immediately after (2022+), and beyond (2025+). Each chapter can be read in isolation, or as part of a sequence, as the 'baton' of MSME finance passes through each period. There are short vignettes throughout the volume that are intended to serve as tangible examples of activities or business interventions that are pertinent to MSME finance in Asia and the Pacific, and hopefully serve to illustrate and support some of the discussion, with real world examples.

We should add that this book has been the product of a series of desk-based studies and is not the product of any wholly new empirical evidence gathered and collated by this project itself. Rather, it sits on the shoulders of others, and attempts to use that slightly elevated position to depict a changing landscape for MSME finance in Asia and the Pacific.

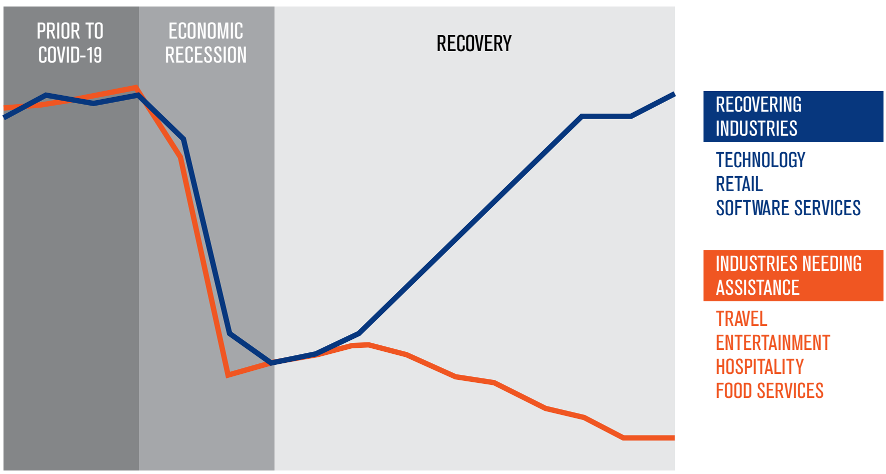
2. The economic recovery context

Prior to the COVID-19 outbreak, Asia-Pacific countries had begun to experience a slower growth trajectory, with greater downside risks to their economies stemming from rising trade tensions and global economic uncertainty (ESCAP, 2020). The COVID-19 pandemic and countries' associated health and quarantine measures have exacerbated this trend. In this vein, MSME development, and therefore MSME access to finance, always a challenge, will need to be encouraged further, as part of the post-pandemic economic recovery process in developing Asia and the Pacific.

At the time of writing, mass vaccination campaigns for COVID-19 are being initiated, albeit at different rates of speed, and businesses and governments alike are starting to shift at least some of their attention to envisaging the post-pandemic economic recovery process (ESCAP, 2021; Sneader and Singhal, 2021). The principal question is: what happens next? While it is not possible to answer that question with any great degree of confidence or accuracy, we can draw some useful lessons from recent experience to help inform our view of the economic recovery context for MSME finance in Asia and the Pacific. The rollout of vaccination campaigns in 2021 will be a literal 'shot in the arm' for the global economy, but the pace of recovery will not be immediately, uniformly, nor simultaneously felt. There will be no single 'flicking of a switch'.

Indeed, some observers have spoken, not of an 'L', 'U', or 'V' shaped economic recovery in Asia and the Pacific after the pandemic, but rather of a 'K' shaped recovery, reflecting the degree to which future economic growth prospects may diverge for different economies and business sectors (Clark, 2020; ESCAP, 2021; S&P Global Ratings, 2020).[2] A K-shaped recovery would see different parts of an economy recover (or fail to recover) from an economic shock like the pandemic, at varying trajectories, and could even bring about fundamental changes in the structure of an economy (figure I.1). For example, a sector badly impacted by the pandemic may take longer to revive, or be so weakened by its impact, and/or by the introduction of new ways of doing business, that it goes into permanent decline. Conversely, some sectors or individual businesses may benefit from the circumstances of the crisis (e.g. home delivery, contactless payments, home entertainment, etc.), or be the recipients of significant government largesse that enables them to bounce back stronger. Numerous observers have suggested that it may take several years for international tourism to return to pre-2020 norms (Clark, 2020; OECD, 2020b; UNDP, 2020). If so, this will be a slow recovery process for all those enterprises, sectors, and even economies that depend heavily on tourism-related revenues.

Figure I.1: Example of a K-shaped recovery scenario



Source: Clark (2020).

So, what lessons can we draw that might be useful in forecasting the economic context of MSME finance in Asia and the Pacific? First, just as COVID-19's spread around the globe was a staggered process, so too will be its retreat (Clark, 2021; ESCAP, 2021). While the virus travelled along lines of human travel and points of

2. "The Covid-19 recovery path bifurcates in two directions: large firms and public-sector institutions with direct access to government and central bank stimulus packages will make some areas of the economy recover fast but leave others out. Those that get left out are the usual whipping boys: [MSMEs], blue-collar workers, and the dwindling middle class" (Bheemaiah, Esposito, and Tse, 2020).

close proximity – through the hubs of airport departure lounges, inside planes cruising at high altitude, and at venues where people gathered to socialize and be entertained, or simply inside homes and offices – the impact varied across economies, and as some countries were better able to implement protocols and vaccinations that contained the spread. Those countries that have been better able to manage the virus are likely to benefit from its retreat earlier than those still battling with its impact. Thus, from the perspective of MSMEs and their financing needs, as well as those that provide that finance, residing in an economy that is able to come out of lockdown sooner than others will feel the benefits earlier than others, and could even potentially be at a competitive advantage. For example, MSMEs in the tourism and hospitality sector in those countries that are able to re-open their borders safely, and before other destinations, will potentially benefit from any surge in tourism, whether domestic or international. That being said, successful business activity is a function of both adequate demand and supply, and so a return to pre-pandemic levels of activity will also depend on a global improvement, particularly for those MSMEs that are dependent on overseas markets.

It should perhaps be noted here that a number of countries in the Asia-Pacific region that are widely recognized as having been highly effective in various aspects of their responses to the COVID-19 virus. For example, the Lowy Institute's COVID Performance Index places eight economies in the region – Bhutan (ranked 1st), New Zealand (ranked 2nd), Taiwan Province of China (3rd), Thailand (4th), Australia (9th), Sri Lanka (11th), Singapore (14th), and Malaysia (17th) – in the top twenty globally for their relative success in 'handling' the pandemic (Lowy Institute, 2021).[3] Observers may have differing views on the veracity of such rankings, and/or query the methodology by which they were attained. Nonetheless, the broad underlying assertion that Asia and the Pacific saw some of the most rapid and robust policy responses in 2020 to counter the initial outbreak of COVID-19 holds true (Jeong, 2020). (The relatively recent experiences of A(H5N1) 'bird flu' in 1997 and 2003, and severe acute respiratory syndrome (or SARS) in 2003 may have prompted some countries in the region to be more responsive to the initial outbreak of COVID-19.) That said, the picture in 2021 has arguably been more nuanced, as second and third waves of the virus play out in as yet unclear ways across the region and the globe, and the performance of the mass vaccination programmes in Asia and the Pacific has been mixed, relative to some other parts of the world.

Secondly, the degree to which policymakers in individual countries have been able to implement measures that have helped MSMEs survive the impact of the pandemic will greatly influence the speed with which those MSMEs can return to some kind of normalcy in their business activities. If substantial numbers of MSMEs prove to be economic fatalities of COVID-19, then the cull of 2020 will

3. See: https://interactives.lowyinstitute.org/features/covid-performance/#rankings (data as of 20 May 2021).

create new opportunities for those that survive, but only if they have not been so badly wounded by the experience that they can seize these opportunities. Some observers have suggested that big business will be a net beneficiary of the economic crisis triggered by the pandemic, as these firms had the balance sheet depth to survive the 2020 stress test (Clark, 2021; GIIN and Patamar Capital, 2021). The thesis here is that larger enterprises will emerge even stronger and more dominant than before, as their smaller rivals proved less resilient and had fewer assets to devote to their survival. Returning to the 'K-shaped' recovery image above, some observers worry that while large firms will see their fortunes improve (i.e. the upper 'leg' of the K); in contrast, MSMEs will be much less fortunate (i.e. be the lower leg of the K).

That being said, it is likely that, in some sectors at least, relatively small enterprises will find they have been better able to ride out the economic storm, by cutting back on all discretionary spending, and having fewer fixed costs to incur until the macro-economic and/or sector-specific situation improves. In periods such as this, an ability to reduce operating costs to a minimum and preserve capital can be a critical determinant of survival (OECD, 2020a). Thus, not having large rental and utilities bills to pay, and/or loan obligations that need servicing, and generally being 'asset light', can be hugely beneficial. Such firms can seek to go into suspended animation, or a form of hibernation, until it is safe to resume business. But for these same reasons, MSMEs tend not to receive the same attention from policymakers when it comes to emergency relief initiatives, compared with large-scale employers. This is partly due to political economy issues, and the lobbying strength of big business, but also because the operational challenges (and costs) of implementing many small-scale relief packages for MSMEs are greater than focusing on a more modest number of relief packages of large-scale employers. It should also be kept in mind that most emergency relief measures are essentially, and rightly, focused on mitigating the impact of the pandemic on individuals, rather than on companies per se. In this regard, firms are viewed as a conduit through which policymakers seek to prevent large-scale lay-offs; support to companies is a means to an end (i.e. the avoidance of job and income losses), not an end in itself. That in turn would suggest that policymakers are being strategic in focusing first on large-scale employers, even when they make up a relatively modest proportion of the total business community. A degree of moral hazard therefore pertains during times of economic crisis, with larger firms better able to attract the attention and largesse of governmental assistance, as a function of their size as employers and their political leverage. In contrast, MSMEs are sometimes left to their own devices during such times of crisis, even in countries where policymakers have a tendency to provide generous incentive and other support measures to smaller enterprises during times of economic growth.

Thirdly, the prospects for MSME finance in Asia and the Pacific after the pandemic will depend significantly on the macro-economic health and financial sector stamina of individual countries. The considerable quantities of public debt that have been incurred, as well as private sector insolvencies and debt obligations that have burgeoned since early 2020, mean that post-pandemic MSME finance will operate in a very different, and probably much less benign, enabling environment, once the emergency stimulus and liquidity measures are brought to an end (Díez and others, 2021; ESCAP, 2021). COVID-19's impact on inflation prospects, interest rates, and state budgets (both revenues and public spending) will all inevitably impact the ability of finance providers to service and support the needs of MSMEs (ESCAP, 2021). Traditionally, MSMEs have had better access to debt finance when banks and other finance providers have the ability to price for risk (i.e. to adjust the interest rate attached to a loan upwards, so as to mitigate the greater risks and transaction costs associated with lending to a smaller firm), and not constrained by interest rate caps that will incentivize lenders to only provide debt to large and well-established firms that are associated with the lowest level of risk (Abe and others, 2012).

Fourthly, as national economies start to return to some degree of normalcy, MSMEs in different sectors will encounter differing trajectories of rebound, which will in turn influence the financing needs of MSMEs across different sectors. It could well take several years before MSMEs across all sectors are able to shake off the economic impact of COVID-19. As this book points out, we do not envisage that there will be a full 'snapping back' to the way things were before 2020. Some ways of doing business have been irretrievably altered; for example, the pandemic has undeniably influenced consumer behaviour. Firms have pivoted their business models to remain relevant and solvent during the pandemic. Those changes will have a 'stickiness' that ensures things do not return to the way they were in 2019, including – as we shall see – in the way that MSME finance is conducted.

If one were to develop a checklist by which to appraise the economic context that will impact an MSME, its post-pandemic recovery prospects, and its ability to access finance in the years ahead, it might consist of the following metrics:

- The extent to which the surrounding macro-economy has been adversely impacted by the pandemic, and the effectiveness of national and sub-national governments to respond in various ways, including their financial and logistic capacity to vaccinate large shares of the population.

- The extent to which the specific business sector in which the MSME operates has been adversely impacted by the pandemic and policy responses to it.

- The relative speed with which that the business sector is likely to return to something like pre-pandemic levels (if not modalities) of supply and demand.

- The extent to which changes in business models and demand behaviour in that business sector have changed during the pandemic (and the individual MSME's ability to pivot in that direction).

- The extent to which the financial sector in general, and the primary sources of MSME finance in particular, have weathered the pandemic adequately, and are willing and able to resume operations.

- The degree to which new innovations in MSME finance products and services (offerings) have been dislocated by the pandemic, and can regain momentum.

- The degree of success that governments will have in finessing an end to the emergency stimulus and other economic measures taken in 2020, to offset the crisis triggered by the pandemic, and return to a more normal pattern of behaviour.[4]

- How the evolution of global value chains, in which the region's MSMEs play a key role as suppliers, impacts participating firms. For example, the extent of "reshoring" and its effect on the performance of enterprises in the region's export-oriented economies.

Of course, MSMEs' access to finance in Asia and the Pacific varied considerably, from economy to economy, prior to the pandemic (ADB, 2020a). It was not a level playing field across the region in 2019, and nor will it be a level playing field after the pandemic. The economic dislocation caused by COVID-19 does provide a window of opportunity for policymakers and other stakeholders involved in issues around MSME finance to see how they might recalibrate their efforts in this space, and potentially tip the playing field in a way that is of benefit for their MSMEs.

Before moving on, a brief comment about MSMEs in Asia and the Pacific is merited here. The term MSMEs covers a wide diversity of businesses. Indeed, the vast majority of enterprises in even advanced economies will come under this umbrella term. And yet there are some fairly basic differences among the MSME community in any economy, let alone a region as large as Asia and the Pacific, whether in terms of their origins, scale, core competences, performance, etc. While most can benefit from various fairly generic initiatives, such as improved access to financing, one should take care not to assume that they are equally able, or even willing, to benefit from some other potential initiatives or opportunities. In

4. To shut down stimulus measures too early could result in an adverse shock to a business community that has yet to fully recover and needs more time to recuperate. But to extend the stimulus measures too long could result in unnecessarily large budget deficits from public spending and encourage businesses to depend unduly on taxpayers' largesse (ESCAP, 2021). Getting that balance right will not be easy, akin to landing a plane gently on a moving aircraft carrier.

the context of COVID-19, for example, not all MSMEs have the capacity to pivot their business models in a bid to mitigate the impact of the pandemic on their revenues. One MSME's growth opportunity could be another MSME's dead end.

That said, this volume implicitly focuses on what might be considered a 'special class' of MSMEs that are particularly relevant for any discussion of a post-pandemic business environment. These are start-up and the more entrepreneurially-driven MSMEs, and typically more innovative in outlook. Such MSMEs tend to be better able at discerning new trends, and more adept at seizing new opportunities. They also tend to be the kinds of enterprise that are keen to attract – and are good at attracting – some of the more complex forms of finance, such as venture capital, debt capital, private equity, etc. But it is important to concede that this is certainly not an option for all MSMEs in Asia and the Pacific. Which leads to one other important point about MSMEs and their access to finance. Care must be taken not to focus exclusively on the supply side of the equation, and to think that improvements to MSMEs' access to finance can only be derived from the increased provision of products and services, whether by traditional finance providers or the burgeoning cadre of fintech disruptors. Rather, attention must also be paid to the demand side of the MSME finance ecosystem, and interventions that will encourage greater demand from enterprises for financial products and services. Without sufficient demand from MSMEs, even if latent and waiting to be unlocked, the economic incentives necessary to drive innovation in the provision of finance will be inadequate, and the offerings will prove unsustainable.

3. The principal takeaways

> "Markets go up and down. So do the fortunes of financial companies. But here is one prediction: by 2025 artificial intelligence (AI) will be reshaping global finance, sparking a competitive battle between companies and regions who want to dominate this new sphere. […] The biggest competitive battle may be taking place between finance and tech groups, rather than just between banks. Who wins will depend on another factor: what regulators do".
>
> Gillian Tett, Editor-at-Large for the *Financial Times*, 16 December 2020.

Snapping forward, not back: While these remain early days in the post-pandemic economic recovery period, the perspective of this book revolves around a triptych of three main observations. The first observation pertains to longitudinal change over time, and an appreciation that things will not snap back to the way they were before the pandemic. More specifically, the way MSME finance in Asia and the Pacific is enacted and promoted in the years ahead will differ from what we have previously known. If nothing else, some actors – whether on the demand or supply side of the MSME finance market – will not recover from the economic forces unleashed by the pandemic. Others may survive, but find themselves diminished by the experience, and recovery may prove to be a 'long tail' process of gradual rehabilitation. Others yet may come to view the pandemic as an opportunity to grow, either because of the disruption caused by COVID-19, or that their product and service offerings were well suited for the changes in economic behaviour that the pandemic triggered.

The pandemic has been a massive jolt to the global economic system, including MSMEs and their finance providers in Asia and the Pacific, from which a return to the past is infeasible, whether desirable or not. Therefore, MSMEs and their finance providers alike should not wait for things to snap back; instead, they need to prepare to snap forward. This is a chance to 'lean into' the consequences of the pandemic, and attempt to derive some benefit from what has been a sudden and unwelcome shock to the economic system. Banks and other financial providers have traditionally played the economic role of 'financial intermediators', serving as a conduit through which excess finance in some parts of the economy could be fed through to other parts in need of funds. They receive fees for this service, and to mitigate the risks entailed in doing so, such as issues around covering maturity mismatches. As this book notes, however, new ways of piping finance through economies, including to the MSME sector, are gradually chipping away at that traditional role. From the supply side, new actors are entering the financial sector space, with innovative new products and service offerings that are more closely tied to specific business functions, rather than as sources of liquidity that simply 'pump' funding to those in need of capital, such as MSMEs, for a fee. These new actors, in turn, are driving changes in the way incumbent financial institutions (e.g. traditional banks) will do business, in responding to new and accelerating competitive threats. And from the demand side, MSMEs are looking at sources of funding that are more closely integrated with various specific activities (e.g. inputs and supplies, sales, and revenues), rather than using umbrella debt arrangements to underwrite their whole business. To be clear: these changes in MSME finance are not a direct function of the pandemic, as they largely pre-dated COVID-19. But the virus did not kill off these advances, and in some cases the pandemic experience has served to accelerate their implementation. Perhaps the most obvious example has been the marked increase in e-commerce during the pandemic, which has helped drive forward the adoption of e-payments, online trading platforms, and other innovations, by firms, clients, and retail customers.

Borrowing from the lens of 'ikigai': The second observation in the book pertains to the opportunity that the pandemic provides to re-examine the priorities and purpose of MSME finance, and the optimal way of achieving them. In other words, it has highlighted a growing need for embracing a more sustainable approach to the pursuit of MSME finance. We envisage this as a mindful moment in which to consider whether the pre-2020 approach to MSME finance needs some recalibration. In a bid to frame this, we have drawn from the approach to having a personal sense of purpose and motivation, known in Japan as *ikigai* (Sone, 2008).[5] According to the principles of ikigai, there is a benefit to be derived from trying to balance: (i) what one likes to do; (ii) what one can get remunerated for; (iii) what one is good at; and (iv) what the world needs. In this book, we replace these four elements with: (i) what MSMEs (and the private sector) are good at; (ii) what policymakers and regulators are tasked with doing; (iii) what the post-pandemic 'new normal' will likely entail; and (iv) what the world needs, notably around sustainability, the SDGs, and climate change.

This then provides a structure by which to view MSME finance, and considers ways in which it can be brought into better alignment with those broad development objectives. For example, with regard to 'what the world needs', recent years have seen a marked increase in private sector and financial sector interest in the principles and pursuit of ESG. The rise of ESG is a function of growing public concern around issues of sustainability, such as climate change, and the role that businesses of all sizes can play in this regard (State Street Global Advisors, 2020). Investors and shareholders, bankers and financiers, clients and customers, company executives and boards of directors, and regulators and policymakers have all become more cognizant of these issues, as well as the roles that they can play in attaining the SDG principles in business. For MSMEs willing to embrace this trend, and develop new strategies, new business opportunities exist. While the shift towards ESG, and the concept of the 'triple bottom line'[6] certainly pre-dates the pandemic, there was a sense that it was sometimes battling against an established market mindset that was more oriented towards short-term profits, consumer gratification, shareholder returns, and so on (State Street Global Advisors, 2020). It is possible that, to some degree at least, the pandemic experience has prompted a mindset change on issues of sustainability. If so, the situation presents us with a second chance to reconfigure private sector endeavours, including those of MSMEs, to be better aligned with creating a more sustainable future. Rather than battling market headwinds, the drive for greater ESG may well enjoy a market-driven tailwind of support after the pandemic has passed. For those MSMEs able to pivot their activities within the framework of ikigai to be congruent with this trend, it could beget new opportunities from which they can benefit. And this includes accessing finance. The value of ikigai in this regard is to balance, or frame, that pursuit of ESG with a recognition of what MSMEs are best able to, as well as the role that needs to be played by regulators in advancing this agenda. The heavy load of environmental and social sustainability cannot be put on the shoulders of MSMEs, and their finance providers, alone. Rather, a balance needs to be struck that harnesses the core competencies of various stakeholders, and aligns their intentions and actions with a shared purpose.

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5. For an overview of the principles of ikigai, refer to: https://positivepsychology.com/ikigai/. A Western equivalent might be psychotherapist Victor Frankl's 'logotherapy', aimed at finding a meaning, or 'raison d'etre' to life (Frankl, 2005).
6. The 'triple bottom line' refers to the performance, criteria, and ecosystem of economic, social, and environmental partnership (Elkington, 1998).

Digitalization unlocks MSME finance: The third observation concerns itself with what is likely to be a digital-driven revolution in MSME finance offerings, both globally and in Asia and the Pacific in particular, and in both advanced and developing economies. Advances in digitalization, such as 'big data', quantum computing, blockchain, and AI, are poised to change the way that MSMEs go about attaining financing, and unlock new means of sourcing capital (Biallas and O'Neill, 2020; Callo-Muller and Vasquez, 2020; IFC, 2020). Access to finance for MSMEs will become more embedded within a range of services that are closer to their core business activities, and less defined by a distinct relationship with a conventional credit officer or branch manager. For MSMEs, this holds out the promise of removing some of the perennial challenges of accessing finance, as it becomes bundled with other forms of service provision. As one participant in this trend has noted: "[Firms] of all types and levels of maturity – including retailers, telcos, big techs and software companies, car manufacturers, insurance providers, and logistics firms – are […] preparing to launch embedded financial services to serve business and consumer segments. For customers, the appeal is ease of use: a small business can get a bank account from its accounting software […]" (Townsend, 2021).

For traditional finance providers, the sensation will be more akin to unbundling, as their 'all under one roof' suite of financial products and services for MSMEs encounter increasing competition from more bespoke offerings from up-starts and disruptors. Digitally empowered rivals, specializing in niche services, will increasingly surmount the various moats that protected traditional finance providers (Kruppa and Armstrong, 2020; Restoy, 2021). Large-scale traditional banks are increasingly finding that their various business wings are being encroached upon by fintech start-ups offering clients and customers with more bespoke service offerings, whether that be in: regular business banking, consumer lending, payments, trade finance, wealth management and private banking, investment banking, credit cards, retail deposits and savings, and MSME finance (ibid).[7] Consequently, issues around some of the most intransigent obstacles that MSMEs face in accessing finance – such as information asymmetry and insufficient collateral to pledge as security – could well become obsolete, if digitalization unlocks ways that finance providers can better track and verify an MSME's cash flows (Abe, Troilo, and Batsaikhan, 2015). Little wonder that some of the larger banks and finance providers are looking at ways to integrate these new offerings – and the developers of these new 'white

7. 'Fintech' is an umbrella term for new financial products and services that seek to compete with more traditional financial offerings, leveraging the kinds of advances that digitalization and innovation have unlocked. It spans a wide range of offerings, from advances in financial inclusion stemming from smartphones and mobile banking (of which M-Pesa was perhaps the first), through to products for business, and even new blockchain-driven financial assets like crypto-currencies. The actual range can be bewildering, spanning: crowd-funding, foreign exchange and remittances, payment processing and mobile wallets, 'wealthtech', 'insurtech', 'regtech', capital market and asset management services, accounting, credit scoring and analysis, POS and consumer lending, business (including MSME) lending, micro-finance, agrifinance, digital banking and other core banking services, payroll and benefits, and the list goes on.

label' offerings are themselves seeking to be integrated, for a fee, through the use of open banking software – or emulate them, or even acquire them.[8]

As subsequent chapters seek to explain, we see this as potentially becoming a 'digital *enso*' around MSMEs, including finance provision, as access to finance becomes bundled with other business services – such as e-commerce – that firms can leverage in order to grow.[9] The intersection between meeting MSMEs' access to finance needs and their other business needs will be where the action is. Done right, this trend has the potential to address some of the negative headwinds of inequity and exclusion that MSMEs have often faced when seeking to access finance, particularly in developing country contexts, and turn them into positive tailwinds of equity and inclusion. These advances will not be exclusive to Asia and the Pacific, as they are likely to be piloted, adopted, regulated for, and eventually be mainstreamed across the globe. But it is probably true to say that Asia and the Pacific will be host to some of the leading advances in this exciting new field of endeavour, given the current array of actors in the region. This will not be a dynamic that is initially exclusive to the United States and Europe, before migrating to Asia and the Pacific, and other parts of the world. As the case of M-Pesa in Africa showed, well over ten years ago, revolutionary advances in business innovation can originate anywhere in the world, and the gains to be derived for MSMEs and others can be considerable.[10]

8. Find an example at: https://www.fintechfutures.com/2021/05/hsbc-launches-multi-currency-business-wallet-to-rival-fintech-providers/.
9. 'Enso' is a term taken from Zen Buddhism. It refers to a hand-drawn circle that is executed in just one brushstroke, and is supposed to convey a moment when the drawer's mind and body is free to create. In the same vein, the bundling of access to finance with other service offerings could create an opportunity for an MSME to focus on its core competencies, and not be distracted by the additional burden of having to make do with more traditional, ill-fitting financial offerings. The owners and founders of most MSMEs rarely went into business with the desire to struggle with financial products needed to fund their business; they would much prefer access to financial offerings that free them from these unavoidable chores, so that they can focus on producing whatever it was they went into business to achieve.
10. M-Pesa is widely regarded as the first commercially successful mobile-phone based payment and micro-finance services, first launched in Kenya in 2007. It has since expanded to numerous other countries, and remains a model that numerous other MSME finance providers have sought to emulate. For details, visit: https://www.vodafone.com/what-we-do/services/m-pesa.

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CHAPTER II

Before: The Trends and the Challenges

Shigehiro Shinozaki[11]

"[T]he total unmet need for credit by all formal and informal MSMEs in emerging markets today is in the range of $2.1 trillion to $2.5 trillion. In fact, of the estimated 365 million to 445 million formal and informal MSMEs in the developing world, approximately 70 percent do not use external financing from financial institutions, although they are in need of it. Another 15 percent or so are underfinanced."

IFC and McKinsey (2010).

"[T]here is an estimated $2.9 trillion potential demand for finance from informal enterprises in [128] developing countries, which is equivalent to 10 percent of the[ir] GDP […]. This research estimates that there are 65 million formal micro, small and medium enterprises that are credit constrained, representing 40 percent of all enterprises in the 128 reviewed countries."

IFC (2017).

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1. Introduction

In recent decades, the global economy has been supported by the robust growth of Asia and the Pacific. The region's growth has in turn been driven by private sector development. As commonly recognized, the private sector plays a critical role in economic development, income generation, job creation, goods and service delivery, and poverty reduction (IFC, 2011a; OECD, 2007). In Asia and the Pacific, micro, small, and medium-sized enterprises (MSMEs) account for more than 90 per cent of all enterprises (ADB, 2015a; 2020a), and are a major source of incomes and employment. Strengthening their role and dynamics contributes to promoting inclusive growth nationally, regionally, and globally.

Finance is a critical driver of private sector-led economic growth, and enhancing MSMEs' access to finance – itself a work in progress – has been a critical element of Asia-Pacific's growth story. Empirical evidence indicates that financial sector development plays a vital role in facilitating economic growth and poverty reduction (Zhuang and others, 2009). A sound financial system helps promote the private sector, as well as the sustainable and resilient growth of a national economy. Thus, it is crucial for countries to establish a robust financial system, with a high level of financial depth and stability, so they can respond appropriately and effectively to unexpected events, such as economic and financial crises, natural disasters, and other exogenous shocks, such as the COVID-19 pandemic.

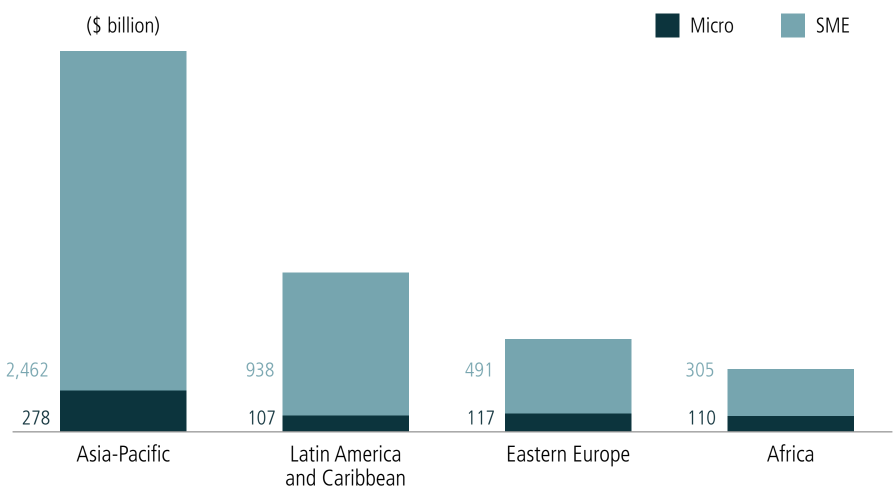
Before the COVID-19 outbreak, Asian and Pacific countries were already facing increased downside risks to their economies, accelerated by growing trade tensions and global economic uncertainty brought about by protectionist measures (ESCAP, 2020). The COVID-19 pandemic and associated health and quarantine measures imposed by governments have further exacerbated this trend. MSMEs in the Asia-Pacific region have arguably been hit the hardest. Their integral role in national economies is to stimulate domestic demand and job creation and foster competition and innovation, all of which can promote economies building back better. Thus, MSME development is a key contributor to inclusive growth in the region, and its importance has increased since the COVID-19 outbreak, as part of countries' attempts to engineer speedy economic recoveries. Among the common factors impeding MSME development, poor access to financial services is the most critical constraint for MSMEs to survive (Abe, Troilo, and Batsaikhan, 2015). During the pandemic, MSME owners reported a serious lack of funds to continue their business operations, and have had huge difficulty in raising enough working capital, across numerous countries (ADB, 2020b).

This chapter reviews the condition of MSME financing before the COVID-19 outbreak, as a benchmark to understand the pandemic's impact on MSMEs' access to finance in Asia and the Pacific. The chapter also examines finance policy directions taken to support MSMEs' survival and growth, addressing which conditions should continue, and which may need to be restructured under the new normal, after the virus is contained. This chapter particularly focuses on a number of South-East Asian examples from the *Asia Small and Medium-sized Enterprise Monitor 2020* (ADB, 2020a; 2020b).

2. MSME finance gap[12]

Inadequate access to finance is a long-standing structural problem that MSMEs face in developing Asia and the Pacific. The International Finance Corporation (IFC) (2017) estimated that the financing gap for formal MSMEs in developing economies amounted to US$ 5.2 trillion in 2017, or 19 per cent of global GDP. By region, based on the recomposed data following the United Nations regional groups, Asia and the Pacific recorded the highest financing gap in the world, accounting for 57 per cent of the total financing gap, or US$ 2.7 trillion (US$ 2.46 trillion for small firms and US$ 278 billion for micro-enterprises). See figure II.1. In Asia-Pacific developing countries, enhancing MSME access to finance has consistently been a policy priority within their wider financial inclusion strategies. Governments in the region have launched numerous assistance measures to improve financial access for MSMEs, such as offering concessional loans, providing public credit guarantees and initiating secured lending programmes.

Figure II.1: MSME finance gap in developing economies



Source: The author, recomposed from IFC (2017)
Note: MSME finance gap is based on the United Nations regional groupings.

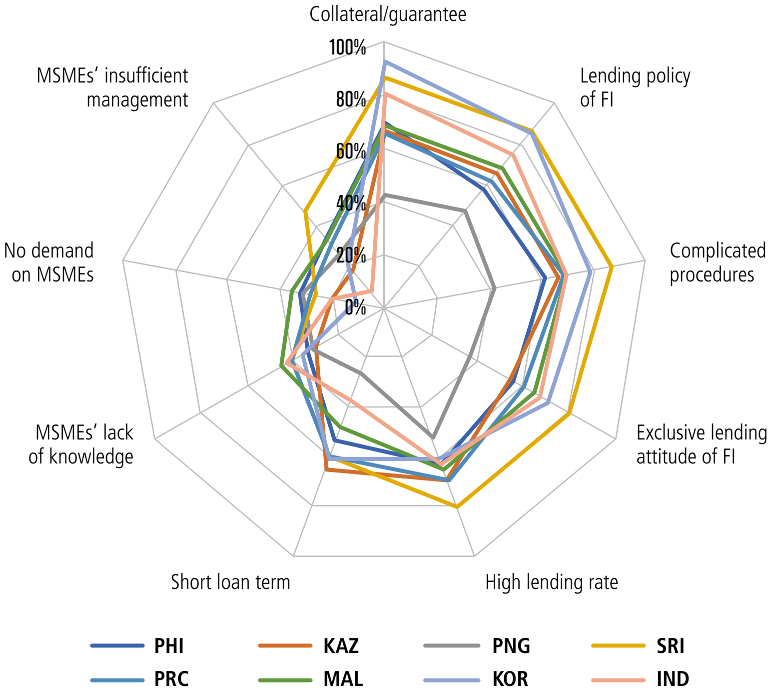
12. 'Finance gap' in this book refers to a gap within the corporate finance of an MSME or its aggregated amount in an economy.

However, a huge financing gap still remains in developing Asia and the Pacific, which raises a question: why does the MSME finance gap seemingly never disappear, despite considerable and consistent government efforts? The answer appears to be a structural one: nationally, regionally, and globally.

MSME surveys conducted by the Asian Development Bank (ADB) in eight countries (China, India, Kazakhstan, Malaysia, Papua New Guinea, the Philippines, the Republic of Korea, and Sri Lanka) during 2013 and 2015 revealed several supply-side barriers.[13] See figure II.2. Inadequate collateral and guarantee requirements for loans were the top barriers for MSMEs to access formal financial services (71 per cent of total respondents), followed by financial institutions' strict lending policies (69 per cent), complicated procedures to borrow money (68 per cent), and high lending rates (65 per cent). The surveys also identified two demand-side problems: a lack of knowledge of available financial products and services (37 per cent), and MSMEs' insufficient management skills and human resources (27 per cent). Moreover, 26 per cent of MSME respondents reported having no demand for funds from formal financial institutions. This suggests a hesitation to go to banks due to their perception that banks will never lend to them, but does not mean that they have adequate working capital to operate. This perception by MSME owners has led them to a high reliance on their own funds (47 per cent), including borrowing from close relatives (20 per cent) and/or informal money lenders (5 per cent).

13. From an aggregate sample of 626 MSMEs, comprising China (303), India (40), Kazakhstan (98), Malaysia (60), Papua New Guinea (19), the Philippines (63), the Republic of Korea (28), and Sri Lanka (15).

Figure II.2: Barriers for MSMEs to accessing financial institutions



Source: Modified from Shinozaki (2019).
Notes: FI stands for financial institution. PHI=the Philippines, KAZ=Kazakhstan, PNG=Papua New Guinea, SRI=Sri Lanka, PRC=China, MAL=Malaysia, KOR=Republic of Korea, and IND=India.

Box II.1
Providing non-collateralized loans: The case of Bangladesh

Like those of other developing countries, Bangladeshi MSMEs have faced difficulties in accessing capital and credit (Hossain, Yoshino, and Taghizadeh-Hesary, 2018). They are in need of small short-term loans to maintain their working capital, and are often obliged to take loans from informal sources at high interest rates to meet their emergency needs, which have increased during the COVID-19 pandemic. In this regard, collateral-free loans would enhance access to finance for previously underserved MSMEs.

Led by City Bank and bKash (a mobile finance service provider), during the third quarter of 2020, a collateral-free digital lending project was launched where a select group of bKash's small business customers were eligible for a loan of up to Tk 10

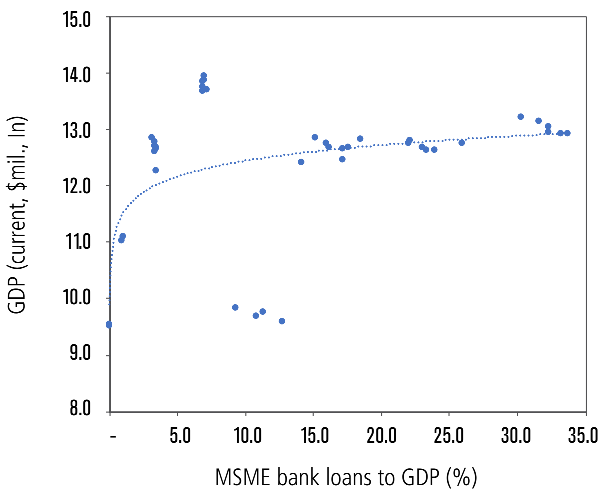
000 (equal to roughly US$ 120) (ibid.). Rather than going through the traditional loan process, equal monthly instalments (EMIs) are deducted automatically from the owners' bKash accounts on fixed due dates. The borrowers are also able to pay before EMIs' due dates, and thereby reduce interest payments, as the bank will associate early repayment with lower interest rates. MSME borrowers are notified through a text message before every due date for the EMIs. This collateral-free loan initiative can enhance financial inclusion among MSMEs that have been marginalized in the institutional debt market, although they still need to accept an interest rate that is higher than traditional institutional debt schemes.

3. Bank credit and financial infrastructure

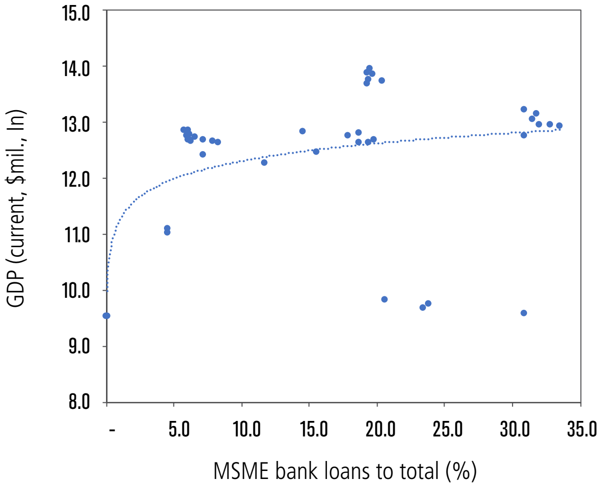
When looking at the banking sector prior to the COVID-19 pandemic, the level of MSME access to bank credit was broadly correlated with the size of the national economy. And it also indicated that capital flows to the MSME sector contributed to the economic development of a nation. Bank credit data in South-East Asian countries during 2010-2019 shows that total MSME loans outstanding tended to be greater in larger economies (figure II.3A), and that the proportion of MSME loans to total bank loan portfolio was also larger in those economies (figure II.3B), although the precise conditions might vary by country.

Figure II.3: Bank credit to MSMEs in South-East Asia

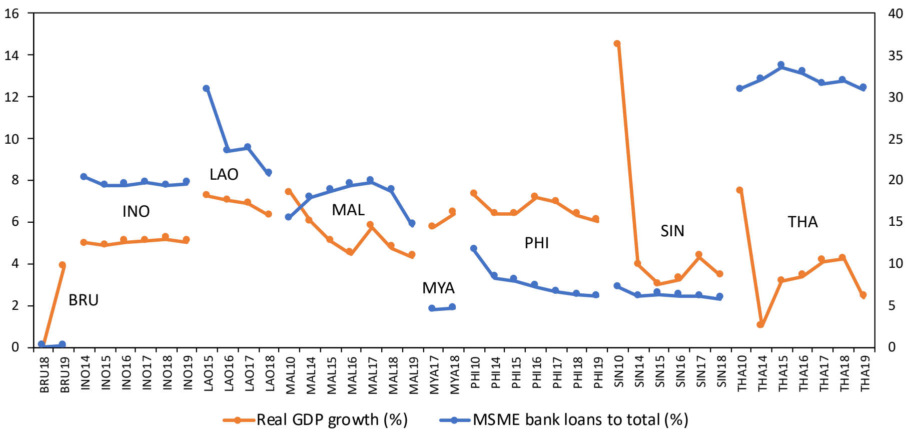
A: MSME loans to GDP



B: MSME loans to total loans



C: GDP growth and MSME loans



Source: The author, recomposed from ADB (2020a).

Notes: BRU=Brunei Darussalam (2018-2019), INO=Indonesia (2014-2019), LAO=Lao PDR (2015-2018), MAL=Malaysia (2010 and 2014-2019), MYA=Myanmar (2017-2018), PHI=Philippines (2010 and 2014-2019), SIN=Singapore (2010 and 2014-2018), THA=Thailand (2010 and 2014-2019). Figures II.3A-C cover these countries and years. In figure II.3C, the right-hand scale is for 'MSME bank loan to total' while the left-hand scale is for 'real GDP growth'.

However, the MSME credit market remains small in scale, and its share of the total credit market has actually been gradually shrinking, as national economic growth slows. In South-East Asia, bank loans to MSMEs made up an average 15 per cent of a country's GDP and 17 per cent of total bank lending during 2010–2019, with sluggish growth at 1.3 per cent and 0.3 per cent compound annual contraction, respectively (ADB, 2020a). Overall, countries with decelerating growth in the region are facing a decline in the share of MSME loans to total bank loans over time (figure II.3C). Also, MSMEs' non-performing loans (NPLs) are relatively larger than those for non-MSME loans. MSMEs' NPLs accounted for an average of 4.1 per cent of total MSME bank loans, versus an overall bank average of 2.0 per cent in the region, although the MSME NPL ratio is gradually improving over time (ADB, 2020a).

In developing Asia and the Pacific, commercial banks tend to prefer real estate as loan collateral. Laws often permit the use of movable assets (e.g. machinery and inventory) as collateral for bank loans, but it is normally at a bank's discretion and seen as a less favourable option for many banks. This is especially true for MSME loans, as theirs are regarded as higher-risk assets, particularly in countries with no credit registries/bureaus and/or collateral registries (ESCAP, 2017). A tightening in international banking regulation – the Basel Capital Accords – also impacts banks' risk preferences, further constraining their ability and willingness to provide loans to MSMEs. A well-developed financial infrastructure with sound legislation – such as credit data platforms and secured transaction laws – is indispensable to reduce the funding gap in MSME finance. Most Asia-Pacific developing countries hold a credit registry or bureau, whether in the form of a central bank-operated entity or a private business, either with a centralized (single registry or bureau in the country) or a competitive system (plural registries/bureaus) (ADB, 2020a). However, their collective enterprise data has yet to be well utilized to develop credit scorings/ratings in many cases. In addition, their business orientation is rarely dedicated to MSMEs. A credit risk database such as Japan's does not appear elsewhere in developing Asia and the Pacific.

A secured lending legislation generally creates an online collateral registry and facilitates financial institutions to use movable assets as loan collateral. Across Asia and the Pacific, many countries still lack an adequate legal framework to promote secured transactions or asset-based finance (Freeman, 2015). Against this backdrop, the Pacific Island States – such as Micronesia, the Marshall Islands, Solomon Islands, Tonga, and Vanuatu – have undergone extensive secured transactions reforms. The reforms allow more corporate lending, with better terms, and especially benefit smaller businesses. Information asymmetry has clearly impeded bank lending to MSMEs, even before the COVID-19 pandemic (European Parliament, 2020).

4. Role of public financing

Public financing plays a critical role in mitigating the financing gap faced by MSMEs. It offers various financing modalities, such as direct or indirect lending to MSMEs, via specialized banks, special funds, soft loan programmes, and/or refinancing facilities, which are often combined with interest rate subsidies, mandatory lending, and/or credit guarantees (ADB 2020a). Public financing also acts as an emergency assistance tool for MSMEs when unexpected events strike, such as the COVID-19 pandemic. Many Asia-Pacific developing countries have a specialized bank dedicated to MSMEs, and most of them are state-owned. For example, in South-East Asia alone, an MSME-focused bank that offers concessional or subsidized loans, or an Islamic-compliant product, is operating in Brunei Darussalam (Bank Usahawan), Cambodia (SME Bank), Malaysia (SME Bank), Myanmar (Small and Medium Industrial Bank), and Thailand (Small and Medium Enterprise Development Bank). These specialized banks are a critical delivery channel of finance to MSMEs confronting external shocks, such as financial crises, disasters, and epidemics.

Soft loan programmes, special funds, and refinancing schemes are a common tool for financial assistance to MSMEs in developing Asia and the Pacific. For example, special government funds have been established in the Lao PDR (SME Promotion Fund), Malaysia (26 government funds eligible for financing MSMEs), and Viet Nam (SME Development Fund and Credit Guarantee Fund) to offer concessional MSME loans (ADB, 2020a). Those funds have also been used for financing MSMEs affected by COVID-19. The Philippines has soft loan programmes for un-served or under-served micro-enterprises and entrepreneurs in the poorest provinces (Access of Small Enterprises to Sound Lending Opportunity [ASENSO] programme and the Pondo sa Pagbabago at Pag-Asenso [P3] programme). Myanmar offers financial intermediation loans (two-step loans) at below-market rates for MSMEs, assisted by Japan International Cooperation Agency (JICA). Some countries have developed a mandatory lending scheme. Indonesia introduced one in 2012, requiring banks to allocate 20 per cent of their loan portfolio to MSMEs. The Philippines mandated banks to allocate 10 per cent of their loan portfolio to MSMEs until 2018, following the 1991 Magna Carta, and the 2019 Philippine Innovation Act provides another 4 per cent mandatory lending for innovative businesses, including start-ups and MSMEs (ADB, 2020a).

Credit guarantee schemes are probably the most popular tool to help finance MSMEs in Asia and the Pacific, which are generally linked to the implementation of mid- to long-term government MSME development policies. Indonesia has operated a public guaranteed loan scheme for MSMEs called Kredit Usaha Rakyat (KUR) since 2007 (Wardhono, Modjo, and Utami, 2019). The Philippines created a centralized credit guarantee corporation – PhilGuarantee – in 2019, merging existing guarantee schemes in the country. And Thailand also has a centralized guarantee institution; the Thai Credit Guarantee Corporation, offering portfolio guarantees for MSMEs.

Box II.2
Credit guarantee corporations

MSME credit markets are often considered to be less efficient and imperfect. Seen as a high-risk group, young and small-sized companies, such as start-ups, typically find it hard to borrow money from a financial institution, even if they are willing to pay a higher interest rate to reflect this risk premium (OECD, 2015; World Bank, 2015). Some MSMEs may provide additional collateral, which can reduce the lending risk and make them easier to borrow. However, most of MSMEs do not have sufficient assets to provide as loan security, and this lack of collateral is a major challenge for MSMEs seeking external finance.

To alleviate this constraint that MSMEs are facing, public credit guarantee corporations (CGCs) have become a common player in many economies. A CGC is typically an institution established and funded by a government to ease the difficulties of MSMEs' access to finance (EIB, 2014). In case of defaults, CGCs absorb all or part of the loan loss incurred, so that they – in cooperation with the banking and finance sector – can leverage more liquidity for the MSME sector (ibid). While CGCs' role may cause moral hazard and adverse selection, they can transfer and diversify the potential default risk by providing a third-party credit risk mitigation for both MSME lenders and financial institutions.

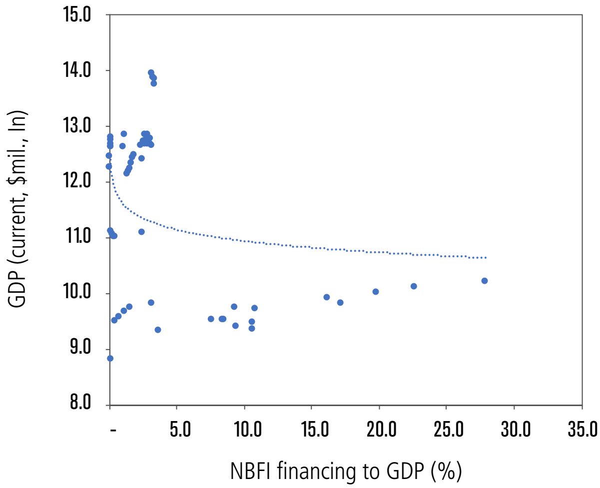
But they typically incur losses that then need to be underwritten by public funds, which can pose difficulties for less developed economies. There is also the critical need that CGCs are trusted by banks and other finance providers to honour their commitments to fully or partially losses incurred on loans that default, otherwise their desired impact – of increasing aggregate loan levels to the MSME sector – is not achieved (Ilhyock, 2006).

5. Non-bank and market-based financing

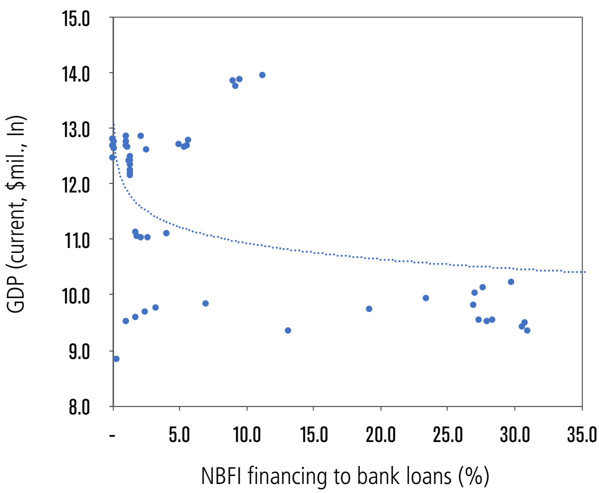
The non-bank finance industry – represented by micro-finance institutions, credit cooperatives, finance companies, pawnshops, and leasing companies – is small in scale but growing in developing Asia and the Pacific. Non-bank finance institutions (NBFIs) generally do not target MSMEs for their business, but can act as viable substitutes for banks in offering working capital for MSMEs (Tadjibaeva, 2019). NBFI data for 2010-2019 in South-East Asia shows that the share of NBFI financing to GDP tended to decrease in more developed economies (figure II.4A) while the share of NBFI financing to bank loans also decreased in those economies (figure II.4B), although the specifics clearly differ across individual countries. This suggests that the banking sector supports the financing demand from MSMEs in more developed economies relatively well, while NBFIs supplement a shortage of MSME working capital in less developed economies in particular. In South-East Asia, NBFI financing accounted for 4 per cent of a country's GDP and 9 per cent of total bank lending during 2010–2019 on average, with compound annual growth of 13.1 per cent and 3.2 per cent, respectively (ADB, 2020a). The non-performing financing ratio was a negligible 0.8 per cent in the region.

Figure II.4: Nonbank and market-based financing in South-East Asia

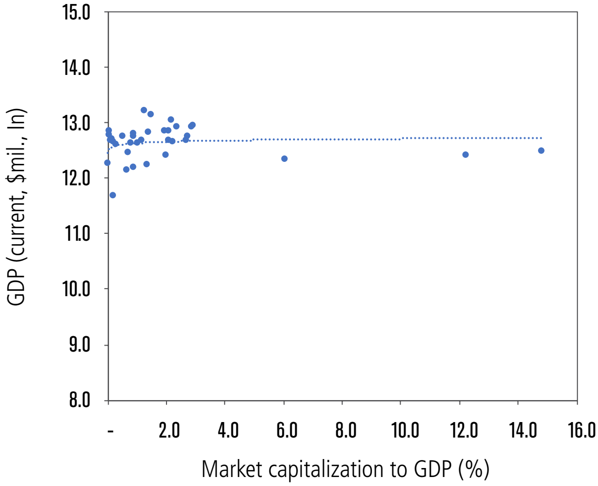
A: NBFI financing to GDP



B: NBFI financing to bank loans



C: MSME equity markets



Source: The author, recomposed from ADB (2020a).

Notes: NBFI includes micro-finance institutions, finance companies, leasing companies, factoring companies, credit unions and cooperatives, and pawnshops. Malaysia includes private equity and venture capital companies. Figures II.4A and II.4B cover Brunei Darussalam (2010 and 2014-2019), Cambodia (2010 and 2014-2019), Indonesia (2016-2019), Lao PDR (2010 and 2014-2018), Malaysia (2010 and 2014-2018), Myanmar (2014-2018), the Philippines (2010 and 2014-2019), Singapore (2010 and 2014-2019), and Viet Nam (2014-2019). Figure II.4C covers South-East Asian equity markets for MSMEs, namely Malaysia's ACE and LEAP, the Philippines' SME Board, Singapore's Catalist, Thailand's mai, and Viet Nam's UPCoM.

There are also equity markets that MSMEs can tap in developing Asia and the Pacific. Over the last ten years, MSME equity markets have been created in several Asia-Pacific developing countries. These markets have been mainly developed in upper-middle-income or high-income economies (figure II.4C). They remain small in scale but are gradually expanding. Their market capitalization averaged 8 per cent of a country's GDP during 2010-2019, with compound annual growth of 1 per cent (ADB, 2020a). There are roughly three types of MSME markets developed in the region: (i) a dedicated board of the stock exchange that offers concessional listing requirements for MSMEs; (ii) a sponsor/advisor-driven alternative investment market (AIM), modelled on the United Kingdom's AIM;[14] and (iii) a dedicated MSME

14. Companies seeking to list on AIM in London must have a 'nominated advisor' (NOMAD), approved by the stock market, to assist with the initial public offering (IPO) and listing, and all subsequent company reporting. The role of the NOMAD is in addition to the company's, broker(s), accountant and legal advisor. A NOMAD is essentially a corporate finance advisor that ensures the relevant MSME's reporting is compliant with all stock market related laws and regulations, as well as providing some strategic guidance to the company's board of directors. The stock exchange sets minimum criteria by which such advisory firms can be approved as NOMADs.

market (OECD, 2020a). For example, Indonesia created a new board for MSMEs called the Acceleration Board at the Indonesia Stock Exchange in 2019, and trading started with one listed company in 2020. Singapore's Catalist (launched in 2007) and Thailand's mai (1998) both belong to the AIM typed markets (Shinozaki, 2014). The recent development of MSME equity markets in developing Asia and the Pacific has been a direct response to their demand for long-term growth capital.

Box II.3
LEAP: A new advisor-driven market for MSMEs in Malaysia

Bursa Malaysia, the stock exchange of Malaysia, consists of three major stock markets: (i) the MAIN Market, or the Kuala Lumpur Stock Exchange (KLSE); (ii) the Access, Certainty, and Efficiency (ACE) Market, which is the new name for the former Malaysian Exchange of Securities Dealing and Automated Quotation (MESDAQ) and a sponsor-driven market designated for growing firms, with 129 listed companies as of end-2019; and (iii) the Leading Entrepreneur Accelerator Platform (LEAP) Market, an advisor-driven market for emerging firms and MSMEs, with 28 listed companies as of end-2019. While the MAIN Market welcomes large multinational firms from prominent sectors like oil and airlines (Isa, Ismail, and Isa, 2019), the ACE Market consists of firms from sectors of emerging technologies and young companies looking for financing (Isa, Ismail, and Isa, 2019; Mohd-Saleh and Rahman, 2009). The LEAP Market is a newly developed market established in 2017 that gathers MSMEs, intermediaries, advanced investors, and advisors. It aims to provide effective and efficient fund-raising for MSMEs, and especially start-ups (Isa, Ismail, and Isa, 2019).

Due to its perceived risks, the LEAP Market restricts investor access to only those individuals and corporate investors who pass several criteria, such as income and net assets. Compared to the Malaysia Venture Capital Management Berhad (MAVCAP) or the Malaysia Tech Entrepreneur Program (MTEP), which are private and government-backed markets, the LEAP Market aims to offer investors with a wider and more open access to capital, as well as a more efficient and transparent pricing process. Further, approved advisors assess and decide whether an MSME that seeks to list on the LEAP Market is eligible to do so, based on such requirements as business plans, good corporate governance, and tracking records of business and management. It is a market for professional investors that can take risks associated with MSME issuers.

The LEAP Market provides business development facilities for MSMEs with funds and experience from investors and advisors (Harrison and others, 2018). The market has been helping MSMEs by matching them with relevant advisors to their respective area of business. Once accepted, MSMEs are accompanied by their advisors through their journey of development. The market, therefore, works as a stepping-stone for MSMEs to move up to the MAIN or ACE Market. In the LEAP Market, listed MSMEs can benefit from lower costs of compliance. Besides filling some the financing gap, the market also acts as a platform for MSMEs to enhance their company profile and reputation. This concept could be adapted by other countries in the region that wish to support MSMEs with long-term finance, using their capital markets.

6. Financing for technology and innovation-driven MSMEs

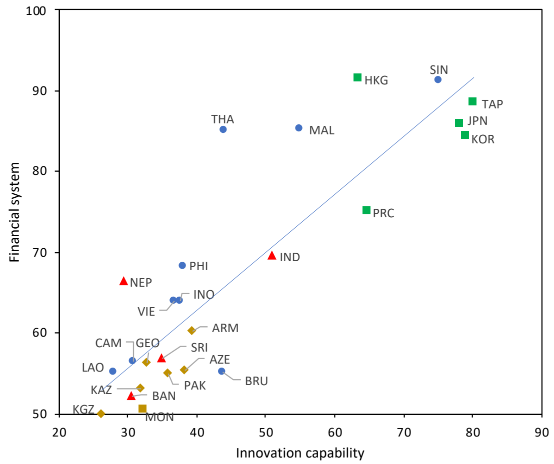
A modern financial system is a prerequisite to encourage investments in technology and facilitate innovation. The Global Competitiveness Index 2019 (World Economic Forum, 2019) ranks the level of countries' overall competitiveness, and serves to illustrate a large spread among Asia-Pacific economies; from Singapore ranked at the top, to Lao PDR ranked 113 out of 141 economies. Within the Asia and Pacific region, North-East Asia – including China, Japan, and the Republic of Korea – has made major strides in their level of competitiveness, as measured by various metrics for the business enabling environment, human capital, market sophistication and innovation ecosystem, followed by South-East Asia, North Central Asia, and South and South-West Asia.[15]

There is a correlation between financial system sophistication and innovation capability in Asia and the Pacific (figure II.5A), which explains why countries with sound financial systems (i.e. a high level of financial depth and stability) demonstrate higher innovation capability, such as China; Japan; the Republic of Korea; Singapore; Hong Kong, China; and Taiwan Province of China. Conversely, developing and less developed Asia-Pacific countries with less modernized financial systems, especially in North Central Asia (Armenia, Azerbaijan, Georgia, Kazakhstan, and Kyrgyzstan), and South and South-West Asia (Bangladesh, Nepal, Pakistan, and Sri Lanka), are reconciled to a relatively low innovation capability. From a different perspective, countries with high business dynamism – as denoted by the emergence and growth of innovative companies with disruptive ideas – tend to have relatively larger investment levels in research and development (R&D) (figure II.5B). Such countries are mostly from high-income advanced and emerging economies, including China, Japan, the Republic of Korea, Singapore, and Taiwan Province of China. Overall, the Asia-Pacific developing countries have low investment in R&D, suggesting a lack of appropriate financing venues and options in these countries. Together with several elements including human capital, demand-responsiveness, and technology commercialization strategies, limited access to finance for innovative businesses in turn may increase the risk that the future growth potential of Asia and the Pacific will be constrained.

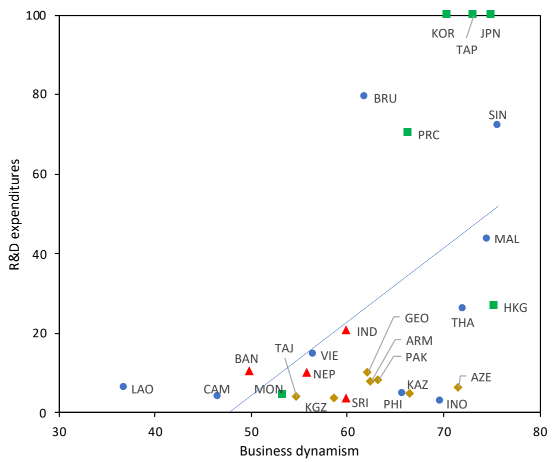
15. The Global Competitiveness Index 2019 does not cover any Pacific small island States.

Figure II.5: Innovation and finance in Asia and the Pacific

A: Innovation capability and financial system



B: Business dynamism and spending on R&D



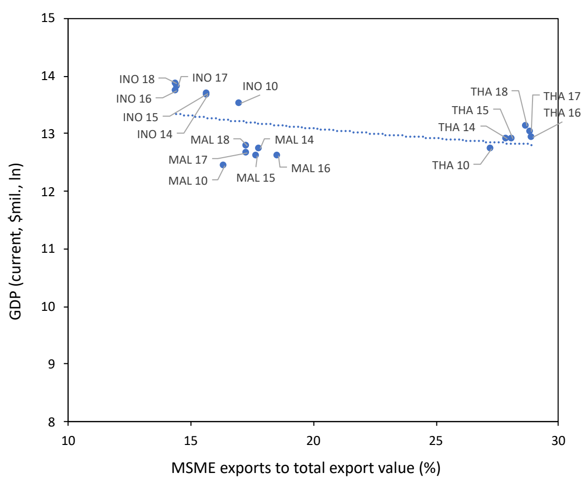
Source: The Author, recomposed from World Economic Forum (2019).
Note: Figures refer to score (0-100 [optimal]).

7. MSME internationalization and trade finance

Liberalized trade and investment brought by economic integration and expansion – such as the Association of Southeast Asian Nations (ASEAN) and the ASEAN Economic Community (AEC), the Eurasian Economic Union, and the recent Regional Comprehensive Economic Partnership (RCEP) – is promoting a structural change in the MSME business model from one that has been domestically-focused to one that is more globally competitive coupled with the emergence of global supply chains (ADB 2015a). This shift requires new policy solutions for emerging growth-oriented MSMEs. A rapidly changing business environment accelerated by intra-regional trade and foreign direct investment inflows within Asia and the Pacific is creating more opportunities for internationalized MSMEs in the region, including developing and less developed countries.[16] However, it has yet to materialize sufficiently in the region, and overall, internationalized MSMEs are more apparent in relatively larger economies such as Thailand (figure II.6A). Nonetheless, in developing Asia and the Pacific, a small number of MSMEs have been exposed to global markets as material suppliers, or in some cases as lead firms within the global supply chains (ADB, 2015b; ERIA, 2015). In South-East Asia, for example, MSMEs contributed an average 20 per cent of countries' export value during 2010–2018 (ADB, 2020a). In developing Asia and the Pacific, MSME participation in the global supply chains is limited, and international market access remains a major challenge for them.

Figure II.6: MSME exports and trade finance

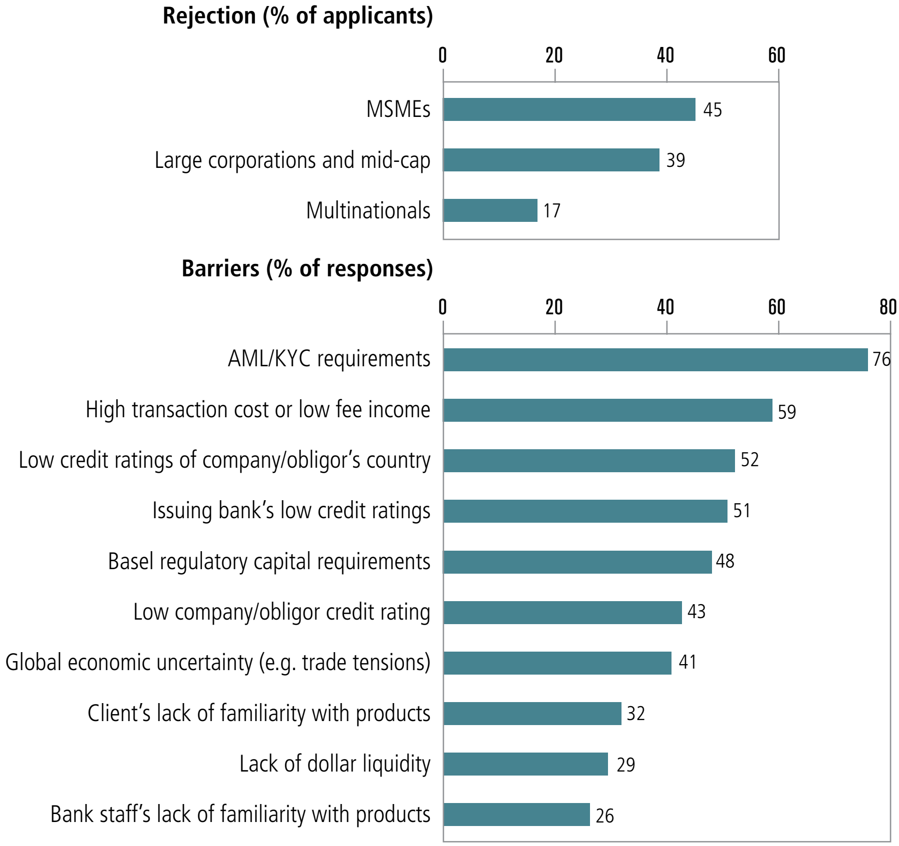
A: MSME exports to total export value



Source: The author, recomposed from ADB (2020a).
Note: The figure covers Indonesia, Malaysia, and Thailand (2010 and 2014-2018).

16. MSME internationalization could take two different forms. While this section's focus is on firms as suppliers in global value chains (B2B), there is also exporting firms serving final consumers (B2C). They would have different, though overlapping, financing needs and conditions.

B: Trade finance rejection, barriers, and MSMEs



Source: The Author, recomposed from Kim and others (2019).
Note: AML stands for anti-money laundering while KYC is know-your-customer.

A lack of access to finance – both trade finance and supply chain finance – is a critical impediment for MSMEs seeking to operate in global markets. Trade tensions and slowing global economic growth are adversely impacting global trade and getting trade finance is becoming more difficult for internationalized firms, especially MSMEs. According to the ADB trade finance gap survey (ADB, 2019),[17] MSMEs accounted for 37 per cent of trade finance demand (based on trade finance applications to banks), where the rejection rate reached 45 per cent of all applications (figure II.6B). Banks noted that a major barrier to trade finance is the legal requirements now placed on them with respect to anti-money laundering (AML) and know-your-customer (KYC), as well as relatively high transaction costs and insufficient credit ratings of the company. It was followed by low credit ratings

17. The 2019 survey collected survey data from 112 banks from 47 countries, 53 export credit agencies from 17 countries, 39 forfaitors from 20 countries, and 336 firms from 68 countries (Kim and others, 2019).

of company/obligor's country and issuing banks, and Basel regulatory capital requirements. A lack of familiarity with trade finance products among client firms including MSMEs also constituted a barrier.

During the pandemic, internationalized MSMEs (i.e. firms involved in global supply chains) faced a sharper drop in demand, delayed product delivery, supply disruptions, and contract cancellations than domestically-oriented MSMEs (ADB, 2020b). However, their survival rate during the pandemic is more likely to be higher, backed by relatively greater cash flows and balance sheets that enable them to maintain their operations and better access to finance for survival (e.g. emergency bank credit and funding support from business partners) (ibid).

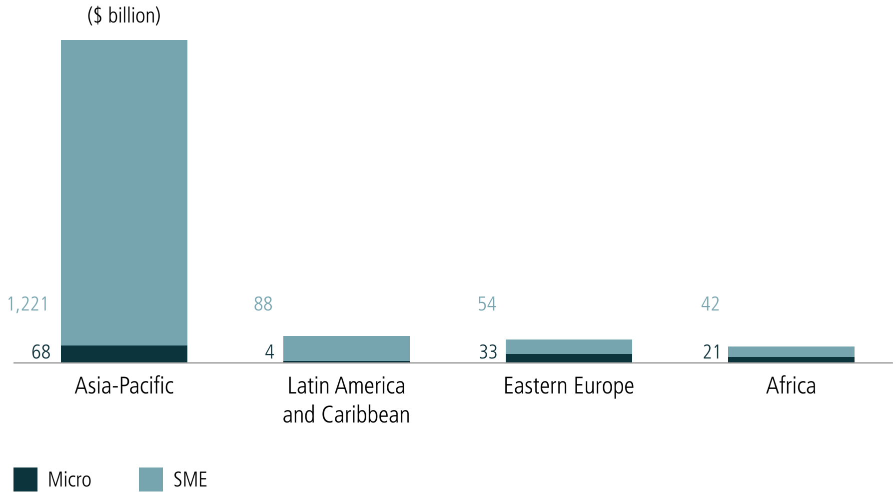
Across developing Asia and the Pacific, internationalizing MSMEs by inducing them to participate in global supply chains is crucial to boost national productivity and promote inclusive growth. Trade finance is key to supporting MSME internationalization in the region. This implies that more organized government support for international trade and finance is required to help bolster MSME participation in the global supply chains.

8. Financing women-led MSMEs

Women-led MSMEs and entrepreneurs have considerable growth potential if they are able to harness adequate financing. The IFC (2011b) reported that formal women-owned MSMEs account for 31-38 per cent of all MSMEs in emerging markets but their average growth rate is significantly lower than men-led MSMEs. Women-owned MSMEs are largely skewed to smaller firms (32-39 per cent of them for very small firms, 30-36 per cent for small MSMEs, and 17-21 per cent for medium-sized enterprises) and more likely to be in the informal sector (ibid). Access to formal financial services is much harder for smaller and informal firms which involve the large number of women-owned MSMEs. A lack of access to finance is one of the key contributors for their slow growth.

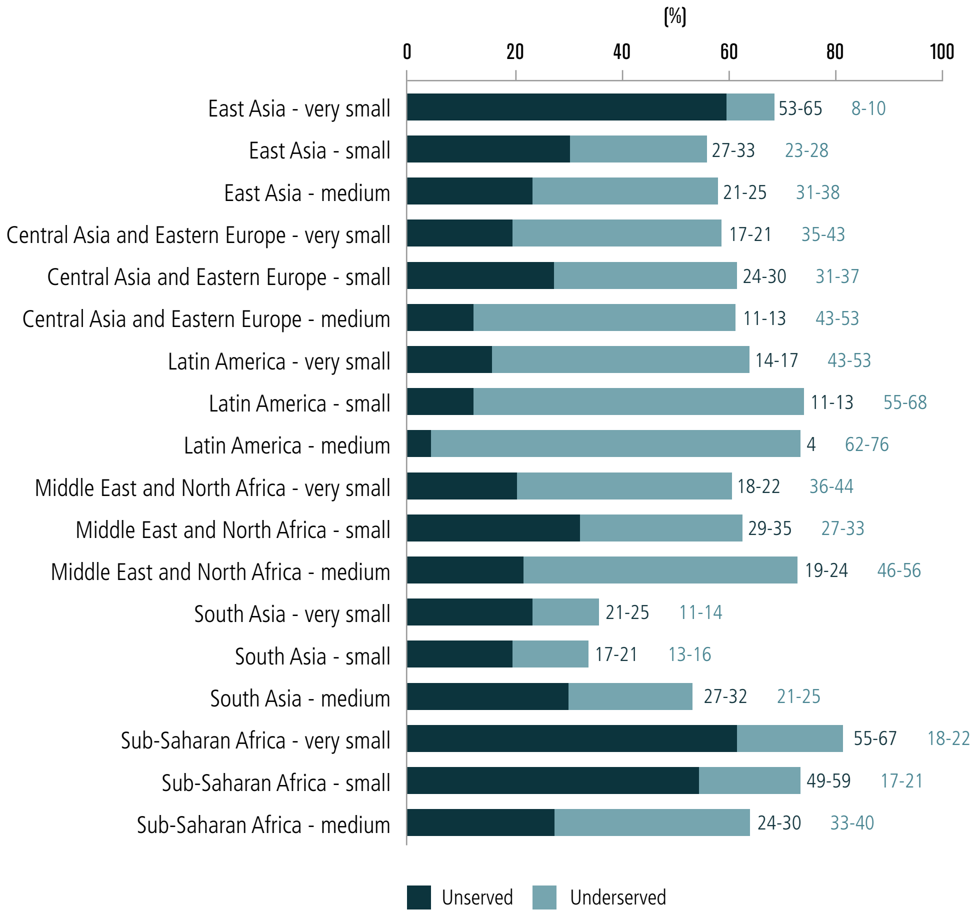
Another IFC (2017) report confirmed that women-led MSMEs face significant difficulties in getting finance. They are generally smaller than those led by men and thus employ fewer workers (ibid.). Based on the recomposed data following the United Nations regional groups, their aggregate finance gap is estimated to be US$ 1.5 trillion globally, 84 per cent of which (i.e. US$ 1.29 trillion) is from the Asia-Pacific region (figure II.7). Women-led MSMEs are less likely to obtain formal financing and often pay higher interest rates (IFC, 2011b). In East Asia, around 60 per cent or more of women-led MSMEs are un-served or under-served by formal financial institutions (figure II.8).

Figure II.7: Women-led MSME finance gap in developing economies



Source: The author, recomposed from IFC (2017).
Note: MSME finance gap is calculated as potential demand minus existing supply (see IFC (2017), pp. 7-19) based on the United Nations regional groupings.

Figure II.8: Credit access for formal women-owned MSMEs



Source: The author, recomposed from IFC (2011b, p. 35).
Note: The regional classification is based on IFC's category.

There are clearly gender-specific barriers when it comes to accessing formal financial services, which include (but are not necessarily limited to): (i) women legally unable to own immovable assets (i.e. ownership of land and buildings) that commonly serve as loan collateral; (ii) possessing less formal education and fewer qualifications; (iii) a greater degree of business informality among women-led MSMEs; and (iv) a range of other regulatory and socio-cultural barriers including financial institutions' attitude such as imposing higher interest rates to female clients (IFC, 2011b). Besides a need for direct financial assistance, women-led MSMEs also reported a need for more mentoring and financial literacy support from government. This suggests that a comprehensive policy framework, covering both finance and non-finance issues, should be elaborated further for women-led MSMEs in the region.

9. National financial inclusion strategies

In many Asia-Pacific developing countries, central banks and financial authorities have promoted financial inclusion as part of their wider national inclusive growth strategies. For example, Cambodia launched the National Financial Inclusion Strategy for 2019–2025 in 2019; Indonesia updated the National Strategy for Financial Inclusion in 2016; Lao PDR set the Financial Inclusion Roadmap for 2018–2025 in 2019; Malaysia launched the Financial Inclusion Framework in 2011; Myanmar established the Financial Inclusion Roadmap for 2014–2020; the Philippines initiated the National Strategy for Financial Inclusion in 2015; and Viet Nam set the National Financial Inclusion Strategy until 2025 (table II.1).

National financial inclusion strategies in developing Asia and the Pacific have several common components, comprising: (i) alternative and innovative financial products and services developed for MSMEs, addressing the promotion of digital finance service solutions or fintech innovation; (ii) financial literacy among MSMEs; and (iii) consumer protection (ADB, 2020a). These strategies are a key benchmark for enhancing MSME access to finance in the region.

For the successful promotion of financial inclusion nationally, intra-governmental policy coordination is indispensable. For instance, Indonesia has the National Council of Inclusive Finance, and the Philippines implements its financial inclusion strategy through the Financial Inclusion Steering Committee. Overall, Asia-Pacific developing countries tend to have good policy coordination mechanisms for MSME development and access to finance. However, some improvements are still needed in policy coordination among central government authorities, and between central and local governments, to create and implement more policy synergies (ADB, 2020a). Given the emerging risks associated with digital finance solutions, such as cybersecurity, more extensive coordination between financial regulators, government authorities, and the private sector will be also needed, so that financial inclusion efforts can benefit more MSMEs in developing Asia and the Pacific.

Table II.1: National financial inclusion strategies in South-East Asia

Country	Strategy	Launch year	Responsible entity	Outline
Cambodia	National Financial Inclusion Strategy 2019–2025	2019	National Bank of Cambodia	1) Encourage savings in formal financial institutions. 2) Promote innovative credit products for MSMEs. 3) Enable the expansion of payment system capabilities. 4) Improve broader access to insurance. 5) Strengthen the capacity of the financial sector regulators. 6) Increase consumer empowerment and protection, and financial sector transparency.
Indonesia	National Strategy for Financial Inclusion	2016	Coordinating Ministry of Economic Affairs	1) Financial education. 2) Public property rights (improvement of collateral for loans, e.g. land titling and copyright/patent certificate). 3) Financial distribution channels and intermediary facilities (e.g. digital financial services and value chain financing). 4) Government financial services (including a guaranteed micro-finance programme and non-cash subsidy and payment). 5) Customer protection.
Lao PDR	Financial Inclusion Roadmap 2018–2025	2019	Bank of the Lao PDR	1) Improving the availability and sustainability of credit. 2) Consumer protection and empowerment. 3) Strengthening village funds. 4) Payment ecosystem development. 5) Extending the outreach of banks and other financial service providers (financial outreach).
Malaysia	Financial Inclusion Framework (through 2020)	2011	Bank Negara Malaysia	1) Innovative channels. 2) Innovative products and services. 3) Effective financial institutions and infrastructure. 4) Well informed and responsible underserved.
Myanmar	Myanmar Financial Inclusion Roadmap 2014-2020	2014	Central Bank of Myanmar	1) Strengthened financial sector to better support financial inclusion. i) Institutions critical to financial inclusion are created/strengthened. ii) Market barriers across product categories are addressed. 2) Financial inclusion for three priority segments. i) Improved financial access in agriculture. ii) Increased financial access for MSMEs. iii) Financial inclusion and resilience for low income households.
Philippines	The National Strategy for Financial Inclusion	2015	Financial Inclusion Steering Committee	1) Policy and regulation that facilitate access to a wide range of financial products and services for all. 2) Financial education and consumer protection. 3) Advocacy programmes. 4) Data and measurement for proper monitoring.
Viet Nam	National Financial Inclusion Strategy	2020	State Bank of Vietnam	1) Situation assessment. 2) Directions and solutions. 3) Roadmap.

Source: The author, based on ADB (2020a).

Box II.4
Financial literacy education in Hong Kong, China

Financial literacy is a set of financial knowledge and skills, which helps investors allocate their financial asset effectively and get much more profits from the financial market. Meanwhile, it benefits and supports MSME owners to improve the quality of their business and investment management.

Investor and Financial Education Council (IFEC) was established in 2012 to improve the level of financial literacy among Hong Kong citizens. IFEC targets on five main groups: youth, working adults, elderly, vulnerable groups, and school children. It provides various financial training activities and conducts a number of competitions on financial literacy. For example, it has held teaching competitions on business and education at middle schools, which enable students learn entrepreneurship and acquire basic financial management skills. It also provides many online programmes and publishes articles through its website to help potential entrepreneurs and MSME owners start and run a business and enhance financial literacy.

According to the Survey on Adult Financial Literacy (OECD, 2020b), Hong Kong, China, ranked on the top with the highest score (14.8) in the survey. As a leading financial centre in Asia and the Pacific, IEFC's work presents a good example for other Asia-Pacific countries to develop a financial literacy strategy for MSME development.

Source: https://www.ifec.org.hk/web/en/about-ifec/about-us.page.

10. Rise of digital financial services

The advent of financial technology, or fintech, has been sharply changing the financial sector's architecture and landscape. Digital financial services have spread widely across Asia and the Pacific, and are expected to fill much of the unmet financing demand from MSMEs and accelerate financial inclusion (ADB, 2017). Besides traditional financial institutions, new players – such as telecom companies, mobile network operators, and cash agents – have emerged in the financial markets, and developed new and alternative financial products and services. They include (but are not limited to): peer-to-peer (P2P) lending, e-commerce finance, online supply chain finance, and equity crowdfunding.

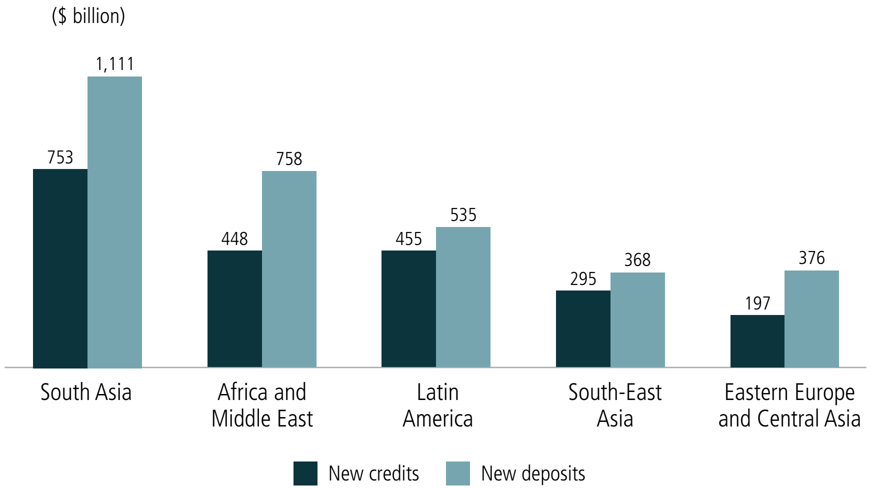
P2P lending refers to lending flexible amounts of money to borrowers without going to physical bank branches and with no collateral requirements.[18] E-commerce platforms such as Alibaba, Amazon, and eBay are offering working capital loans for MSMEs through their platforms for selling goods.[19] Compared with traditional trade finance, online supply chain finance relieves many inevitable risks, such as information asymmetry, bogus transaction, and operational risk caused by insufficient information flows between enterprises and financial service providers along the supply chain. With all the data online, those entities participated in the supply chain can enhance and monitor capital flows timely and in a secured and transparent manner while increasing liquidity.[20] Crowdfunding is the term generally used to describe a person or company raising funds from a large number of people (the crowd). Equity crowdfunding is a type of crowdfunding where issuers raise funds via an online platform in return for equities/shares. It is a method of raising capital normally used by start-ups and early-stage companies, where each investor is entitled to a stake in the company proportional to their investment.[21]

In 2016, McKinsey estimated that digital finance can create US$ 2.1 trillion in new credit and US$ 4.2 trillion in new deposits globally by 2025 (figure II.9A). By region, except for China, South Asia has the highest potential to benefit from digital financial services, with estimates of new credit of US$ 753 billion and new deposits of US$ 1.1 trillion created by digital finance. An ADB (2017) study conducted in Cambodia, Indonesia, Myanmar, and the Philippines revealed that digital finance would have a significant and positive impact on promoting access to finance for low-income households, women, and MSMEs (figure II.9B). For example, the study estimated that unmet demand for payments, credits, and savings in Indonesia accounted for 65 per cent, 36 per cent, and 26 per cent, respectively, of total demand and that digital finance would reduce the financing gap by 37per cent, 20 per cent, and 35 per cent for payments, credits, and savings, respectively.

18. Peer-to-peer (P2P) lending normally offers faster and low-cost financing to borrowers as well as higher returns to investors. Meanwhile, it is exposed to high credit risks and no insurance/government protection to lenders in case of borrowers' default. For details, visit: https://corporatefinanceinstitute.com/resources/knowledge/finance/peer-to-peer-lending/.
19. For details visit: https://corporatefinanceinstitute.com/resources/careers/jobs/introduction-to-e-commerce-guide/.
20. For details, visit: https://www.adb.org/what-we-do/trade-supply-chain-finance-program/main.
21. For details, visit: https://www.seedrs.com/; https://corporatefinanceinstitute.com/resources/knowledge/finance/equity-crowdfunding/; and https://australianfintech.com.au/equity-crowdfunding-fintech-story/.

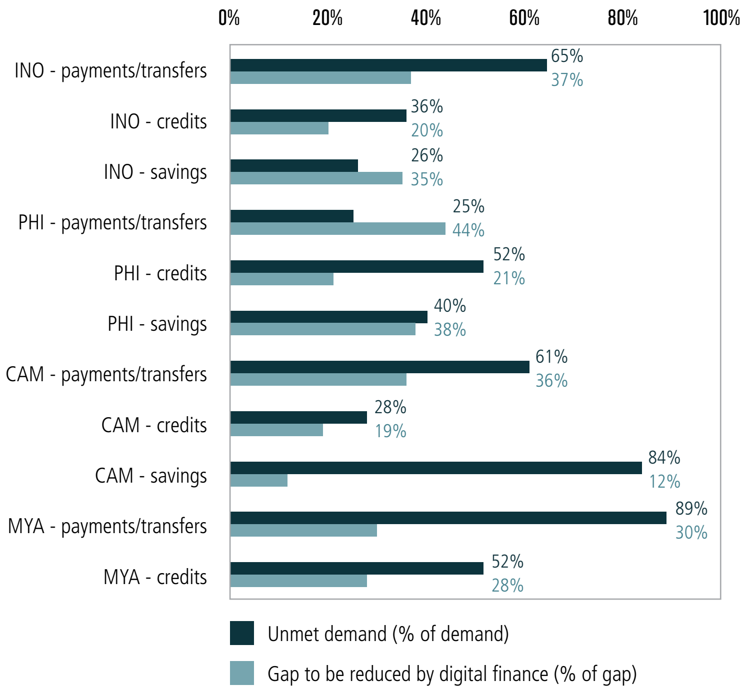
Figure II.9: Benefits from digital financial services

A: Estimated new credits and deposits, 2025



Source: The author, based on McKinsey (2016).

B: Finance gap in South-East Asia



Source: The author, recomposed from ADB (2017).
Note: INO=Indonesia, PHI=Philippines, CAM=Cambodia, and MYA=Myanmar.

In developing Asia and the Pacific, the number of fintech firms has been increasing, but many still operate informally (ADB, 2020a). To respond to this, central banks and financial authorities in the region have started regulating digital financial services, addressing branch-less/agent banking, P2P lending platforms, equity crowd-funding, and cyber security.

To develop a healthy digital finance industry, each country must first focus on developing a national payment system as the basis of a digital finance infrastructure. Inter-operable national payment gateways have been created in several Asia-Pacific countries, such as: Gerbang Pembayaran Nasional (GPN) in Indonesia (launched in 2017), PayNet in Malaysia (2019), National Retail Payment System (NRPS) in the Philippines (2018), and PromptPay in Thailand (2017).[22] A digital identification system has also been developed in some countries, such as PhilSys in the Philippines and NDID (pilot testing as of end-2019) in Thailand, which are expected to simplify private business transactions.[23]

Box II.5
So, what precisely is fintech?

The term 'fintech' is used a lot in this volume, but what does it mean? Fintech has become an umbrella term for a number of technology-driven advances and innovations that are changing the way finance provision, including banking, can be enacted (Anagnostopoulos, 2018; Fintech Global, 2021). These advances are unlocking a range of new products and services that have the potential to make MSME finance, along with other fields of financing, much more accessible, cheaper, and better tailored to the specific needs of individual clients. No longer will an MSME be obliged to pick from a limited number of standardized financial products; instead, it will be able to access a bespoke financial offering that precisely meets is specific needs. But unlike the higher costs usually associated with a bespoke product, these will be markedly cheaper to access, and in so doing, fintech promises to propel a major advance in financial inclusion. Or at least, that is the theory.

We have identified a number of components of fintech that, working together, are expected to revolutionize the banking and financial sector in the next decade. They comprise (in no particular order) the following:

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22. For details, visit: https://www.bankmayapada.com/en/e-channel-services/national-payment-gateway; https://paynet.my/index.html; https://www.bsp.gov.ph/Pages/PAYMENTS%20AND%20SETTLEMENTS/National%20Retail%20Payment%20System/The-Regulatory-Framework.aspx; and https://www.bangkokbank.com/en/Personal/Digital-Banking/PromptPay.
23. For details, visit: https://psa.gov.ph/taxonomy/term/3393; and https://www.ndid.co.th/.

Big data and data mining: Big data entails the analysis of very large amounts of conventional and unconventional data, from which to conduct accurate risk analyses and forecasts (Sivarajah and others, 2017). In so doing, finance providers can have a higher level of confidence about the informed risks they are taking in providing products and services to individual clients. This in turn can result in more inclusive portfolios, and prices that reflect a lower level of risk. This is also possible through data mining which refers to extracting patterns and trends from a large amount of data, i.e. big data (Susswein, n.d.). It is mainly used in statistics, with the support of AI and machine learning. It can analyze relationships and patterns in stored transactions that assist financing decision. For example, in credit scoring, data mining helps detect fraud by checking the past transactions of a company.

Alternative data for credit scoring: Alternative data are all non-financial data that may be used to examine behavioural trends (Susswein, n.d.). The data may be for example, airtime purchase (mobile credit recharge) frequency, airtime credit number, or social media interactions and behaviours. Alternative data has become an important source of credit assessment for individuals or MSMEs who do not have business relationships with traditional financial institutions. The usage of alternative data can boost financial inclusion as for example many fintech firms operating in emerging economies use them in collaboration with banks and mobile network operators.

Artificial intelligence (AI) and machine learning (ML): AI revolves around the use of software to help computers to continually learn from the activities they are asked to perform, and thereby become more adept at those tasks over time (Heath, 2020). ML's ability to learn and predict outcomes helps fintech identify emerging market opportunities and working out coherent strategies (Oleksyuk, 2019). AI combined with MI algorithms detects correlations among sequences and events, extracting useful information that is camouflaged among vast data sets, e.g. big data, and recognizing patterns and recurring themes, spotting inconsistencies that might be issues of concern, such as money laundering.

Open banking: Open banking refers to a technological trend whereby network connections can be made between the data and systems used by traditional financiers, such as banks, and third-party systems, such as through the use of specialized applications, resulting in more holistic service provision for clients (Brodsky and Oakes, 2017).

Cloud: The cloud is simply a means to store large amounts of digital data, which can be up-loaded and/or downloaded when required, through applications, websites, and other means of retrieval (Chuard, 2020).

Blockchain: Blockchain, sometimes also known as 'distributed ledger', is a diverse, decentralized system of independent servers and storage devices that can hold and cross-verify large amounts of data on a single platform (Lootsma, 2017). This data cannot be removed, and is held in a data chain, or 'ledger'. Blockchain technology is behind various crypto-currencies (see below).

Cryptocurrency and central bank digital currencies (CBDCs): Cryptocurrencies have been defined as a digital asset that can be used as a virtual form of currency, or medium of exchange (Frankenfield, 2021). They are not issued by a central bank or a conventional source of a recognized currency. The most well-known cryptocurrency is Bitcoin, but there are numerous others in circulation. A central bank digital currency (CBDC) uses a blockchain-based token to reflect the digital version of a specific nation's fiat currency (ibid.). A CBDC is centralized; it is issued by the country's competent monetary authority and controlled by it. As of 2020, about 80 per cent of central banks worldwide were looking at implementing CBDCs, and more than half had started running experimental pilots.

Mobile payment: Leveraging the increasing sophistication of smart phones, mobile payment applications allow clients to conduct financial business at virtually any time or place, without the need for a computer (Bosch, n.d.).

Internet of things (IoT) and quantum computing: The IoT denotes the increased connectivity and exchange of data between computers and electronic devices (Gillis, n.d.). This allows for more complex and integrated activities to be undertaken, including in the field of financial services and products provision. Quantum theory-driven advances in computing power allow for the rapid analysis of extremely large and complex data sets (Orúsabcd, Mugelde, and Lizasod, 2019).

Crowdfunding platforms and peer-to-peer (P2P) lending: Crowdfunding is the practice of funding a project or venture by raising small amounts of money from multiple people, typically via the Internet (CFI, n.d; SEEDRS, n.d.). Crowdfunding gives investors an equity stake in the project they decide to invest in (Kourabas, n.d.). P2P lending enables MSMEs to obtain loans directly from other individuals or companies, cutting out financial institution as the middleman (Kagan, 2020).

5G digital banking: 5G is the fifth-generation technology standard for cellular networks, which cellular phone companies began deploying worldwide in 2019: the successor of the 4G networks which provide connectivity to most current smartphones (ITU, 2018). In the banking industry, 5G can reduce lag times to less than one millisecond, which can provide a more efficient mobile banking experience in real time (Thales Group, 2020). 5G is expected to simplify the lengthy procedures of receiving credit for large-ticket transactions, from applications to credit checks and lending packages, as well as loan penalties.

Regtech: can be defined as the use of new technologies to solve regulatory and compliance requirements more effectively and efficiently (Anagnostopoulos, 2018; Colaert, 2018). While regtech extends well beyond the field of banking and finance to include all areas of business regulation, it is referred to here in the context of MSME finance. Regtech has potential to allow better compliance strategies, improving performances and productivity, and reducing barriers to entry for MSMEs looking for financing options. Regtech is being used by both regulators and institutions to address increasingly cumbersome compliance processes, and can also help MSMEs monitoring transactions recognizing money laundering, frauds, and the funding of terrorism. Regtech also eases increasingly onerous know-your-customer (KYC) regulations. For example, the identification of customers could become more effective with the use of automated solutions, such as fingerprint, retina, and face scanning (Arner, Barberis, and Buckey, 2017; Lootsma, 2017).

Box II.6
The challenge of regulating fintech

Although fintech has the potential to benefit MSME finance in many aspects, it also poses some risks. In particular, the institutional capacity of regulatory agencies in developing countries can be insufficient to assess and monitor various risks emanating from the adoption of new forms of business that are driven by technological advances (Saal, Delort, and Gradstein, 2018).

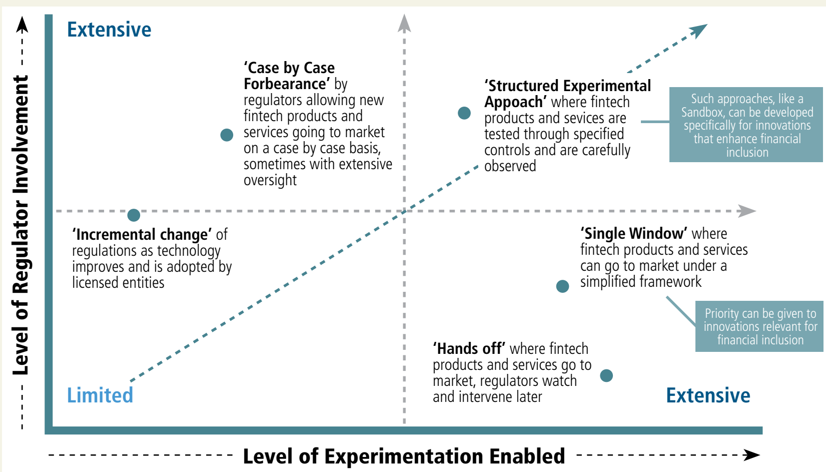
In this context, there are some common approaches to regulating fintech (please also refer to figure II.10 below):

i. Case by case forbearance: Regulators allow new fintech products and services to be launched in the market on a case-by-case basis.
ii. Incremental change: Regulations are adopted in a gradualist manner, as fintech applications evolve.
iii. Structured experimental approach: Fintech products and services are tested through specified controls, and are carefully observed. (Similar to the 'sandbox' approach.)
iv. Single window: Fintech products and services are allowed to be introduced into the market under a simplified framework.
v. Hands off: Fintech products and services are allowed to go to market under regulatory supervision, and intervention may come later.

Part of the challenge is the speed with which fintech is advancing in scope and complexity, which makes the task of regulatory oversight even more challenging.

Determining whether a new fintech product or service falls within the scope of existing regulation, and if so, under which regulatory envelope, is just the beginning of the exercise. Regulatory agencies do not want to get in the way of new offerings that can benefit customers, but they have a fiduciary responsibility to also ensure stability of the banking and financial sector, as well as customer protection (Ehrentraud, Ocampo, and Vega, 2020). The technological leaps being made in fintech inevitably mean that regulators and legislators will be constantly having to play catch-up in the years ahead, as the banking and financial sector undergoes a technology-driven revolution in product and service offerings – a highly disruptive process we have come to refer to as 'fintech'.

Figure II.10: Common approaches to regulating fintech



Source: Saal, Delort, and Gradstein (2018).

11. Concluding remarks

Inadequate access to finance has been a long-standing problem that MSMEs have faced in developing Asia and the Pacific. Despite numerous government assistance measures intended to improve financial access for MSMEs, a considerable financing gap still remains, as both supply-side and demand-side barriers continue to inhibit MSMEs' access to finance. Even during the ongoing COVID-19 crisis, when governments attempted to roll out emergency financing measures, most MSMEs did not change their approach to raising funds (e.g. relying on their own funds and informal financing). Their scant usage of formal financial services has made their working capital problems more serious, leading to an increased number of business closures and insolvencies. Put another way, MSMEs have traditionally been at the back of the line when it comes to accessing finance, but found themselves at the front of the line when it came to being impacted by the pandemic.

Several of the structural problems that lie behind MSMEs' limited access to finance remained constant during the COVID-19 pandemic and economic crisis, but their magnitude was elevated to a more serious level. Given the prolonged national containment measures seen throughout 2020 and into 2021, government assistance to specific MSME groups – such as technology-based, internationalized, and women-led MSMEs – need to be implemented quickly and effectively during the post-COVID-19 period. A phased policy approach should also be elaborated at the national level, given the uncertainty over containing the COVID-19 spread. This includes more balanced and holistic policy measures to support the banking and non-bank finance industry, addressing digital finance solutions under financial inclusion strategies. The demands placed on public finance will expand further, both during and after the pandemic. These structural interventions need to be well managed so as to avoid undesirable market distortions and with consideration made for more detailed budget allocations. Those crucial issues will be examined in the successive chapters.

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CHAPTER III

During: The Impact and the Responses

Masato Abe, Sawami Hayashi, Luciana Baglioni, Nick Freeman, and Mike Troilo[24]

“[Y]ou can’t judge a decision by how it turns out, only by whether it made sense given the information available at the time.”

Timothy F. Geithner.

“Globalization has created this interlocking fragility. At no time in the history of the universe has the cancellation of a Christmas order in New York meant layoffs in China.”

Nassim Nicholas Taleb.

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1. Introduction

The COVID-19 pandemic has served as a major and unexpected stress test for the economic systems of all countries, including both their MSMEs and their banking and finance sectors. A December 2020 report from the Asian Development Bank on the anticipated impact of COVID-19 on economies in 2020 and 2021 suggests that losses in global GDP will be anywhere between US$ 4.8 trillion and US$ 7.4 trillion in 2020, and between US$ 3.1 trillion and US$ 5.4 trillion in 2021. For developing Asia and the Pacific alone, the respective GDP losses in 2020 will be somewhere between US$ 1.4 trillion and US$ 2.2 trillion, and between US$ 0.8 trillion and US$ 1.4 trillion in 2021 (ADB, 2020a).

In addition to the immediate impact of the economic strains posed by the pandemic-related lockdowns and other measures enacted to address the public health crisis, we see COVID-19 as a potential watershed moment for an array of business endeavours, including the financing of MSMEs. While it is quite likely that some degree of 'snapping back' will occur, once the pandemic abates, there is a degree to which things will 'snap forward'. For example, the economic toll enacted on governments, businesses, and financiers will be felt for many years to come, as evidenced by reduced economic growth rates and higher debt levels. A recent paper from academics at the University of California at Davis in the United States, on the long-run economic consequences of global pandemics, cautions that significant macro-economic after-effects can 'persist for decades', and potentially up to 30-40 years (Jorda, Singh, and Taylor, 2020).[25] At the very least, the economic environment surrounding MSME finance activity in Asia and the Pacific will be markedly different in early 2022 than it was in late 2019. So, what does that economic toll look like for MSMEs and their financial providers? This is what this chapter seeks to sketch out.

In this chapter, we lay the foundation for the post-crisis policy agenda in MSME finance for Asia and the Pacific. The chapter is broadly divided into two main parts. In the first part, we summarize the economic impact of COVID-19 on MSMEs in the region, particularly concerning outcomes such as productivity, profits, and employment among MSMEs. In the second part, we explore the policy responses to this impact within the scope of MSME finance. We conclude the chapter with several key takeaways for policymakers that then sets the stage for our analysis of how COVID-19 will change MSME finance in Asia and the Pacific in the years ahead.

25. The paper analyzes long-term economic consequences emanating from 19 pandemic events since the fourteenth century. It concludes that "pandemics are followed by sustained periods—over multiple decades—with depressed investment opportunities, possibly due to excess capital per unit of surviving labour, and/or heightened desires to save, possibly due to an increase in precautionary saving or a rebuilding of depleted wealth" (Jorda, Singh, and Taylor, 2020, p. 16).

2. Overall effects of the pandemic

The COVID-19 pandemic has wreaked havoc on both physical and economic health at both the individual and societal levels. Besides the ravages of the virus itself, containment measures such as lockdowns of cities and travel bans have burdened countless enterprises. Although governments are responding to support their beleaguered economies and businesses, there remain many unknowns about future public health and economic recovery. Given their relative lack of resources and economies of scale, as well as their weak capital structures, MSMEs are more vulnerable in the time of crisis compared to large corporations (Runyan, 2006). The disadvantageous position of MSMEs is highlighted by the fact that during the pandemic, the Global Top 100 companies saw their collective market capitalization grow by 48 per cent from March 2020 to 2021 (PwC, 2021). This section describes the overall impact of COVID-19, especially regarding MSMEs.

Global trade is experiencing huge disruptions due to the pandemic. According to the International Trade Centre (ITC, 2021) as of 29 March 2021, 98 countries have export restrictions, while only 12 have import restrictions. Many of the export measures constrain the shipment of medical and food products. On the other hand, many of the import measures liberalize access to these same products. The year-on-year decrease in exports from February 2019 to February 2020 was 21 per cent for China, 8 per cent for the European Union (EU), and 7 per cent for the United States. These three economies constitute 64 per cent of global supply chain exports (ibid.).

Employment has also suffered. The countries with mandatory or recommended workplace closures so far account for 81per cent of the global labour force (ILO, 2020a). In the United States, the country with the most confirmed cases in the world as of January 2021, the unemployment rate was 6.7 per cent as of the end of December 2020 (U.S. Bureau of Labor Statistics, 2021). At its height, the unemployment rate in the United States hit nearly 15 per cent in April 2020; in comparison, the highest unemployment rate during the Global Financial Crisis in 2007-2008 was about 10 per cent (U.S. Bureau of Labor Statistics, 2020). Note that much of the decline between April and December 2020 is due to many people simply quitting their job search and therefore not being counted as unemployed; the pre-pandemic unemployment rate in February 2020 was 3.5 per cent (U.S. Bureau of Labor Statistics, 2021). In Asia and the Pacific, for example, Singapore experienced its highest unemployment rate (2.4 per cent) in the past decade although this rate is still lower than that during the recessions under the SARS outbreak in 2003 and the Global Financial Crisis in 2007-2008 (Ministry of Manpower, 2020).

The effects of COVID-19 on health fell disproportionally on those who were already vulnerable due to pre-existing burdens such as health conditions, poverty, or both. For instance, the economic effects of the pandemic have been especially pronounced on young people, women, and the lowest paid, as they normally work in sectors that have shut down or reduced activity. Informal employees, who are a major share of the MSMEs' workforce, have suffered, and continue to suffer, severely (ILO, 2020b). According to the ILO (2020b), the number of informal workers around the globe is approximately two billion, which accounts for almost 62 per cent of total employment. Informal workers are at risk both because they often lack healthcare coverage and because their jobs do not allow them to work remotely – exposing them to higher risks of infection. When lockdowns occur, they are at a high risk of losing their jobs.

These trends particularly affected MSMEs. Consequences were suffered on several fronts, such as: (i) lack of manpower, since many workers went back to their hometowns; (ii) freezing of economic activities; (iii) difficulty in procuring raw materials at reasonable prices; and (iv) shutdowns due to decreased demand and, in some cases, due to mortality. A study by Roy, Patnaik, and Satpathy (2020) shows that 50 per cent of MSMEs in India witnessed a loss of 20-25 per cent in their earnings due to lack of adequate response measures.

To cope with the crisis, some measures have been taken worldwide by firms, for example, measures to enhance teleworking. Nevertheless, according to the ITC (2020), MSMEs have fewer options for teleworking compared to large enterprises. While 58 per cent of large enterprises undertook teleworking to cope with the crisis, only 38 per cent of medium and 25 per cent of small enterprises opted for this measure, as table III.1 shows. Micro enterprises did not shift to teleworking at a measurable level. Instead, MSMEs mainly reduced employment temporarily; 40 per cent of medium, 42 per cent of small, and 34 per cent of micro enterprises took this approach (ibid.). MSMEs in the informal sector in developing countries have suffered even more than in the Global Financial Crisis of 2007-2008 due to the limited teleworking opportunities (ILO, 2020c). Other measures include online sales, customized or new products, and increasing marketing efforts (see table III.1 again).

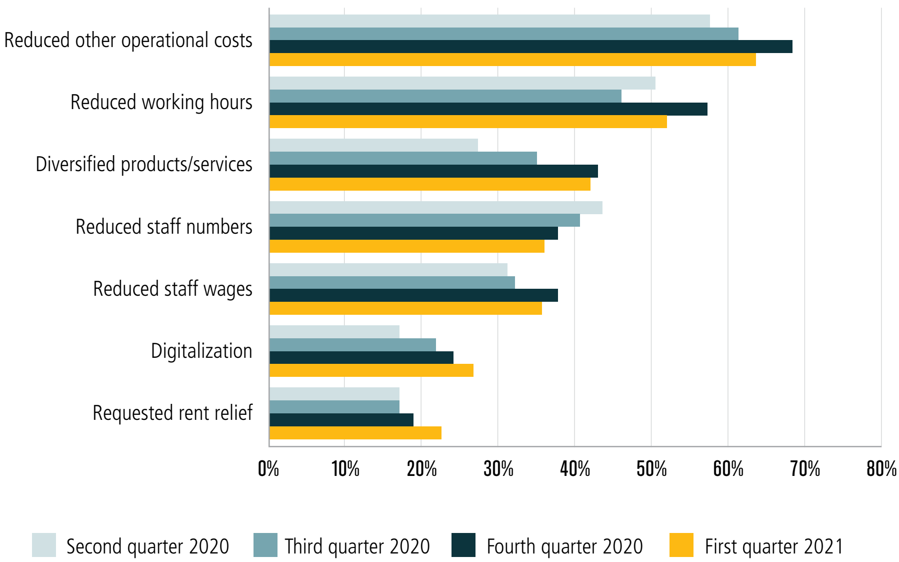
Table III.1: How firms coped with the crisis

Micro		Small		Medium		Large	
Temporaily reduced employment	34%	Temporaily reduced employment	42%	Temporaily reduced employment	40%	Teleworking	58%
Online sales	31%	Online sales	25%	Teleworking	38%	Temporaily reduced employment	42%
Customized/ new products	20%	Teleworking	25%	Increased marketing efforts	26%	Increased marketing efforts	26%

Source: Authors, modified from ITC (2020).

Following the same line, surveys by Pacific Trade Invest (PTI) suggest that the main measures taken by firms in the Pacific islands[26] to mitigate the COVID-19 damages to MSMEs since the outbreak of COVID-19 have been to: (i) reduce other operational costs; (ii) reduce working hours; (iii) diversify products and/or services; (iv) reduce the number of staff; (v) reduce staff wages; (vi) digitalize business; and (vii) request rent relief as seen in their order in figure III.1 (PTI, 2021). There has been a consistent increase in the number of MSMEs that have taken measures in the direction of digitalization and rent relief, while fewer and fewer MSMEs have taken measures to reduce staff members.

Figure III.1: Actions taken to reduce cost and damage to MSME's business in the Pacific under the crisis



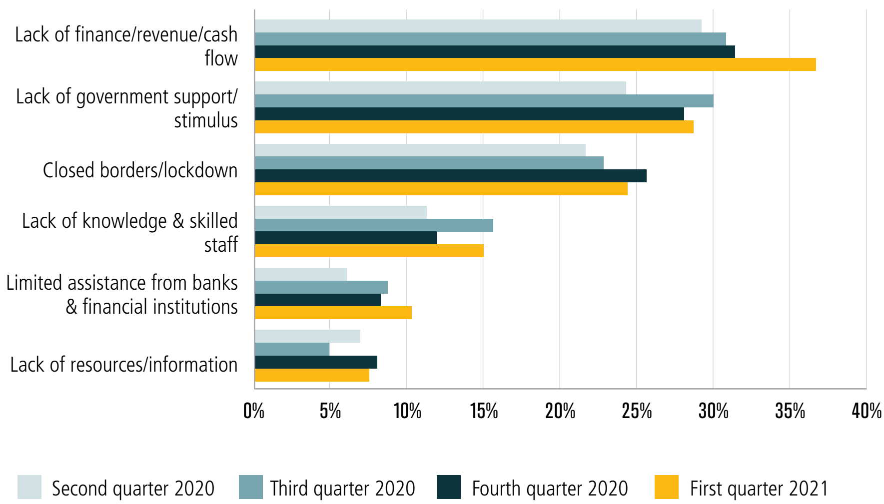
Source: Authors, based on the data of PTI (2021).
Note: At the time of writing, PTI had conducted twelve surveys, finalized on 24 May, 7 June, 21 June, 12 July, 16 August, 13 September, 18 October, 15 November, and 13 December 2020 as well as 17 January, 14 February, and 14 March 2021. For details, visit: https://www.pacifictradeinvest.com/services/pti-pacific-business-monitor.

The surveys (ibid.) also state that the main obstacles that MSMEs have faced during the first quarter of 2021 are: (i) lack of finance, revenue, and cashflow (37 per cent); (ii) lack of government support and stimulus measures (29 per cent); (iii) closed borders and lockdown (24 per cent); (iv) lack of knowledge and skilled

26. Cook Islands, Fiji, French Polynesia, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu are the countries covered by Pacific Trade Invest.

staff (15 per cent); (v) limited assistance from banks and financial institutions (10 per cent); and (vi) lack of resources and information (8 per cent), as figure III.2 shows. Moreover, since the beginning of the surveys, there has been a consistent increase in the number of MSMEs that have reported the lack of finance, revenue, and cash flow as a major obstacle. A similar trend can be seen in the number of MSMEs that reported barriers due to limited assistance from banks and financial institutions, with a small exception in the fourth quarter of 2020 (which affected firms at a higher rate than in the second quarter of 2020, yet a bit lower than in the third quarter of 2020).

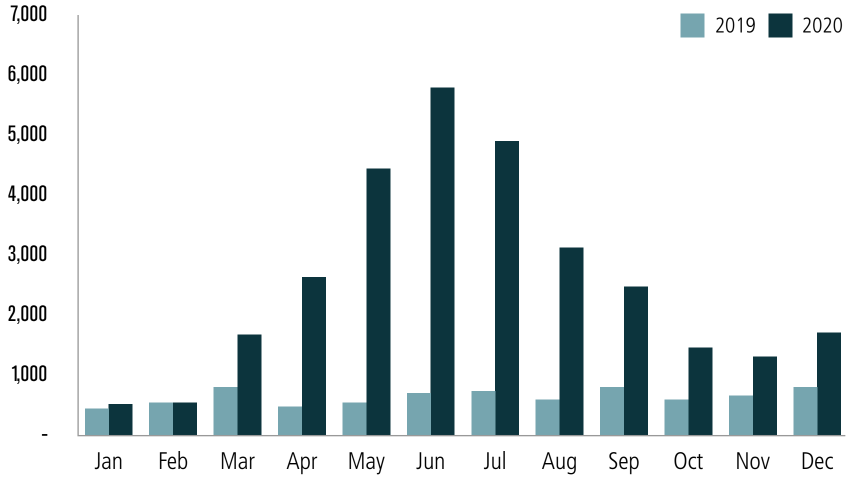
Figure III.2: Barriers to support MSME's business in the Pacific under the crisis



Source: Authors, based on the data of PTI (2021).
Note: At the time of writing, PTI had conducted twelve surveys, finalized on 24 May, 7 June, 21 June, 12 July, 16 August, 13 September, 18 October, 15 November, and 13 December 2020, as well as 17 January, 14 February, and 14 March 2021. For details, visit: https://www.pacifictradeinvest.com/services/pti-pacific-business-monitor.

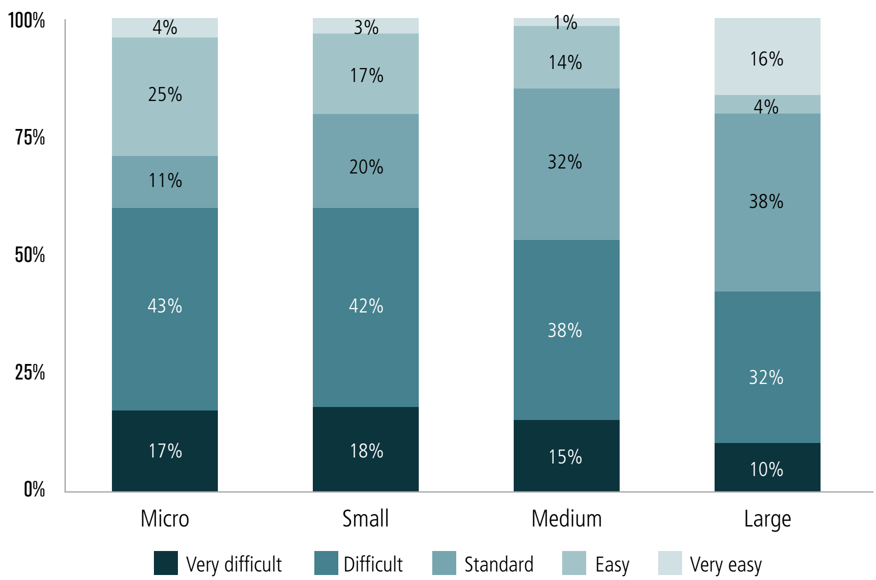
During this crisis, one of the main challenges has been the lack of finance, and consequently, there has been huge demand for financing from MSMEs facing illiquidity. Many governments have been arranging access to finance in response. For instance, the Japan Federation of Credit Guarantee Corporations (2021), a government controlled non-profit organization serving as public guarantors for MSMEs, has accepted a much higher amount of guarantees during the pandemic compared with the pre-pandemic year (ibid.). Figure III.3 shows the amounts of accepted guarantees in 2019 and 2020. Although the amount in February 2020 is not largely different from that of 2019, acceptance of guarantees significantly grew from March 2020 onward. The amounts in 2020 against those in 2019 are 204 per cent in March, 545 per cent in April, and 807 per cent in May, and peaked at 826 per cent in June. Although declining from this point, acceptance of guarantees in November 2020 was still almost two times of that in the previous year (ibid.).

Figure III.3: Amounts of accepted guarantees by the Japan Federation of Credit Guarantee Corporations (in JPY billion)



Source: Authors, based on the data of the Japan Federation of Credit Guarantee Corporations (2021).
Note: A small increase in December 2020 can be explained with extra funds needed in the end of year before the new year holiday as the biggest holiday season of Japan.

Figure III.4: Firms' ease of access to information and benefits from government COVID-19 related assistance programmes



Source: Authors, modified from ITC (2020).

Despite governments' efforts at relief, MSMEs may still be unable to avail themselves of financial resources mainly due to: (i) lack of information on MSMEs' side; (ii) cumbersome loan application processes; (iii) MSMEs' informal status; (iv) lack of collateral; (v) lack of business, managerial, and operational skills; and (vi) banks' unwillingness to deal with MSMEs. As described in chapter 2, this trend predates the pandemic, just as the problem of conventional access to finance; however, the pandemic has exacerbated the difficulty. Regarding the lack of information on MSME side, small enterprises find it difficult to find COVID-related information and benefits more often than larger firms, as shown in figure III.4. Almost 42 per cent of large enterprises answer that it is difficult to access, while 60 per cent of micro and small firms feel it is difficult to find information (ITC, 2020).

The COVID-19 pandemic has amplified the risk of over-indebtedness due to difficulty in paying outstanding corporate debts, a situation that has increased NPLs and further exacerbated the impacts of the COVID-19 led economic downturn globally and regionally (CEIC, 2021; UNDP, 2021). Soares and others (2020) estimate that global NPLs due to the pandemic would be at the same level or even worse than those during the Global Financial Crisis of 2007-2008. For the United States alone, the amount of NPLs is expected to be twice that of the prior crisis. The Asia-Pacific region would also fare worse: the study forecasts that pandemic-related NPLs in China would be more than 20 times what they were in the previous crisis, while Japan would also face NPLs two to five times larger than the pre-outbreak condition (ibid.). The accumulation of NPLs could have significant impacts on economies for the long term since unresolved NPLs could discourage corporate investment and detain economic recovery (ADB, 2020b). The present liquidity crisis has been urging MSMEs to find new sources of financing to satisfy their financial obligations and their necessities.

Box III.1
How to cope with over-indebtedness and NPLs amid the COVID-19 pandemic

In Indonesia, nine out of ten MSMEs faced lower demand for their products and services during the COVID-19 outbreak, leading to a decrease in revenue for two-thirds of them, which has intensified the necessity of financing but also made it harder to pay debts (UNDP, 2021). According to the CEIC database (2021), NPLs in Indonesia increased during 2020, reaching its peak of 3.22 per cent on July 2020 (versus 2.55 per cent on July 2019) and remaining above 3.00 per cent for the rest of the year. This level is the sixth highest among ESCAP member States, only lower than Armenia, Kyrgyzstan, Pakistan, the Philippines, and Uzbekistan (ibid.).

The situation of over-indebtedness and, subsequent NPLs' increase, can be further aggravated by the excessive use of illegal and non-transparent credit platforms.

There is a relatively high financing gap in Indonesia, with 74 per cent out of 63 million of MSMEs not having access to institutional credit (PwC, 2019). Since many MSMEs do not have easy access to credit, many of them have found a source of alternative finance in peer-to-peer (P2P) lending. However, inadequate financial literacy opens space for illegal P2P to offer desperate MSMEs a short-term high interest credit due to their inability to calculate costs and risks (Aidha, Armintasari, and Mawesti, 2020).

To avoid over-indebtedness and increase in NPLs that could aggravate the recessionary impact of the pandemic, some policies recommendation to provide financial support to MSMEs can be summarized as follows (Aidha, Armintasari, and Mawesti, 2020):

1. Educate MSMEs to improve their financial literacy;
2. Build effective monitoring systems to improve bank compliance, and better regulate consumptive credit;
3. Strengthen the regulations of P2P lending practices; and
4. Make credit card issuers and P2P lenders operate rigorous and prudent credit scoring systems.

Having depicted what the impact of the pandemic has been on MSMEs in Asia and the Pacific, we now turn to the policy responses of governments in the region to provide some relief to their respective MSME sectors.

3. Policy responses to the impact of COVID-19 on MSMEs

As the COVID-19 pandemic gradually progressed during 2020 and early 2021, a more nuanced view of its ramifications for MSMEs, as well as whole economies, was able to develop. This more informed view comprised a number of elements, including: (i) a realization that the pandemic would not be a short-lived anomaly (i.e. that it would not conclude, particularly in Asia and the Pacific, by Christmas 2021); (ii) that the economic recovery would not take the form of a straight-line upward trajectory, but rather be a see-saw affair of 're-openings' and 'lockdowns'; (iii) that different economic sectors – and companies in those sectors – would be impacted to differing degrees and in differing ways; and (iv) that there would be no snapping back to a more familiar pre-pandemic world, as a number of trends in business had been accelerated, and some things have irretrievably changed. Rather, a 'new normal' was in the making.

Thus, as views on the pandemic evolved, so did the policy responses. Emergency measures around economic 'triage'[27] and ensuring adequate liquidity in the financial system, in a bid to simply keep the corporate sector afloat and minimize job losses, were clearly the order of the day in the first half of 2020. The urgency of the problem did not allow for accuracy and efficiency, as significant sums of public spending were thrown at the corporate communities in many countries. By the latter half of 2020, however, response efforts had become more measured, if only because the levels of public spending could not be sustained indefinitely without incurring immense levels of debt. At the time of writing, and as a number of COVID-19 vaccines start to be administered, policymakers' attention is beginning to shift to the recovery process, and how that might be handled best, given finite resources.

A major concern, as raised in chapter 1, has been that the economic recovery for the corporate sector in Asia and the Pacific – including MSMEs – will be 'K-shaped', with some firms rebounding well, and even benefiting from the pandemic in various ways, while other firms struggle to survive and revive (Clark, 2020). The prospect of expending resources on what are, in effect, 'zombie companies' (i.e. firms that are already insolvent and have no chance of long-term recovery) is unappealing; but so is allowing large numbers of firms to go under. In the United States, this K-shaped recovery has already been discerned, with mostly larger, 'tech-enabled' firms represented in the upper 'leg' of the K, and smaller firms making up the lower leg. Put another way, the strong are getting stronger, and the weak appear to be getting weaker (Edgecliffe-Johnson, 2020).[28] In this context, policy responses in support of MSME finance have sought to mitigate the mass cull of large numbers of firms that lack the resources that enable survival from a pandemic-induced economic downturn.

Governments have sought to lessen the number of company insolvencies and closures principally in order to cap the job and income losses and avert the kind of socio-economic instability that could result. In this context, the pandemic has posed an existential threat to governments that understandably worry about ensuring that the various systems and structures of the state continue to function. The scale of the global death toll from COVID-19 – 3.5 million as of 21 May 2021

27. Triage is the medical process of assigning degrees of urgency in order to decide the order of treatment of a large number of patients or casualties.
28. "The unequal, "K-shaped" recovery that economists fear is dividing the wider United States economy is also playing out across corporate America, as the pandemic deepens the gulf between the largest, best-financed companies and those lacking scale, leading brands or robust balance sheets. Bank and central bank policies coupled with shifts in consumer behaviour have accentuated trends that were already putting more wealth and growth in the hands of a few large companies, according to academics, consultants and corporate advisers. That, some of them warn, threatens to reduce competition, stifle innovation and hold back smaller businesses that are supposed to be sources of job creation and economic dynamism" (Edgecliffe-Johnson, 2020).

(Worldmeters, 2021) – sometimes feels detached from what has been for most a relatively personal and 'silent war', with no dramatic broadcast images of battles and mass carnage. So too, the toll on MSMEs has also been relatively silent and personal; the closure of a single, sole proprietor here, and another small firm there, does not capture headlines. When measured in the aggregate, however, the damage and distress has been considerable.

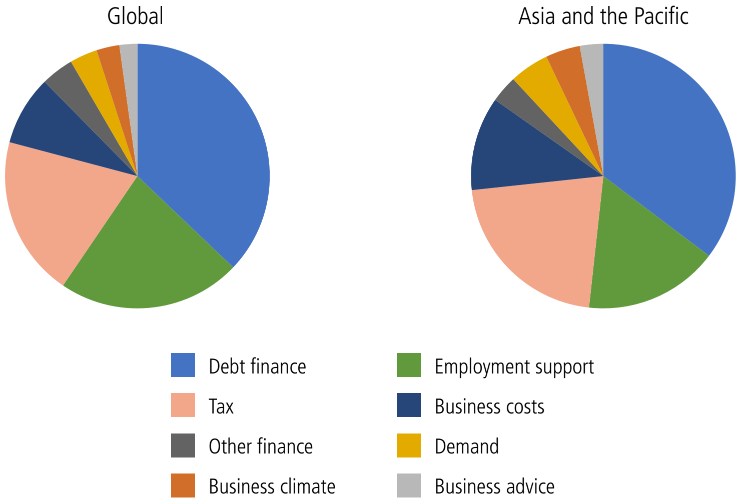
This section elaborates various policy interventions that have been implemented to protect economies and their business and MSME sectors globally and in Asia and the Pacific. One can broadly define the policy measures introduced to support the MSME business community into two main components: (i) macro-economic measures enacted that also benefit MSMEs ('a rising tide lifts all boats'); and (ii) specific measures focused particularly on MSMEs ('targeted buoyancy measures'). This section focuses largely on the latter, but first needs to be put in the context of the former.

Economy-wide support packages

Economic policy responses to the impact of COVID-19 on MSMEs and the financial sectors in Asia and the Pacific, enacted through much of 2020-21, were quite broad in scope and lacked much in the way of careful calibration. Such was the magnitude of damage being inflicted on economies across the globe and so rapidly, with massive levels of unemployment anticipated, that all possible economic and financial pumps needed to be primed and activated in a bid to bail out economies in danger of going under.

When considering the various government measures to support MSMEs, the World Bank (2020) has categorized them into: (i) debt finance measures; (ii) tax measures; (iii) employment support; (iv) business cost reductions; as well as (v) other measures such as business advice, the business climate, and stimulating demand, as figure III.5 shows. The broad aims have been to: (i) lower companies' working capital costs and preserve cash flows; (ii) strengthen balance sheets; (iii) find ways of boosting weak demand and buoying revenues; (iv) provide technical capacity support; and (v) explore ways of making the business environment less hostile (World Bank, 2020).

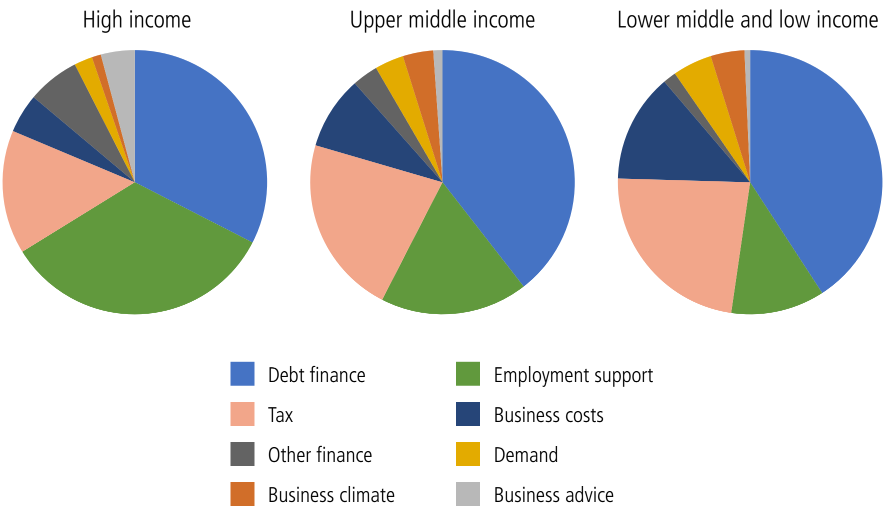
Figure III.5 : Immediate measures to support SMEs in response to COVID-19 as of 14 April 2020



Source: Authors, based on the World Bank data (2020).

The propensity of individual countries to implement these measures is a function of a number of economic and non-economic factors, including but certainly not limited to: (i) the strength of the state budget and public purse; (ii) the ability of state agencies to roll out such measures; and (iii) the absorptive capacity of MSMEs to benefit from this emergency largesse. For instance, high income countries adopt a higher number of measures when compared to lower-middle- and low-income countries. The latter barely adopt business advice as measure. As figure III.6 presents, high income countries mainly choose measures on debt finance and employment support followed by tax related measures, while lower-middle- and low-income countries have smaller emphasis on employment support and relatively higher supports on debt finance, tax, and business costs (World Bank, 2020).

Figure III.6: Immediate measures to support SMEs in response to COVID-19, by country's income level as of 14 April 2020



Source: Authors, based on the World Bank data (2020).

Initial analysis from data derived during the first months of the pandemic suggests that, as one might expect, the leading determinant of the size of economic packages announced by individual governments was the average per capita income of its citizens. The package per capita was also, however, "positively related to the COVID-19 deaths per 100 000 population, population of at least 65 years old as per cent of total population, and wage and salaried workers as per cent of total employment; and inversely related to self-employed as per cent of total employment, and vulnerable employment as per cent of total employment" (Felipe and others, 2020, p. 25). Put another way, the more affluent the country, the more formalized the economy, and the more deaths seen in the working population, the greater the relief package. Conversely, the greater the size of the informal business sector, the smaller the relief package.

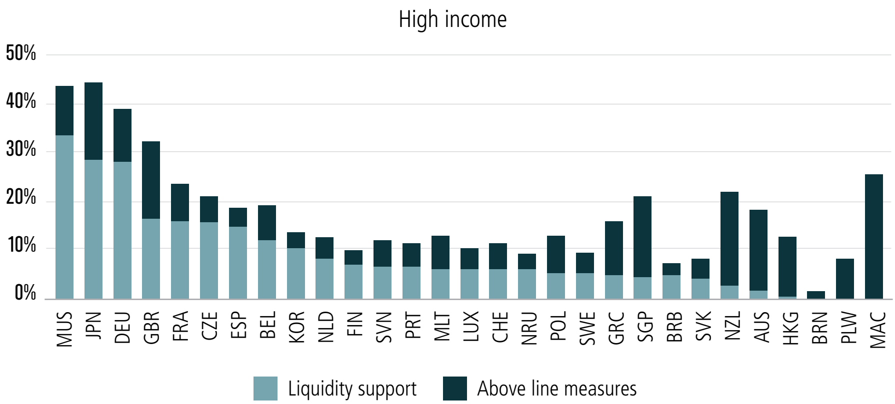
Figure III.7 below, using data compiled by the IMF as of end-2020, gives an indication of both 'above the line'[29] and 'liquidity support'[30] macro-economic measures enacted by countries, as a percentage of the respective country's GDP. Regarding the above the line measures such as additional spending in the health sector and foregone revenue, Tuvalu has been most active in accelerated spending, followed

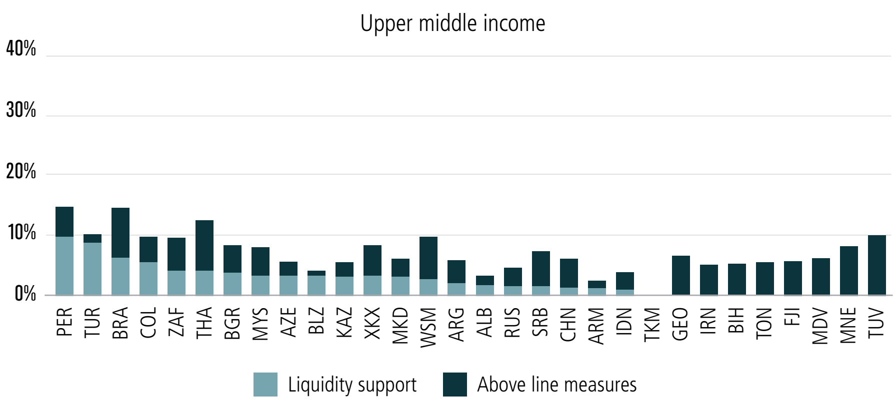
29. Above the line measures, in IMF database, includes: (i) additional spending or foregone revenues both in health and non-health sector; and (ii) accelerated spending/deferred revenue.
30. Liquidity support includes: (i) below the line measures (e.g. equity injections, loans, asset purchase, or debt assumptions); and (ii) contingent liabilities (including guarantees and quasi-fiscal operations).

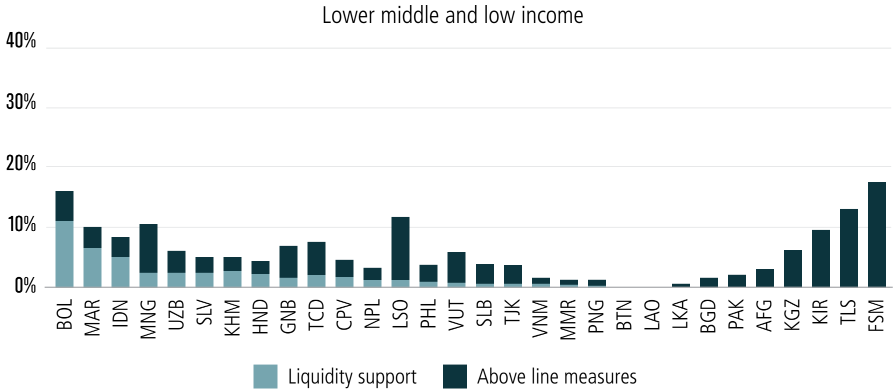
by Iran (Islamic Republic of) and Japan. The latter, for example, designated US$ 243 billion (close to 5 per cent of its GDP) in measures related to deferred revenue (e.g. deferral of payments of taxes and social security premiums).

As for the liquidity support measures, both Japan and the Republic of Korea responded quite stridently, relative to the rest of the region, and the global average. With regard to so-called 'below the line' measures (including equity injections, loans, and asset purchases), Singapore has probably been most vigorous in Asia and the Pacific, followed by Azerbaijan, Uzbekistan, and Kazakhstan. To enhance liquidity, Turkey, India, and Malaysia have led on the issuance of various kinds of guarantees, whereas Japan and the Republic of Korea have been exceptional in what are termed 'quasi-fiscal operations' (i.e. non-commercial activities by public corporations on behalf of the government, such as constructing infrastructure and providing social services). Putting the health sector to one side, additional spending has been most evident in Macao, China; New Zealand; Australia; Japan; Singapore; Micronesia; and Hong Kong, China.

Figure III.7: Fiscal measures' percentage in GDP in selected countries, by country groups, as of December 2020







Source: Authors, based on the data of IMF (2020a).
Note: Country groups are weighted by GDP in purchasing power parity-adjusted current United States dollars. 'Above the line' measures exclude deferred taxes and advance payments, referring only to additional spending and forgone revenues. 'Liquidity support' measures cover equity injections, loans, asset purchase, debt assumptions,[31] and guarantees.

The Asian Development Bank database, as of mid-June 2020, when the pandemic was less than six months old, indicated that the aggregate cost of government measures, across the globe, associated with fiscal interventions alone, was at least US$ 7.1 trillion, and a further US$ 14.9 trillion or more had been expended on monetary measures (ADB, 2020d; Felipe and others, 2020). It also suggests that within Asia and the Pacific, economic packages announced by Japan, China, and India have been some of the largest in scale recorded across the globe, being respectively of US$ 3.1 million, US$ 1.8 million, and US$ 0.4 million (ibid.). As a percentage of GDP, within Asia and the Pacific, Japan (59.5 per cent); Hong Kong, China (50.6 per cent); Malaysia (20.4 per cent); Singapore (19.6 per cent); Marshall Islands (16.8 per cent); and Bhutan (16.6 per cent) have been some of the biggest spenders. And on a per capita basis, the Hong Kong, China (US$ 25 567); Japan (US$ 24 224); Singapore (US$ 12 200); the Republic of Korea (US$ 3 885); Malaysia (US$ 2 296); and Cook Islands (US$ 1 912) have been the most vigorous in spending on economic measures intended to combat the impact of COVID-19.

One inadvertent but somewhat inevitable result has been that the profile of the state in the economies of many countries increased in 2020, reversing a broad trend of state withdrawal from large parts of the economy and productive assets over recent decades. The pandemic, therefore, was a promoter of state-owned enterprises.

31. "A debt assumption involves two simultaneous transactions; the first transaction cancels the original debtor's obligation, and the second transaction creates a new debt contract between the creditor and the new debtor, or assumer" (OECD, 2005).

Saving MSMEs

For policymakers, a momentous challenge has been how to ensure that economic policies reach many MSMEs effectively and efficiently, because a significant proportion of them have quietly become insolvent and gone out of business, even if they have not formally undergone closure procedures, during the crisis. In terms of MSME finance, the primary intervention by governments has been to inject liquidity into the financial sector, with instructions that this should feed through and down to firms that would otherwise 'go under'. And, where feasible, to also reduce the cost burden on firms through temporary breaks in various fiscal and other operating costs, so that small businesses in particular do not burn through their all-important cash flows necessary to sustain their operations. In this vein, key challenges here are how quickly and accurately those governmental interventions can reach out to targeted MSMEs through appropriate channels and actors. This has been an exercise in life support, not wholly unlike putting COVID-19 patients on ventilators.

Reviewing impact response measures as a whole (see the previous section), the majority are fairly classic macro-economic, financial, and fiscal policy interventions, aimed at helping MSMEs, and businesses in general, to weather the storm and lighten their load of costs and other financial obligations, in hope that they can keep afloat. They are very much tactical emergency-cum-defensive measures, and strategic or more forward-looking initiatives are still shy, with only few structural policies put forward. One could go one step further and argue that they were always (and rightly) intended to be symptomatic care measures, aimed at lessening some of the pain being felt by MSMEs, rather than curative care measures aimed at addressing the long-term and underlying conundrum of how to alleviate MSME financing constraints.

To have a clear overview of those MSME policies under the crisis, we created a cluster that offers a comprehensive summary of responses' possibilities. The cluster intends to help policymakers worldwide to better assert their options and to choose the best measures to address specific businesses aspects and timings – offering policy recommendations for the pandemic, recovery, and new normal periods. It is an interesting tool to have a more holistic approach – not relying solely in tactical emergency-cum-defensive measures but offering further tactics to face these challenging times. In order to facilitate the analysis regarding policy measures, a simple and straightforward categorization was created: (i) business aspect (income, cost, finance, capacity building, and business environment), (ii) length of time that measures aim to affect (relief, stimulus, and structural change), and (iii) direct and indirect support, as figure III.8 shows.

Figure III.8: Overview of MSME policy measures

	Relief	Stimulus	Structural change	Direct (D)/ Indirect (I)
Income	✓	✓	✗	D
Cost	✓	✗	✗	D
Financing	✓	✓	✓	D/I
Capacity Building	✗	✓	✓	D/I
Business Environment	✗	✓	✓	D/I

Source: Authors, based on the databases of ADB (2020a), IMF (2020b), OECD (2020), and the World Bank (2020).

Regarding the business aspect, we categorized policies into: (i) increasing enterprises' income (Income); (ii) reducing enterprises' cost (Cost); (iii) strengthening enterprises' finance (Financing); (iv) other support for enterprises themselves (Capacity Building); and (v) support for enterprises' external environment (Business Environment). For instance, cash injection to enterprises are regarded as Income, while wage subsidies are classified as Cost, since they reduce enterprises' cost with wage.

Considering the length of time that measures aim to affect, three categories were prepared: (i) support to get through ongoing crisis for short-term (Relief); (ii) stimulating economy to foster internal strength for mid-term (Stimulus); and (iii) transforming society to move forward to new normal for longer-term (Structural Change). Relief measure includes Income, Cost, and Financing measures and are indicated for regions where the spread of disease is still under poor control and where the priority lies on dealing with ongoing issues. For Stimulus measures, Income, Financing, Capacity Building, and Business Environment are covered. They are indicated to respond to mid-term challenges, such as the recession resulted from the COVID-19 outbreak. Structural Change measure supports Financing, Capacity Building, and Business Environment that focus on long-term changes, aiming to solve structural constraints and bottlenecks and to create a more resilient, sustainable, and inclusive society.

Finally, the last categorization divides the measures in direct or indirect support. For instance, the support which enterprises directly receive from governments are categorized as Direct (D), while support sent to MSMEs indirectly through other institutions or consumers are classified as Indirect (I). For example, while income and cost measure seems to be a direct support, other measures include both direct and indirect supports.

Business aspects and direct and indirect support clusters

A diversity of support measures was taken by each country, depending on what governments wanted to tackle down and depending on the structure of each economy. To better analyze measures that focused on the impact of MSMEs' business aspects, this section will detail Income, Cost, Financing, Capacity Building, and Business Environment.

Income

Most enterprises had their operating income reduced during the pandemic and many individuals lost their jobs, consequently, losing the means to sustain their livelihoods. In order to keep business operating and support citizens to guarantee the basics to survive, governments took several measures to cope with the crisis in the short term, such as cash injection, coupons, asset purchasing, corporate bailouts, and emergency loans. Those are measures taken – normally temporarily and directly (D) - to increase the MSMEs' income (ADB, 2020a; OECD, 2020; World Bank, 2020):

a. Cash injection: Cash injection for both business and individual are conducted in Asia and the Pacific to assist businesses or individuals under the coronavirus pandemic. This policy, however, presents two risks: (i) some cash might be reserved instead of being used; and (ii) it is often difficult for the governments to reach out to all in need quickly and comprehensively.
b. Coupons: Coupons stimulate economies through increasing consumption. It is like cash transfer, although coupons do not have much flexibility in what to be used for, therefore the risk for being reserved instead of being used is relatively low.
c. Asset purchasing (mortgage debts and corporate debts): Some central banks have injected money into markets through purchasing assets, such as mortgage debts and corporate debts to stabilize the markets.
d. Corporate bailouts: Financial help has been provided to prevent companies from experiencing significant financial downfall such as bankruptcy.
e. Emergency loans: Some governments are providing emergency loans and credit guarantees to struggling MSMEs – in some cases to large companies and individuals as well – with no or low interest rate.

Cost

During times of crisis, a business's priority is to maintain liquidity. At such times, it is essential to slash costs and to reduce burdens. Governments have been trying to waive or to compensate costs (particularly fixed costs), in an attempt to decrease MSMEs' burdens during a phase when they already face low revenue. The measures – such as tax relief, utilities payment waivers, deferrals of payments, subsidization of wages, etc. - taken to reduce an enterprise's costs are normally direct (D) and are categorized under this section (ibid.):

a. Tax relief (exemption, break, refund, and deferral): According to ESCAP's database (as of 15 November 2020), 25 countries in the region supported MSMEs through tax exemptions, 18 countries did so through tax breaks, and 11 countries employed tax refunds (ESCAP, 2020).
b. Delays of filing deadlines for regulatory requirements: Required payments, such as utilities, are deferred in some countries often for short periods of less than one year. As the adverse impacts of this pandemic are projected to continue in the long term, updates of these deferrals might be needed.
c. Rental payment waivers: Fixed costs, such as rent, become huge burdens for MSMEs when revenues decline rapidly. To alleviate these burdens, relief for these fixed costs are granted in some countries.
d. Subsidization of wages: According to the World Bank's database (as of 14 April 2020), assistance to sustain MSMEs' employment, including subsidization of wages, is one of the most common measures globally implemented under the crisis (World Bank, 2020). However, this is more widely observed in high-income countries than lower-income countries.
e. Income support during sick leave: Given that health is one of the biggest social issues during the COVID-19 pandemic, income support during sick leave is highly important. Almost all OECD countries offer income support for eligible employees who are placed under mandatory quarantine.
f. Unemployment insurance and benefits: During the pandemic, employee layoffs and business shutdowns have occurred across Asia and the Pacific. To deal with this, governments undertake measures to assist the unemployed. While unemployment benefits are important to support people in the middle of the crisis, it is often difficult to reach all unemployed workers, due to limited eligibility and poor accessibility.
g. Crisis and disaster insurance: Public interventions are needed to establish more insurance programmes since those who are uninsured may suffer substantial hardship. This measure mitigates risks of uncertain financial loss due to sudden economic crisis or natural disaster.
h. Subsidization in important sectors: Several countries applied subsidies to support exports in particular sectors. Subsidization of personal protective equipment and disinfection materials is also important to ensure safe business operations.

Financing

Many MSMEs face difficulties in accessing financial support, which was exacerbated during the COVID-19 pandemic, and this issue is the origin of this book. In this regard, many governments and institutions made efforts towards making this financial help easier to access and more abundant. Setting up new loan instruments and schemes or making them more accessible, expanding funding available for loans, simplifying and speeding up the process to receive credit, and offering more favourable terms and interest rates are some examples of measures taken to strengthen MSMEs' finance directly (D) or indirectly (I) (ADB, 2020a; OECD, 2020; World Bank, 2020):

a. Deferral of loan repayment: This measure is widely undertaken globally and helps to improve cash flows of MSMEs or individuals that face financial difficulties. In Asia and the Pacific, 40 countries carried out this policy (IMF, 2020b).
b. Concessional loans with credit guarantee: Some governments prepare concessional loans to support individuals or enterprises facing financial difficulties through providing additional funds and credit guarantee schemes. Zero-interest loans are also available in some countries. Increasing the availability of loans contributes to stimulating economic activity. However, it is extremely difficult to properly assess the solvency of an enterprise during the current uncertainty, although banks scrutinize the past performance or business plans of MSME applicants before approving loans. Due to the increased risk they face, such as increasing NPLs, further assistance to banks is also critical for avoiding further financial disruptions.
c. Provision of credit lines: Credit lines, agreements between financial institutions and their clients allowing borrowers to access the maximum loan amount when in need, also work to improve cash flow of MSMEs. Measures regarding credit lines include increasing credit lines, reducing interest rates, and deferrals of repayment.
d. Supply chain and trade finance: This covers financing methods to promote efficient transactions in supply chains through various measures, such as payments for sellers by financial institutions on behalf of buyers. This is a method to smooth transactions in international trade, including providing receivables with exporters to make importers process their transactions faster. This method plays an important role in business transactions such as mitigating risk and improving cash flow.

Capacity building

With social distancing measures and lockdowns, digitalization, and teleworking have become crucial. As a study from ADB (2020c) pointed out, enterprises that took advantage of technology and focused on innovation were better off during the crisis. Some governments and institutions focused on offering trainings and extra financial assistance, so that MSMEs could implement innovative digital solutions to cope with the outbreak. These measures focus on improving enterprises' capacities and they can be either direct (D) or indirect (I) and can have an impact in short, medium, and long term, depending on which one is implemented (ADB, 2020a; OECD, 2020; World Bank, 2020):

a. Training: Other than subsidization of wages, there are various measures to safeguard the employment of existing workers, for instance improving their skills and enhancing their operational and management knowledge. It is also important to teach technical and financial literacy to both employees and employers, which can enhance their business capacity and promote innovation.
b. Enhancing the role of business associations: Business associations are beneficial to MSMEs with regards to information collection, lobbying, and representation of interests, according to research conducted in the United Kingdom (Bennett and Ramsden, 2007). During the COVID-19 pandemic, some business associations supported entrepreneurs and lobbied their respective governments for further support.
c. Strengthening the banking and finance sector (including fintech applications): The COVID-19 pandemic has shed light on the necessity of strengthening the banking and finance sector. During lockdown and travel restrictions, the importance of online banking and payment achieved greater recognition particularly among those who had difficulty in physically accessing financial institutions or stores. Some countries showed efforts to make their banking or payment systems more accessible and resilient.
d. Finding new and alternative markets: Some governments have adopted measures to support firms to find new or alternative markets in order to cope with or substitute the supply chains that were severely impacted during the lockdowns and restrictions. In this regard, promoting services that connect business – for instance, digital business-to-business (B2B) marketplaces that can link larger business to MSMEs – can play an important role.
e. Limiting the scope of foreign firms: Another idea would be to control competition with foreign multinationals, so that MSMEs would have a greater chance of surviving competitive threats during the crisis and could access wider consumer markets (and higher demand) for their products and services. Although this intervention can be implemented quickly, policymakers must be aware of its possible side effects such as negative impacts on foreign direct investment, productivity, and innovation in both the short and long term.
f. Digital literacy: At present, many of MSMEs are not using digital platforms for their business and financing amid the COVID-19 pandemic (1-2 per cent of survey respondents in Indonesia, Lao PDR, the Philippines, and Thailand) (ADB, 2020b). Digital skills training for MSME owners and employees will

be needed, so that they can survive and thrive in the new normal, and this will need to be addressed in government assistance programmes.

g. Business continuity planning: A business continuity plan (BCP) is a preparatory plan to prevent and recover from potential threats to business such as financial or economic crises, natural disasters, terrorism, and pandemics. Since the impacts of the spread of COVID-19 are much more serious than some expected in the beginning, current BCPs might need to be reviewed and upgraded for future risks, including a stronger focus on the digital economy and in social distancing-related innovations.

Business environment

The government can also act to improve conditions for business and promote entrepreneurship, to help more MSMEs to flourish. Improving the spirits and confidence of producers and investors is an important step towards economic recovery. Below, some direct (D) and indirect (I) measures to exemplify how governments can create a better business environment (ADB, 2020a; OECD, 2020; World Bank, 2020):

a. Business enabling environment (legislations, incentives, fixing market failures, and infrastructure): Since this pandemic has had a tremendous impact on economies, reforms to enhance the business environment and which would eventually encourage more businesses to flourish will be necessary. Implementation of large-scale infrastructure projects also plays an important role in creating a better enabling environment for economic recovery. Moreover, improving the efficiency of government services – through electronic governance, for instance – can benefit MSMEs by increasing their ability to quickly access government support.
b. Supporting value chain creation: Governments could provide support to smaller businesses to organize into cooperatives and or benefit from economic clusters, generating more jobs and higher productivity.
c. Trade promotion: MSMEs play an important role in international trade, contributing to the domestic economy. By promoting trade internationally, governments can bolster the development of MSMEs.
d. Foreign exchange controls (including currency swapping): Since COVID-19 disrupted exchange rates and global capital flows, many governments intervened through foreign exchange (FX) controls to stabilize markets and currencies (Putnam, 2020; PwC, 2020).
e. Promotion of foreign direct investment: Inward investments of foreign multinationals develop cross-border networks to reach out to domestic MSMEs while encouraging them to participate in global supply chains. This development enhances MSMEs' capacity building and productivity through accessing foreign markets and new technologies and knowledge.
f. Digital economy: Digitalization is becoming an indispensable tool for any business in recent years. In the post COVID-19 era, or 'new normal',

there will be greater demand for contactless transactions, and the corresponding demand for digital finance will also increase for MSMEs. For more conventional MSMEs, especially in wholesale and retail trade, their current business model is typically based on personal contact, suggesting they will need to shift to digital transactions in the coming years.

g. Tourism promotion: Encourage domestic and international travel to support the tourism industry which was devastated by the pandemic. However, an approach that can balance economic stimulus and recovery with containment of the disease is critical under the pandemic.

Box III.2
Paycheck Protection Programme under the pandemic

During 2020, a number of finance-related projects were launched in the United States, in a bid to assist MSMEs with their COVID-19 response. Among them, the Paycheck Protection Programme (PPP), backed by the United States Small Business Administration (SBA), is a loan facility designed exclusively for MSMEs to keep their workers on payroll. To be eligible, applicants must be MSMEs that have less than or equal to 500 employees. The SBA also offers special treatment to ensure that applicants most in need get priority access to these loans. For example, on 24 February 2021, SBA established a 14-day, exclusive PPP loan application period for businesses and non-profits with fewer than 20 employees.

Essentially, PPP was established to support MSMEs to pay their employees during the COVID-19 pandemic. MSMEs are allowed to apply up to two times for the PPP loans. Such loans can be used to pay salary expenses, interest on mortgages, rent, COVID-19 related employee support fees, and damage and losses that are not covered by insurance. Furthermore, applicants can apply for the PPP loan forgiveness if within eight to 24 months after the loan is granted:

i. The number of employees and salary levels remain unchanged.
ii. Loans are used for eligible expenses.
iii. At least 60 per cent of the loans are used to pay salary expenses.

After the first draw PPP loans, applicants that satisfied the following conditions can apply for second draw PPP loans:

i. The first draw PPP loan has been received and will be used, or has been used, exculsively for eligible expenses.
ii. The number of employees does not exceed 300.
iii. The total revenue between comparable quarters of 2019 and 2020 has decreased by at least 25 per cent.

For most applicants, the maximum amount of second draw PPP loans cannot exceed either 2.5 times the average salary in 2019 or 2020 (3.5 times for applicants in line of accommodation and catering service), or US$ 2 million.

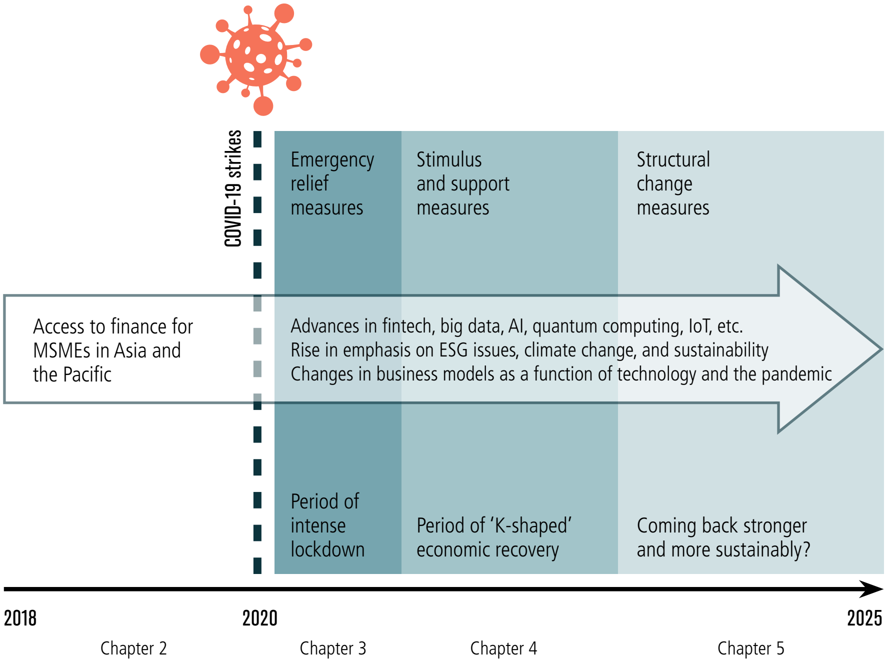
Source:
https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program.

Timing cluster

Due to the learning curve on how to cope with the pandemic and due to the start of vaccinations against COVID-19, the extent and severity of the impact of COVID-19 on businesses has eased. Despite some improvement to the business environment, new waves of the pandemic, new and more contagious variants of the virus, and delays in vaccinations, have, however, decreased the expectations of returning to business as usual in 2021. It is also relevant to highlight that, during the first quarter of 2021, 17 per cent of the MSMEs surveyed in the Pacific islands reported that their governments have not provided any support to their business, and that 38 per cent are somewhat or extremely dissatisfied with the government response to the crisis (versus 12 per cent and 39 per cent in the past quarter, respectively) (PTI, 2021). Therefore, there could be still a crucial gap that must be fulfilled to overcome the disruptions caused by COVID-19. This cluster presents the measures both previously taken and recommended to address challenges at different periods of time – during the pandemic and beyond it.

As shown in figure III.9, there are certain trends and challenges during and post COVID-19, therefore policies corresponding to each phase are needed, e.g. for the (i) lockdown, (ii) economic recession, and (iii) recovery period. Regarding the latter, the presented policies are not only linked to the recovery from the crisis but also linked to creating a more sustainable and resilient future, where societies would avoid crisis or – at best – be more prepared for them. In this section, 'Relief', 'Stimulus', and 'Structural Change' policies that would respond to the challenges related to the different lockdown, economic recession, and recovery periods, respectively, are provided.

Figure III.9: Pre- and post-COVID-19 trends and challenges



Source: Authors.

Relief under lockdown

As the situation was (and still is) unparalleled, policymakers faced an arduous challenge in reacting and in proposing measures in the beginning of the pandemic. The effects of the crisis disproportionally impacted the MSME sector. Lockdown on business and communities caused an immediate and large demand decrease through reduced customers and orders. Supply chains were also disrupted and the impact on the flows of goods and services enhanced the importance of information flows through information and communication technology (ICT) facilities.

For this phase, we propose measures listed as Relief (Income, Cost, and Financing). The implementation of those policies needs to be relatively fast, as the most vulnerable – such as MSMEs – do not have savings to fall back on and protect their operations and employment during such crisis. Governments must have channels and cooperating agencies to reach out to the majority of MSME clients in a quick and comprehensive manner. Additionally, policymakers need to make sure to reach out to those who are the most affected, such as informal workers, who struggles to access the formal benefits and support. Special attention should be paid to other marginalized communities as well, such as women, LGBTQIA+,[32] racial minorities, and indigenous communities, since they are also affected disproportionately.

Stimulus under economic recession

Under the recovery phase, we propose measures listed as Stimulus (Income, Financing, Capacity Building, and Structural Change). In order to stimulate a large and diversified group of MSMEs, the government in cooperation with other agencies (business associations, such as chambers of commerce, and local financial institutions, such as credit unions and cooperatives) must provide tailor-made interventions to sectoral or geographically selected MSME clusters (ADB, 2020a; OECD, 2020).

Structural change for recovery

To achieve a satisfactory new normal, long-term policy interventions would have to move towards sustainability and development of the MSME sector after the crisis through Structural Change (Financing, Capacity Building, and Business Environment). This also indicates that policymakers must mobilize their resources and authorities to enhance the business environment of the sector and to provide more long-term development services to it, perhaps through developing solid, transparent, and stable frameworks of regulations and policies. Such regulations and policies must also increase trade and investment activities, while improving connectivity both at regional and sub-regional levels and at digital and physical spheres. In addition to capacity building activities for the MSME, the sector's capacity should also be enhanced particularly through fostering business associations. Financial institutions should provide training and technical support to their MSME clients as well. Moreover, transformative approaches, such as promoting digital economy and environmental, social, and governance (ESG) principles are very important to construct a more sustainable society (ADB, 2020a; OECD, 2020).

The banking and financial sector also needs to change its structures. Since marginalized communities such as women, LGBTQIA+, racial minorities, and indigenous people often face financial difficulty, it is essential to provide them with investment and financial support, as they are often bottlenecks for their businesses to survive and grow. Indeed, in many patriarchal societies - where the family assets belong to the man – women are often denied credit for their MSMEs, since they have no valuable asset to present as collateral. Moreover, low digital and financial literacy among women – for instance – is still high due to (but not only) gender stereotypes and unequal access to education. Considering the fact that women-led MSMEs that applied digitalization measures faced less negative effects on its revenues during the pandemic (ADB, 2020c); not investing in education and accessibility deteriorates their situation, preventing them to be

32. Lesbian, gay, bisexual, transgender, queer, intersex, and asexual.

better off during the crisis. Given this scenario, government, financial institutions, and civil society organizations should empower the marginalized by providing educational support and by developing technological, financial and digital means. Those changes can address MSMEs directly, but also indirectly, since addressing and enhancing equality are the 'a rising tide lifts all boats' type of measure mentioned before, which ends up benefiting the whole society, including MSMEs.

Box III.3
Mitigating the effects of the COVID-19 crisis: Pandemic bonds 2.0

A 'pandemic bond' was initially introduced as an insurance scheme by the World Bank during the 2015 Ebola crisis. The scheme aimed to float specialized bonds that would alleviate the financial constraints suffered by the affected countries, among the world's poorest, as a result of the epidemic (World Bank, 2017). Designed in tandem with the pandemic bond, in 2016 the World Bank introduced the Pandemic Emergency Financing Facility (PEF) which, in addition to other functions, monitors the necessary activation criteria including outbreak size, spread, and growth, for providing financing through insurance window (ibid.).

During the COVID-19 pandemic, the maximum insurance pay-out of US$ 196 million was transferred by PEF to support 64 countries in 2020 (World Bank, 2020). Since its launch, however, the ambitious venture has received many criticisms from both development and financial experts due to its legally complex verification and stringent requirements that have made pay-outs complicated, slow, and inefficient (Brim and Wenham, 2019; Jonas, 2019). In fact, the World Bank has not renewed the PEF insurance window after the first pandemic bonds matured in July 2020.

Within the purview of the new COVID-19 pandemic, the issue of the potential viability of floating a 'pandemic bond 2.0' was raised (Hodgson, 2020). This time, the pandemic bonds are regarded as a global financial instrument to facilitate the COVID-19 recovery from the pandemic aligned with the 2015 Paris Agreement and the United Nations' Sustainable Development Goals (SDGs), which are both devoted to a more resilient and sustainable future. The new pandemic bonds aim to provide financial support to those most affected groups during the pandemic, such as MSMEs, and in principle the COVID-19 bonds can be structured as green, social, or sustainability bonds; thus, the new bonds are more akin to traditional corporate bonds than the Word Bank's initial pandemic debt initiative (AXA Group, 2020). According to the AXA Group (2020), COVID-19 bonds are issued primarily to:

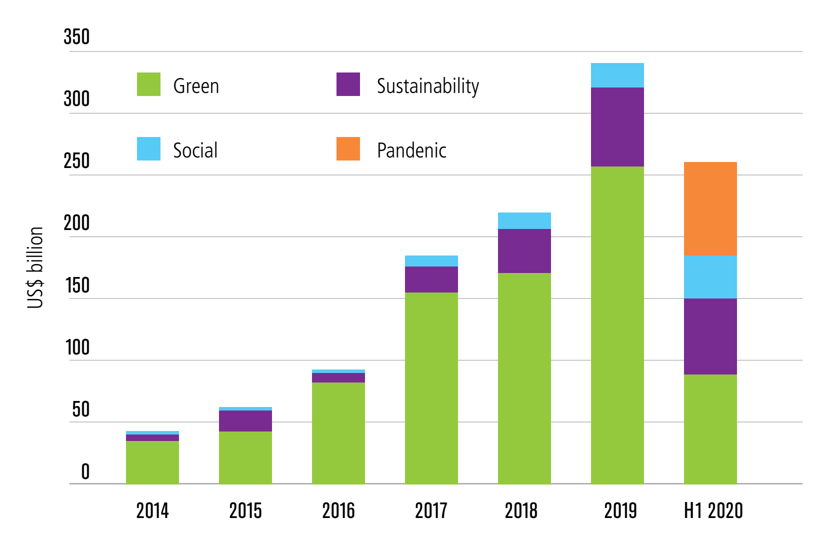
a. Finance or refinance activities that can help with combating the disease – by monitoring, testing, and supporting public health services; and/or
b. Assist businesses facing adverse economic impacts – by providing support to MSMEs facing cash flow issues, for example.

The issuing success in the first half of 2020 with a total of US$ 75 billion of the COVID-19 bonds by 447 issuers (Almeida and others., 2020) confirms that the pandemic bonds have the potential to be a valuable, innovative scheme for financial support for recovery from the crisis (figure III.10).

Various institutions have initiated the issuance of the pandemic bonds, ranging from international organizations and governments to the private sector. For example, the Spanish bank BBVA placed an inaugural COVID-19 bond of €1 billion aimed to support European MSMEs, corporations, and eligible social projects, followed by Caixa Bank's issuance of €1 billion COVID-19 bond to support MSMEs in the most disadvantaged areas in Spain. Issuers in Asia and the Pacific are also active: Kookmin Bank in the Republic of Korea has directed 90 per cent of its US$ 500 million pandemic bond toward MSME support. Similarly, Shinhan Bank (the Republic of Korea) and Bank of China (China) sold COVID-19-related bonds to support MSMEs impacted by the pandemic. The Asian Development Bank is supporting the Government of Thailand in issuing innovative themed bonds for the member country's recovery from the COVID-19 pandemic with proceeds funding social projects through job creation in MSMEs (ADB, 2020e; CaixaBank, 2020; Gross and Temple-west, 2020; KB Kookmin Bank, 2020).

While the pandemic bonds could alleviate the difficulties that MSMEs are confronting during the pandemic, they also raise challenges regarding the transparency and management of the usage of the bonds, similar to the confusion that might deter investors from considering green, social, and sustainability bonds in the past and present. The bonds require the cooperation and integrity of bond issuers and financial regulators, to prevent the potential risk of 'social-washing', which occurs when proceeds are used for causes other than those originally stated. Given that in its current trajectory in 2020, Asia and the Pacific remains unlikely to meet any of the 17 SDGs by 2030 (ESCAP, 2021), pandemic bonds might be an opportunity to scale up their financing and progress.

Figure III.10: Themed bond markets



Source: Almeida and others (2020).

4. Concluding remarks

What is clear from the schemes outlined before is that policymakers have been obliged to pursue emergency measures that are unsustainable beyond the short term, and come with considerable (but unavoidable) perils, including damage to national budgets, as expenditures climb and revenues contract. These observations are not intended as criticisms. The emergency measures were both necessary and unavoidable; however, the majority of these schemes will need to be phased out as soon as it is feasible. Unlike the virtually simultaneous roll-out of emergency measures in economies across Asia and the Pacific, the phaseout of these measures is likely to be a more staggered affair, depending on the extent and pace at which economic normalcy starts to return in each country. Countries that are slower to come out of the pandemic may have to keep emergency and relief economic measures in place for longer, despite the burden on the public purse. The inflection point between the rolling-out of the vaccine and the phaseout of the relief policy measures will differ from economy to economy.

Nevertheless, a legacy of heightened levels of sovereign and corporate debt will persist in the years to come, and be a shared legacy for much of the Asia-Pacific region (Fitch Ratings, 2021). The balance sheet damage inflicted on the MSME sector, and the financial sector that provides much of its funding needs, will not be easily overcome. There is no vaccine to aid recovery from the economic damage that has been inflicted. No economic 'shot in the arm' exists for what will be a drawn-out rehabilitation and recovery process for many MSMEs in Asia and the Pacific adversely impacted by this most recent – but unlikely to be the last – pandemic.

We made reference earlier to some sequential stages of the policy responses, from one of relief, through stimulus, and to structural change. What now follows will be a process of restructuring and advancement. The goal is not only to rebuild the MSME sector in the region back to its former vibrancy, but also ensure it is more resilient in the future. While innovation and efficiency have been two of the most alluring attributes that governments, investors, and businesses have sought to pursue in recent years, one suspects that resiliency will have added emphasis in the years ahead.

Business models will mutate accordingly. For example, overly extended value chains are likely to be pulled back to more robust and less complex networks of suppliers, which will have ramifications for MSMEs that operate inside these production networks, and may well source some or all of their financing through them. Efficiency gains derived from 'lean' and 'just-in-time' manufacturing methods will need to be balanced with an increased appreciation for dependability, particularly in times of economic stress, distress, and dislocations triggered by sudden and unwelcome exogenous events like pandemics. Indeed, the current pandemic and its resultant " virtual destruction of contemporary [global value chains] as we know them" has led scholars to argue for the need to take a longer-term approach when thinking about efficiency, given the potentially catastrophic impact of low-probability, high-impact events (Gölgeci, Yildiz, and Andersson 2020, p.131).

At the time of writing, we are starting to see the development of more bespoke interventions intended to support MSMEs during the pandemic and post-pandemic economic turmoil. In November 2020, for example, an impact investment manager, founded in 2001 by an initiative of the United Nations, announced the establishment of an emerging and frontier markets MSME support fund. With a target size of US$ 350 million, the fund aims to provide additional liquidity, through existing financial institutions in emerging and frontier market economies, to support up to three million small-scale businesses (BlueOrchard, 2020). According to BlueOrchard's own website, "BlueOrchard was founded in 2001, by initiative of the UN, as the first commercial manager of micro-finance debt" (BlueOrchard, 2021). A number of development finance institutions (DFIs) have pledged to invest in the fund, to be managed by a subsidiary of Schroders Group. The fund will also operate a technical assistance facility (BlueOrchard, 2020).

Members of the international development community are also starting to reorient their existing economic, financial sector, and private sector development projects, and/or launch new projects, intended to assist in the economic and corporate sector recovery process. These are likely to combine: (i) financial and technical inputs from development partner agencies; (ii) efforts and commitments from relevant government bodies; and (iii) inputs and support from the private sector itself. As we will see in the chapters that follow, we envisage quite a lot of this activity shifting away from what might be thought of as 'hardcore' MSME financing issues as a discrete field (e.g. pursuing credit scoring, guarantee schemes, and liquidity infusions), and more towards the bundling of financial products and services within other service offerings that MSMEs can avail themselves of, thanks to advances around digitalization of business services, fintech, big data, AI, and blockchain. These advances – in many cases accelerated by the pandemic – have the potential to unlock some of the most stubborn constraints to MSME finance, including lessening perceived risk, and addressing the information asymmetry problem that has inhibited traditional finance providers from serving more MSMEs.

Within the economic consequences of the pandemic, and in the policy responses to those consequences, we have not witnessed – nor has there been triggered – any major new initiative or advance in addressing constraints to MSME finance, whether in Asia and the Pacific or elsewhere in the world. The response efforts taken were largely classical responses around palliative care, aimed at lessening some of the symptoms. COVID-19 will not be regarded as a blessing that helped bring about a cure for MSME finance, and the pandemic itself has not changed the long-term trajectory of our collective search for ways that MSMEs might better access inexpensive sources of finance; it has merely interrupted it, and probably served as a temporary distraction from it.

Thus, as the economic impact of the pandemic abates, there is therefore likely to be a return to the kinds of experimentation in MSME finance that pre-dated COVID-19 in 2020-21. In the next two chapters – 'after' and 'beyond' – our attention turns to that experimentation work, and some of the trends, notably around digitalization and fintech, as well as increasing emphasis on issues pertaining to ESG and climate change, that can be discerned. Some of those trends have probably been accelerated by the pandemic, as the MSME appetite for solutions to various challenges brought about by the pandemic has increased. But while appetite may have increased, the financial capacity of many MSMEs to avail themselves of those solutions will have lessened. Indeed, some MSMEs in Asia and the Pacific will clearly not survive the pandemic, and some that do will face 'long tail' symptoms and weakness for years to come.

In that context, there will be a heightened need for government agencies and development partners, particularly in less developed and developing countries, to help MSMEs leverage the innovations now emerging in finance. For policymakers in Asia and the Pacific there will be a need to change gears immediately, and shift from the 'fire-fighting' efforts of 2020-21, towards the creation of an enabling environment – and catalyzing interventions where necessary – that will address the familiar foe: the MSME financing constraint. As public spending on emergency policy measures lessens, there will be a need to reallocate resources to the task of reconstruction. This 'building back better' project for Asia and the Pacific will need to include interventions in MSME finance that support a drive towards more efficient and green economies.

One example was the announcement, by Singapore in December 2020, of the city-state's first four digital banking licences (MAS, 2020).[33] The expectation is that these digital banks will not contain themselves to Singapore alone, but will serve the wider ASEAN region. Using big data, AI, and other advances from digitalization, they will pursue alternative credit scoring mechanisms, and the expectation is that they will be able to issue small loans and other services to MSMEs normally under-served by conventional banks. This may then force more established banks to digitalize their core lending activities also, in a bid not to lose market share, thereby creating a systemic change dynamic that will benefit MSMEs across the region.

Another field where digitalization-driven innovations may prove useful, and for a category of MSMEs that received the least amount of policy response from governments in the wake of the pandemic, are informal micro and small enterprises. By the very nature of being informal, these businesses tend to be both off the radar of policymakers and the reach of government agencies providing support. Therefore, most have been left to their own devices during the pandemic. However, fintech offers the prospect of delivering wholly new financial products and services that can serve informal enterprises in a commercially viable, and therefore sustainable fashion by digital banks and others.

Despite the development and usage of new technologies, it is also essential to address financial and digital literacy – especially for women and others in vulnerable positions. In this way, the 'building back better' can be extended to marginalized communities as well, and the transformation of structures would not solely be limited to the economic sphere. By having a more holistic view, we can transform society into a more resilient and sustainable one.

33. The Monetary Authority of Singapore has awarded operating licences to: (i) Sea Ltd.; (ii) a consortium led by SingTel and Grab Holdings; (iii) Ant Financial; and (iv) a consortium led by Greenland Financial Holdings, Linklogis, and Beijing Cooperative Equity Investment. These digital banks may offer the same range of services as conventional banks, but without a bricks-and-mortar presence, and are expected to focus on under-served market segments, such as MSMEs. These four banks are expected to commence operations sometime in 2022.

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CHAPTER IV

After: New Normal and Policy Efforts

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"Between stimulus and response there is a space. In that space is our power to choose our response. In our response lies our growth and our freedom."

Victor Frankl.

34. Pamela Mar, Alberto Isgut, David Abonyi, and George Abonyi provided substantive inputs on particularly, but not limited to, supply chain finance. Alexander Kovalenko, Sawami Hayashi, Chuying Pan, Alfonso Pellegrino, and Tai Lo Yeung developed working papers that are used in this chapter. Luciana Milani Baglioni, Aoqi Leng, Clara Robert, Ruohan Wang, Jiajie Wu, and Nan Zhang provided valuable research assistance, including the development of some box cases, to this chapter.

1. Introduction

The COVID-19 pandemic and the accompanying policy efforts to cope with this public health and economic catastrophe have been pervasive, and for the most part, devastating for MSMEs. What the future holds, or should hold, for society in general and MSMEs in particular is still being shaped and debated. This event is ongoing, so even the concept of a 'new normal', while widely bandied about, holds different meanings for different constituencies although they typically suggest dynamic social, economic, and/or political trends in the post-pandemic era (e.g. De Massis and Rondi, 2020; Yang, 2020; Zeegen, Yates, and Jevsevar, 2020).

Regarding MSME finance, we may say with some confidence that the pandemic and its aftermath will serve as an accelerant to certain trends that preceded it. The necessity of conducting transactions digitally has increased the need for innovation across the board, and businesses of all sizes have scrambled to automate and digitize as many facets of their operations as possible. While the outbreaks of COVID-19 have massively hit still-emerging global supply chains, trade finance has played an increasingly important role to facilitate the movements of people, goods, and capital through cross-border production networks under the mandatory and self-imposed health and quarantine measures such as business closures and lockdowns. The post-COVID world also represents an opportunity to pursue and promote environmental, social, and governance (ESG) principles in line with the United Nations' Sustainable Development Goals (SDGs) while reductions of carbon emissions and other green initiatives among MSMEs (and large enterprises) can be rewarded with access to finance on more favourable terms, such as discounted lending rates. Financing for MSMEs can be also tied more closely to the advancement of women and minorities by supporting MSMEs owned by them via reform of collateral requirements, wider ownership of land, and other measures. In this vein, stakeholder engagement such as tripartite collaboration among governments, business associations, and financial institutions has increasingly become important as those cooperative networks could design and provide effective and practical relief and stimulus measures for those suffering MSMEs under the pandemic. While recovery will be a struggle in the near term, policymakers should concentrate on fashioning a more inclusive, resilient, and sustainable future in the long run under the new normal.

We begin this chapter with a brief description of the "new normal'. We then move to discuss the role of innovation and fintech with respect to MSMEs in the aftermath of the pandemic. Following this, we highlight global supply chains as a mechanism for enhancing MSME access to finance. The penultimate section discusses the role of ESG and MSMEs in building a better future, particularly how financing can achieve environmental goals and more equality for female-owned businesses. We then elaborate the important role that key stakeholders and their cooperation play in providing necessary relief and stimulus measures to MSMEs. We summarize our main points in the conclusion.

2. The 'new normal' after the pandemic

The 'new (or next) normal' is expected to have myriad effects for both society and business. The COVID-19 pandemic disrupted and changed many facets of life, and many believe that the post-COVID era will be different from previous ones. This means that, for many, society will not go back to the conditions that prevailed in 2019 and will, instead, open space for a 'new' or a 'next' normal although, with the launch of vaccination programmes, uncertainty will be less radical. This will allow governments to shift their macro focus from one of triage and damage control, to plotting optimum recovery paths, and making the structural changes needed to progress along those paths (Gruenwald , 2020).

EY (2020) and McKinsey (2021a) identified some trends that will shape this new era, which include: (i) growth in digitalization and technology usage, meaning everything from online customer service to remote working, artificial intelligence (AI) usage, and machine learning (ML); (ii) waves of innovation and launch of a new generation of entrepreneurs, either out of necessity or new opportunities; (iii) reconfiguration of operations and portfolios, focusing on resilience - the ability not only to absorb shocks but to use them to build competitive advantage; (iv) shifts in consumer behaviour, focusing more in online retail/e-commerce; (v) supply chains' rebalancing and shifting, with companies diversifying their networks of suppliers to decrease risks and become more sustainable, and perhaps more local; (vi) changes in work, with more people working away from offices; and (vii) tax reforms (and hopefully international cooperation) to address rising debt caused by fiscal response during the pandemic. Within this broad context of major change, MSMEs are also expected to protect the health of both their employees and customers, which will entail embracing technology and new ways to keep operating, and thereby grow in a safe and sustainable manner (OECD, 2020a).

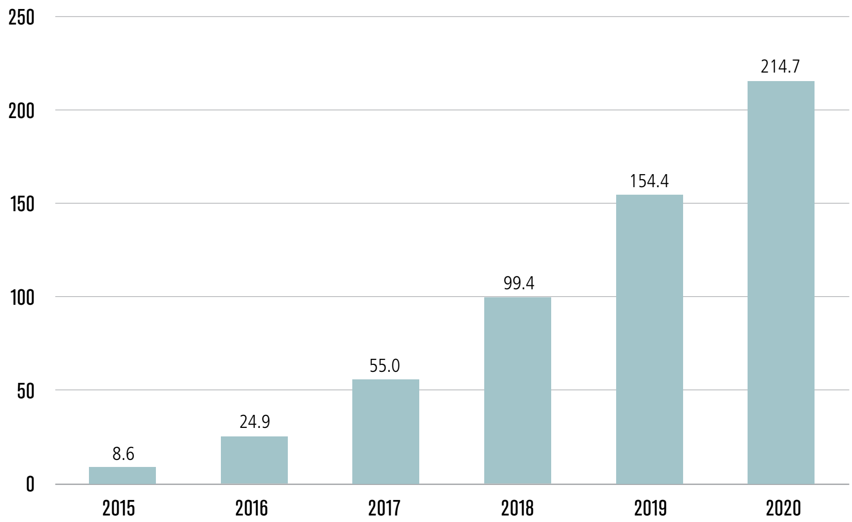
The new normal could be characterized as changing socio-economic conditions that are in the process of emerging in the post pandemic era, entailing new trends in social and corporate norms, as well as institutional structures and behaviours. The COVID-19 crisis has brought about divergent, and in some cases quite dramatic, impacts and responses. For some industries the pandemic has created some exciting tailwinds, while others have suffered badly; the cumulative effect has been to shake up historic norms. (This is akin to the notion of 'punctuated equilibrium', first used in evolutionary biology to depict sudden, large, and infrequent changes that punctuate long periods of relative stability.) When the economy settles into its next normal, such sectoral differences can be expected to narrow, with industries returning to somewhere around their previous relative positions.[35] What is less

35. The impact of the pandemic has given some sectors a major boost forward that would allow them to grow considerably, while other sectors may never fully recover. As such, sectors and economies may bifurcate, rather than coming back into the same alignment as before the pandemic. Or the result would be somewhere in the middle, as no one really knows how 'sticky' this pandemic will be in terms of its potential to change things permanently.

obvious is how dynamics within sectors are likely to change (Sneader and Singhal, 2021). The new normal may also exhibit various aspects that influence such issues as: debt management; movements of goods, people, and capital; healthcare services; consumer and investor behaviour; and supply chain rebalancing; as well as climate change mitigation and adaptation, at both the national, regional, and global levels. In this vein, we concentrate here on finance and operations, noting that what is generally true for businesses is more acute for MSMEs (Sneader and Singhal; 2021). Two crucial aspects have been observed, however: digitalization and impacts on SDG implementation.

First, the new normal for business chiefly means that electronic commerce (or e-commerce) replaces in-person or physical transactions (Arreola, 2020; Davis and Toney, 2021; Sneader and Singhal; 2021). While this trend clearly started prior to the current crisis, the pandemic accelerated it. The rise of e-commerce is well documented: online sales as a portion of total retail sales rose from 5 to 15 points starting from the beginning of lockdowns in the United States and the United Kingdom; in the European Union (EU) 27, online sales experienced growth of up to 40 per cent year on year, while in-person sales growth was negative (OECD, 2020a). Major brands and retailers initially closed stores on government orders; after months into the confinement, they announced permanent store closures while boosting investment in online retail. For example, H&M announced it was closing 250 stores globally in the autumn of 2020, while enhancing its online presence to compensate for the revenue shortfall (BBC News, 2020). Even Hong Kong, China, where consumers prefer in-person shopping to online consumption, experienced surges of 10 per cent growth in e-commerce during the COVID outbreak (Insider Retail, 2020). Figure IV.1 also indicates the rapid growth of online transactions in Asia and the Pacific in the recent years. It shows that impacts are both deep and broad, and the repercussions are still reverberating. It may be years until all aspects of this new state of affairs settles into a recognizable pattern.

Figure IV.1: Mobile payment transactions in Asia and the Pacific from 2015 to 2020, US$ billion



Source: The authors' compilation based on McKinsey (2020).
Note: The data for 2020 is an estimate.

MSMEs typically adopt technology later, due to a lack of sufficient resources – including finance – and knowledge (Caldeira and Ward, 2003; Gupta and Barua, 2016; Syuhada and Gambett, 2013). In order to survive and hopefully return to growth, however, they will need to move to digitalize operations as soon as feasible. At present, the bulk of policy-making remains focused on the 'human' aspect of tiding people and businesses over, but it will increasingly need to shift towards helping spur this tech-driven transition process. Some MSMEs are already overhauling their logistics and marketing to reflect this sudden move away from face-to-face transactions to e-commerce. Indeed, it is an open question how many jobs will be lost permanently as a result of automation and digitization occurring so rapidly, as MSMEs are discovering labour cost savings in certain facets of their operations, despite the overall devastating economic effect of the pandemic (OECD, 2020c). Advances in AI, Internet of things (IoT), and robotics have the potential to radically alter the economics around business costs, including human resources, and while this may be most associated with production lines in large firms, it is equally true of small retail businesses that shift to self-checkout and other modes of working.

Second, in the near term, the pandemic's disruption will negatively affect progress towards the SDGs. Regarding MSMEs and economic development, SDGs #1 (no poverty), #5 (gender equality), #8 (decent work and economic growth), #9 (industry, innovation, and infrastructure), #10 (reduced inequalities), #12 (responsible consumption and production), #13 (climate action), and #17 (partnerships for the Goals) are of particular importance. Table IV.1 provides an overview of those SDGs and their impacts on the MSME sector under the pandemic. It also indicates the degree of MSMEs' role in the implementation of specific SDGs.

Table IV.1: Select SDGs and their impacts on MSMEs in the COVID-19 pandemic context

SDG	Target	Objective	MSMEs' role on the Goals
#1	No poverty	End poverty in all its forms everywhere.	Dependent
#5	Gender equality	Achieve gender equality and empower all women and girls.	Direct
#8	Decent work and economic growth	Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.	Large and direct
#9	Industry, innovation and infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.	Modest but direct
#10	Reduced inequality	Reduce inequality within and among countries.	Dependent
#12	Responsible consumption and production	Ensure sustainable consumption and production patterns.	Large and direct
#13	Climate action	Take urgent action to combat climate change and its impacts.	Dependent
#17	Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development.	Modest but direct

Source: The authors' compilation, adopting the policy assessment framework of Dennis (2011) on new, small, and entrepreneurial business.

The aforementioned SDGs, in which MSMEs are expected to play a significant role in attaining, suggest several pertinent points. The impact of the COVID-19 pandemic on MSMEs has become a direct threat to mitigating poverty and inequality in Asia and the Pacific, where MSMEs have been a key component of socio-economic development in the past decades. Women, and other disadvantaged social groups, may also suffer disproportionally under the pandemic. Women constitute a higher percentage of the workforce in customer-facing sectors, such as retail, tourism, and hospitality, which have been impacted by the pandemic more severely (OECD, 2020b). It should also be kept in mind that MSMEs have been a primary driver worldwide of female labour force participation, while the proportion of women in the workforce correlates positively with economic growth (ILO, 2020; World Bank, 2019a). The causal chain here is clear; if the pandemic has impacted sectors where women represent a higher proportion of the workforce, including those working in or owning MSMEs in those sectors, then this will feed through, and potentially magnify, the negative impact of COVID-19 on inclusive economic growth in developing countries.

The pandemic resulted in record unemployment around the region, which in the short term necessitates all manner of government socio-economic relief programmes, coupled with the medium-term effect of labour-replacing technologies. The ILO estimated that, as of mid-December 2020, the equivalent of 81 million full-time jobs (i.e. 48 labour hours per week) had been lost in the Asia-Pacific region (ILO, 2020). A great number of global supply chains have been severely disrupted and require some rebalancing throughout networks where MSMEs are key members and provide various fundamental products and services (ESCAP, 2021; OECD, 2020c). MSMEs' access to finance, for example, with trade finance, must be enhanced throughout the global supply chains for their survival, perhaps adopting ESG practices. The present pandemic has also deteriorated the financial provision of governments and other stakeholders to take substantive action on climate mitigation and adaptation, and to which MSMEs are expected to contribute but have played lesser role so far (DESA, 2020). Some policy interventions will be needed here to enhance financial incentives for MSMEs to undertake greater climate change related activities. In this vein, closer collaboration among stakeholders must be sought to provide more financial options to MSMEs for their survival in the wake of the global pandemic.

Thus, the new normal is a highly dynamic phenomenon that will impact MSMEs' future, and concerted interventions will be required to enhance MSMEs' access to finance to help mitigate its negative impacts on their strategies and operations. The following sections will review the aforementioned crucial issues on MSME financing in turn.

3. Leveraging innovative financing through the digital economy

The kinds of digitalization occurring in the financial services space are certainly not exclusive to MSME finance, nor finance in general. Rather, a digital-driven revolution of sorts is underway across a vast array of business services; a service sector equivalent to the concept of 'Industry 4.0'.[36] A bewildering array of new services, and 'software as a service' (SaaS) offerings are coming to the market, spanning almost every conceivable way that MSMEs interact with customers (sales and marketing), their input suppliers, their financiers, and their own internal

36. 'Industry 4.0' envisages the increasing automation and digitization of traditional manufacturing practices, through the use of smart technology, robotics, the IoT and machine-to-machine (M2M) communication, etc. For a cogent overview, refer to Schwab (2016).

systems (OECD, 2015). Some of those include access to finance-related components in a convergence of previously separate products and services. To take just one example, some financing needs of MSMEs in the retail sector will be addressed not by traditional banks and financiers, but by financial services embedded in point of sale (PoS) software provision, e-commerce and online payment systems, and digital warehousing and analytics.[37]

Financial digitalization holds enormous potential to facilitate MSMEs' access to finance in the Asia-Pacific region under the COVID-19 crisis. This phenomenon offers solutions to increase efficiencies, lower transaction costs, enhance security, and expand financial services to the underserved MSME sector. Financial digitalization, or 'fintech', covers a group of complementary finance-related technological advances that have the potential to shape a wide range of financial operations altogether (Hendrikse, van Meeteren, and Bassens, 2019). Therefore, fintech services can cover various sectors and industries, such as education, retail banking, fundraising for non-profit organizations, and investment management. Fintech may not only be used by MSMEs to make and receive payments but that there are also specialized services aiming at providing funding options for them.

During a loan application process, for instance, fintech tools can help financial institutions capture, validate, and analyze the creditability of their MSME customers remotely (World Bank, 2020). AI and ML algorithms can also enhance the approval process for MSME loans, thereby compensating for a lack of financial data (ibid). As a few other examples of new technologies, automation, big data, and distributed ledger technology are also providing unprecedented opportunities in innovative financial services (IFC, 2021). New entrants, such as mobile network operators, payment service providers, merchant aggregators, online retailers, alternative lenders, and super platforms, are just some of the fintech players that add to the competitive landscape for conventional banking systems (Hendrikse, van Meeteren, and Bassens, 2019; IFC, 2021).

Digital finance also has the potential to replace many conventional financial services offered by the traditional banking sector: retail banking, foreign exchange, wealth management, investment advice, stock broking, spread-betting, corporate banking, and lending and loan brokerage, which enhance speed and flexibility while making them more personalized and faster. Digital finance provides MSMEs with such amenities as cryptocurrencies and crypto-assets, peer-to-peer (P2P) lending, crowdfunding, online marketplaces and aggregators, smart-devices linked, and index-based insurance (United Nations, 2020). A well-established network of fintech

37. A 2020 map of fintech start-ups in Singapore alone plotted 430 different private sector initiatives, spanning: AI and big data, blockchain and cryptocurrencies, investments and wealthtech, crowdfunding and crowdlending, lending and core banking, neo banking, remittances, regtech, insurtech, payments, and personal finance (FintechNews Singapore, 2021).

applications can optimize payments and settlement of securities as well as back office functions, by reducing costs and enabling direct business-to-business (B2B) transactions, thereby by-passing traditional intermediaries (He and others, 2017).

Due to lockdowns and other preventative health protocols, many MSMEs across the globe closed their workplaces or retail shops. In order to survive, fintech applications became fundamental for their daily operations for receiving payments, placing orders, transferring money, paying taxes, and obtaining credit (Sahay and others, 2020). The volume of mobile payment transactions is expected to raise from US$ 8.6 billion in 2015 to US$ 214.7 billion in 2020 (Harrison and others, 2021) (see figure IV.1 again). Top contributors for mobile payments in Asia and the Pacific include, among others, Alipay and WeChat Pay in China, MobiCash in Bangladesh, and Paytm in India (Li, Candelon, and Reeves, 2018; Mali, 2016; Parvez, Islam, and Woodard, 2015). Many least developed countries (LDCs) in the Asia-Pacific region have also experienced the same trends in digital payments (table IV.2). Emerging mobile payment applications have been leading to a rapid decline in cash transactions (Agur, Peria, and Rochon, 2020).

Table IV.2: Trends of digital payments in select Asia-Pacific LDCs

Made/received digital payments in million		Average transaction value per user in US$		Users in million	
2017	2020	2017	2020	2017	2020
2.4	4.9	5.0	15.0	2.7	5.3

Source: The authors' compilation based on IMF (2020).
Note: Asia-Pacific LDCs in this table comprise Bhutan, Cambodia, Kiribati, Lao PDR, Salomon Islands, and Tuvalu.

Under the ongoing crisis when investors try to minimize their risk exposure in the traditional banking sector (Lewis and Liu, 2020), new digital applications and platforms have been developed to channel capital flows to MSMEs. Barriers faced by MSMEs have provided opportunities for new business models concerning the offering of innovative financial products (ibid.). These new applications, platforms and models can accelerate in light of the COVID-19 pandemic and its aftermath. In this context, fintech firms are increasingly becoming alternatives for MSME financing. For example, online lending has been widely adopted by relatively large online banks like MYbank in China, which in partnership with Ant Group are offering 'no contact micro-loans' to MSMEs (Yang and Zhang, 2020). Those companies are actively encouraging their MSME customers to move to digital finance by teaching them how to use online services (Toh and Tran, 2020). Another example is PayPal that works to promote its contactless fintech services through QR code, allowing MSMEs to receive loans and make transactions minimizing health risks related to COVID-19 (Remolina, 2020).

In response to the pandemic, these fintech companies have also introduced relief initiatives for struggling MSMEs. These initiatives focus on online financial and social data and machine learning systems to analyze MSME customers' credit worthiness (Ghosh, 2020). The limited credit history of MSMEs historically, coupled with the lack of tangible assets as collateral, has placed them at a disadvantage in obtaining credit and building a sound credit rating; it is a common problem among Asia-Pacific developing countries which typically lack extensive coverage of credit bureaus and/or credit registries (Abe and others, 2012; ADB. 2020a). In this vein, online data is essential for fintech in order to prioritize the provision of loans (Wang and others, 2019a). Digital platforms also enhance and facilitate third-party credit guarantee schemes that regulators enact. This is vital for MSMEs, now and for the immediate future, as many MSMEs are facing hardships and often are not able to provide enough collateral for loans from formal financial institutions such as banks, which is an ongoing issue both in the Asia-Pacific region and globally (Abe, Troilo, and Batsaikhan, 2015; Troilo and others, 2019). This presumes that the banking system and credit guarantee guidelines are sound; if so, digitalization can scale their use to provide essential credit to MSMEs.

Another advantage of digital finance is greater transparency. Governments providing digital payments, either directly via agencies or ministries or indirectly via the financial services sector, create a trail of transactions. This dampens both corruption and tax evasion; however, such digital mechanisms could still become the basis for frauds and scams (Manyika and others, 2016). These online scams could be a greater worry in emerging economies where cybersecurity is weaker; moreover, these economies tend to have more MSMEs in the informal sector (Abe and others, 2012; ILO, 2016). For the benefits of traceability and transparency to be realized, it is necessary to bring MSMEs into the formal sector. It also behoves governments to consider tax forgiveness and amnesty for MSMEs entering digital platforms and the formal sector, as many may have avoided taxes in the past. Regulators also need to consider different general policies to facilitate MSMEs throughout the pandemic, such as decrease regulatory pressures, tax policies, and policies to protect investors. Financial rating models that use alternative digital data could be a field for regulators as this can help enhance banks and non-banks' credit decision-making (World Bank, 2019b).

On the demand side, it may be necessary to consider awareness campaigns on alternative digital sources of funds for MSMEs as well as skill enhancement related to the applicability and management of the digital sources of finance. If MSMEs can adopt digital finance that helps track and coordinate their funding, sales, sourcing, and payments, then it would be a huge leap to envisage that fintech could provide to MSMEs, based on having an accurate, real-time, and robust overview of their cash flows and financial well-being. At a stroke, that reduces the perceived risk of providing financing, which then lowers the cost of funds. At this point, traditional approaches to risk assessment, like credit scoring, become moot. Another attraction for MSMEs will be that, if done right, these offerings can easily be tailored to fit the specific needs of each MSME and will be relatively inexpensive to use.

Lastly, a number of platforms currently exist which have used technology to achieve various parts of what is being envisioned above. Their existence is proof that this is all doable; it just has not been done yet. For instance, Lufax in China is a P2P lending platform that enables matching of lenders with borrowers, in exchange for a transaction fee, without restrictions on the purpose of the loan. As such, it democratizes lending without creating additional strain on the financial system.[38] CreditTech in the United States is an AI driven financing platform that establishes MSME creditability using a wider set of data than traditional financial institutions. By using big data to drive down risk, CreditTech has helped to innovate the process of risk assessment.[39] WeBank has pioneered mobile banking and lending for the poor, unbanked, and MSMEs in China, using data and volume to manage risk. Parts of WeBank's model could be adapted to channel funds from investors interested in MSME impact to organizations which traditionally would be excluded from formal finance in the emerging markets.[40] Some other examples are presented in the following box cases in detail.

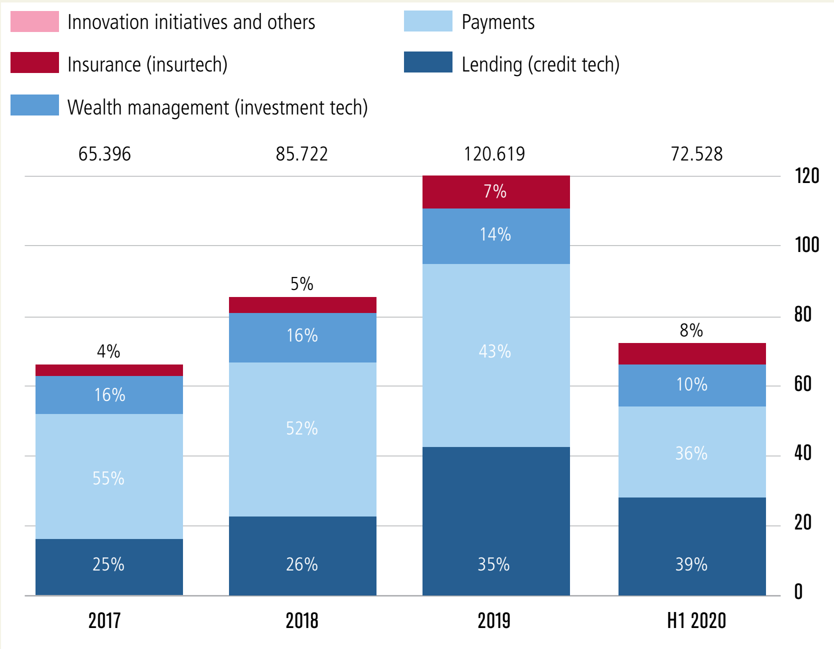
Box IV.1
Structural challenges in financial digitalization

The case of the Ant Group in China is illustrative of the structural challenges that finance digitalization may entail. Ant Group's Alipay application rapidly burgeoned to become the single largest payments platform in China, thereby becoming a significant competitive threat to the country's established banking sector. In the run-up to what became an aborted initial public offering (IPO) in early 2021, it became apparent how large Alipay had become, and that Ant Group's market capitalization would exceed that of most of China's state-owned commercial banks (Global Times, 2021; Vega, 2021). Through its Huabei and Jiebei products, Alipay had come to represent about 10 per cent of all consumer lending in China, and Ant Group had an outstanding loan portfolio equivalent to US$ 340 billion by mid-2020 (McMorrow and Liu, 2020). Approximately 90 per cent of this lending was underwritten by an extensive network of over 100 smaller regional banks, willing to offer competitive interest rates in exchange for having access to Ant Group's distribution network – and superior risk analysis – of around 500 million borrowers (Bloomberg, 2020).

38. For more information, visit: https://www.lufaxholding.com/about/index.
39. For details, visit: https://www.credittechnologies.com/.
40. For details, visit: https://www.webank.com/#/home.

Regulators in China moved in January 2021 to issue new rules that cap total joint-lending activity through applications like Alipay to no more than 50 per cent of a bank's total loan book, and lending through any single fintech platform may not exceed 25 per cent of a bank's tier one capital. In addition, banks may no longer offer deposit accounts on third-party online platforms (Bloomberg, 2021). As for Ant Group, regulations are being applied that will effectively require it to operate more like a conventional bank, notably with regard to having capital on hand to cover risk, and be less of an asset-light fintech business. In short, it will have to play by the same fiduciary rules that its banking peers do. As of 2 March 2021, Ant Group's executive chairman, Eric Jing, stated that the IPO would still occur (MarketWatch, 2021).

Figure IV.2: Ant Group's revenue breakdown from lending, 2017-1H2020, RMB billion



Source: McMorrow and Liu (2020).

Box IV.2
Enhancing credit scoring with alternative data: The case of Lenddo

Lenddo, a SaaS company based in Singapore, is an example using alternative data for credit rating. The company was founded in 2011 and initially operated online lending services in three countries: the Philippines (since 2011), Colombia (since 2012), and Mexico (since 2013). With the vision of improving financial inclusion for at least a billion people, the company uses non-traditional alternative data comprising social media and smart phone records to assess the financial health of its customers (Lenddoefl, n.d.).

Alternative data are derived from non-traditional sources which are non-credit information, such as insurance payments, utility payments, rental payments, taxes, public records, property records, mobile phone usages, and even social media, Internet usage, emails, texts, messaging files, audio files, digital pictures, and images, that help score the creditworthiness of MSMEs, or of individuals (Lu, Zhang, and Li, 2019; Teinemaa and others, 2016). While 'traditional data' refer to a credit report obtained through the lenders' credit utilization and credit history (Kolo, McGraw, and Gaskill, 2012), alternative data could be used to examine their behaviours. Alternative data are becoming an important source of credit assessment for MSMEs and individuals who neither have business relationships with traditional financial institutions nor solid financial history (Björkegren and Grissen, 2019). For this reason, fintech companies like Lenddo in emerging economies are increasingly using the alternative data and collect data by collaborating with banks and mobile network operators.

Confronting the information asymmetry between investors and MSMEs, the alternative data provides complementary evidence on trustworthiness of MSMEs (Mengelkamp, Rohmann, and Schumann, 2016). The target credit customers of Lenddo are MSMEs in developing economies with minimal financial records, whereas social media data are prevalent. In this case, Lenddo circumvents the need for a historical credit score by using social media data through its own rating system (Tan and Phan, 2018). MSME owners are scored according to their social network data from Facebook, LinkedIn, Twitter, Gmail, and Yahoo accounts. The owners' presence in malicious and offensive posts in social media accounts is considered as socially irresponsible behaviour, which affects their credit rating (ibid.). The ratings are also based on the 'trusted connections' which are character references that will vouch for the borrower's financial performance (Teinemaa and others, 2016).

As social media is playing an important role on business development, including reputation building, customer outreaching, and product selling, the alternative data could be a new and complementary option for credit rating for MSMEs. However, it will also challenge MSMEs on social media management and regulators and investors on the reliability and monitoring of the alternative data.

Box IV.3
Fintech solutions for MSME financing in the Pacific

The MSME sector in the Pacific typically suffers from difficulties of accessing finance due to the lack of basic financial infrastructure and capacity, such as no credit rating systems and low financial literacy (ESCAP, 2019) One of the efficient ways to facilitate MSMEs' access to finance is to use fintech solutions. In this vein, a report by the International Monetary Fund (Davidovic and others, 2019) provides some fintech solutions for MSMEs in the sub-region:

In the Pacific, even relatively small financial transactions entail high compliance costs for anti-money laundering (AML) and combating the financing of terrorism (CFT), which hinder the development of micro-loan and financial inclusion. One fintech solution to help lower these costs is identity verification and biometric systems, based on such technologies as fingerprint and face identification, which are not only beneficial to enhancing transparency, but also pave the way for other financial infrastructure, like credit rating systems. Cost-effective and secure technologies like blockchain could also be adopted to store and handle personal financial data. For instance, Papua New Guinea has used blockchain to encrypt personal identities collected from mobile phones, and then shared with other platforms and financial agencies to facilitate financial services safely.

Mobile financial services could also facilitate payment, settlement, and transaction, enhancing financial services for MSMEs. As the numbers of mobile phone subscribers and SIM connections are increasing (GSMA, 2020), mobile payment would be a simple and feasible approach to increase financial convenience and efficiency. It would also enable smaller funding to MSMEs with easy transaction. Some Pacific island States, such as Fiji, Samoa, and Vanuatu, have experimented with mobile financial services to improve financial inclusion among their MSMEs.

Another challenge for MSME financing in the Pacific is the lack of a credit rating system, which hampers banks and investors in assessing risk. As a result, most MSMEs must rely on governmental credit guarantee schemes (Davidovic and others, 2019). With fintech solutions around payment, transaction, and identity verification, online data could be collected for building a credit rating system and even a national credit bureau for the MSMEs. Alternative data collected from social media, mobile payments, and/or utility records could also be used for assessing the trust-worthiness of MSMEs.

Successful adaptation of fintech solutions relies in part on effective interventions by governments to help incentivize investment, and create an enabling market and conducive legal framework. Also, improving digital financial literacy among MSMEs is necessary, through education and training.

Box IV.4
A digital bridge between MSMEs and finance providers in South-East Asia

Launched in Viet Nam in 2015, Kiu Global has developed into a cloud-based business support platform specifically for MSMEs and is currently available in six South and South-East Asian countries (Bangladesh, Cambodia, Myanmar, the Philippines, Thailand, and Viet Nam). The platform currently services more than 35 000 MSMEs, and MSME finance appears to be its primary focus.

Among its integrated services, Kiu Global provides: (i) a business management platform (BMP) that includes customer relationship management, accounting, sales automation, human resources management, and inventory management; (ii) an AI-driven credit scoring engine; and (iii) online access to working capital loans of up to US$ 50 000 based on clients' business performance. Loans are provided either directly by Kiu or by banks that have opted to partner with Kiu.

Kiu collects and uses the data that clients provide while using the BMP, which is then analyzed by an AI credit scoring platform. This platform can analyze fraud, transactional data, and millions of historical loans in conjunction with predictive analysis to create a credit score for a client MSME that finance providers can then use to make a prompt investment decision. The credit scoring platform is therefore able to address two of the most common constraints to MSME finance: (i) information asymmetry; and (ii) the costs of doing financial analysis and due diligence.

Kiu has also expanded into consulting for banks wanting to increase their lending activity to MSMEs by providing 'lending-as-a-service' automation, ranging from electronic know-your-customer (eKYC) and onboarding, loan origination and credit scoring, through to loan management. Kiu also supports MSMEs with point of sales (POS) systems that can allow them to better record, manage, track, and analyze sales and inventory, accept non-cash payments, and venture into e-commerce.

Source: https://www.kiuglobal.com.

Box IV.5
Assisting MSMEs in complying with know-your-customer (KYC) requirements

One of the biggest impediments to MSMEs getting finance or even access to institutional funding pipeline has been to meet KYC requirements. This is due to the complexity of the KYC process, which is defined as the procedures necessary for banks to ensure their customer's identity so as to monitor risks more accurately (Jumio, 2020). And it is often compulsory for banks to comply with KYC regulation as well as anti-money laundering regulations to limit fraud (ibid.). In this vein, regtech solutions such as digital identifiers can enhance KYC compliance (Lootsma, 2017; Ozgümüş, 2018).

In India, customer's identity is verified through their national biometric eID scheme as 99 per cent of Indian population subscribe the digital identity scheme (Thales Group, 2020; UIDAI, n.d.). The Global Legal Entity Identifier Foundation (GLEIF), an initiative of the Group of 20, promotes the use of digital identifier created to lower MSMEs' onboarding burden bringing by the current KYC system which takes six weeks on average (GLEIF, n.d.). By adopting the digital identifier, bankers can also have more time to work on their core focuses such as credit appraisal instead of dealing with all the onboarding documentation process. Another example of the digitalized KYC process is the Sovrin Foundation, an Internet-based non-profit organization, and its network where individual can hold and collect their credentials (such as driver's license and passport) without relying on individually siloed databases (Sovrin, n.d.). By using Sovrin, identity holders, credential issuers, and verifying entities can perform identity transactions simply on a mobile application, with secure encrypted connection to each other.

Some companies also provide digital identities and credentials to assists MSMEs in the KYC process. In the case of Affinidi, a subsidiary of Singapore's Temasek, it is building a global ecosystem where customers can electronically store personal credentials, such as customer profile, trade history, financial statements, and credit rating. Such credentials are provided by public registries, credit bureaus, customs, and financial institutions. Affinidi's services can assist MSMEs in complying with many KYC requirements by providing legal digital identity. Onfido also helps a financial institutions' identity verification digitally with optical character recognition and face detection while speeding up MSMEs' application process. Thanks to AI and ML, Onfido can recognize the identity of customers against global databases to prevent any suspicious and illegal actions.

Sources: https://www.affinidi.com; https://www.gleif.org/en/; https://onfido.com/; https://sovrin.org/; and https://uidai.gov.in/.

Box IV.6
An online short-term loan platform for MSMEs

Validus is an online crowd-funding (P2P) platform that aims to address the financing gap that MSMEs in Indonesia, Singapore, Thailand, and Viet Nam experience. Validus aims to roll out its service across South-East Asia, and become the sub-region's leading financial platform that connects institutional investors and MSME communities. The firm uses data analytics, ML, and AI to 'digitally underwrite' short-term (between 30 and 90 days) loans to growing businesses. It primarily serves as an e-marketplace, but may also participate in individual loans, on a case-by-case basis. At the time of writing, the company was focusing on MSMEs in Viet Nam.

Broadly based on invoice financing (i.e. factoring), the loans – up to 80 per cent of the invoice amount – are unsecured, and thereby avoid the collateral constraint that many MSMEs encounter. Approval is granted within a few working days. Loans have a short-term tenor, and are therefore only appropriate for working capital needs, and not long-term capital financing. Major corporates can also refer their MSME vendors to join Validus, as a means to help the latter finance their activities within the former's supply chain.

Institutional and individual investors can apply to establish an account with Validus, and once approved, may participate in 'live facilities' (i.e. calls for debt funding). Minimum amounts are set for account registration (currently VND 150 million in Viet Nam), and for participation in individual loans (currently VND 20 million in Viet Nam).

Validus is not a bank, but has been granted regulatory approval by the relevant agencies in Indonesia (Batumbu), Singapore (a Capital Markets Services licence), and Thailand. It has received investments from a subsidiary of Temasek Holdings in Singapore and the Dutch Development Finance Institution – FMO.

Source: https://validus.vn/en/.

4. Enhancing MSME finance through strengthening governance in global supply chains

Global supply chains have already undergone a number of changes driven by increasing financial options under digitalization prior to the COVID-19 outbreak (Ali, Gongbing, and Mehreen, 2018; Kim and Abe, 2020). The pandemic has drastically accelerated these changes as a matter of survival among supply chain members, comprising a great number of MSMEs.[41] Supply chain (or trade) finance aims at assisting MSMEs in entering to international markets with affordable cost and acceptable risk. Various financial institutions (e.g. development banks, commercial banks, and insurance companies) provide such finance to traders and enhance their liquidity necessary for international trade. The main purpose of supply chain finance is to hedge the trading risk for both importers and exporters, often like an insurance contract provided by financial institutions to the clients of both sides as an intermediary. Along with the advancement of digitalization (e.g. AI, ML, and big data), online supply chain finance has become a mainstream, while enhancing transparency throughout supply chains.[42]

However, the links between supply chain finance and digitalization are scarcely understood, beyond the reality that constraints on finance present significant barriers to MSME traders' ability to upgrade their enterprises in terms of digitalization (Chen, Liua, and Lib, 2019). The underdevelopment of MSMEs in terms of digital capabilities also inhibits their ability to secure both trade and investment financing, a situation that will only increase under the crisis. Our challenge at present is to turn this vicious cycle into a virtuous one, in which addressing the digitalization challenges with forward-looking policies, and private sector action could improve MSME financing prospects while improving their competitiveness in a rapidly changing global environment.

41. COVID-19 has elevated the urgency of digitalization within the supply chain at almost every point due to the massive shift from physical to online retail and e-commerce in almost every market during 2020. The surge in online sales took place broadly across many categories of products, even those such as household staples, which had until that point been unremarkable in terms of e-commerce (Meyer, 2020). As a result of COVID, those who were already shopping online accelerated their spending, while those who were online novices saw their preferences shift away from in-person retail to e-commerce. The rise of e-commerce, amidst a reordering of retail sales for different product categories, has disrupted traditional mass production, particularly in the emerging markets that manufacture the majority of the world's basic consumer products. The need for speed, flexibility, and transparency, as well as smaller order quantities due to a quickening of the purchase cycle, can only be met with increased digitalization and automation in production processes (Kim and Abe, 2020).
42. For more information, visit: https://www.adb.org/what-we-do/trade-supply-chain-finance-program/main; https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financial+institutions/priorities/global+trade/gtfp; and https://www.wto.org/english/thewto_e/coher_e/tr_finance_e.htm.

These new needs around digitalization require dedicated strategy, investment, and capacity building across the supply chain, and yet they are arising at a time when funding is more constrained than ever. COVID has significantly squeezed supply chain finance, not only because overall demand for consumer and industrial goods has fallen in line with the economic slowdown but also because the process of financing remains largely underdeveloped in the emerging markets in Asia and the Pacific where many MSME participants in global supply chains are located (Duval and Utoktham, 2014).

A recent study into supply chain financing conditions facing MSME exporters across the global emerging markets is illustrative. In the second half of 2020, two private sector research bodies working under the Advisory Group on Trade Finance of the International Chamber of Commerce (ICC) conducted a series of structured interviews of MSME exporters located in select emerging economies, which globally account for over 70 per cent of emerging markets trade (table IV.3). MSMEs operate in five key sectors that were identified as trade intensive or participate in global supply chains, namely: (i) automotive; (ii) commodities; (iii) consumer electronics; (iv) consumer products; and (v) textile and apparel. Those national surveys document the financial hardship facing MSMEs during the COVID-19 pandemic, and these interviews provide additional details that illumine possible ways to mitigate the situation in the short and longer term.

Table IV.3: The findings of a study conducted under ICC's Advisory Group on Trade Finance

Regions/sub-regions: countries	Findings
South Asia: Bangladesh, India, and Pakistan	• Supply chain finance is advanced in urban areas with digitized documentation processes, while bottlenecks in terms of paperwork requirements and lead time still exist in rural and remote areas. • Suppliers look to institutional credit agencies, such as export credit guarantee corporations (ECGCs), for insurance, but there is not enough liquidity to meet market's short-term needs. • Indian suppliers have been shifting to open account terms instead of letter of credit (L/C) due to the cost and inflexibility of covenants, while Bangladeshi suppliers are losing out since they are limited to L/C by regulation. • Reduction in trade volumes and the doubling of days needed to collect cash from buyers have wreaked havoc on Bangladeshi exporters. • Smaller suppliers have seen their volume shift to cash-rich manufacturers, as buyers hedge the risk that consolidation will occur in the absence of local financing support.

Continued...

South-East Asia: Thailand and Viet Nam	• Thai factories struggle with access to liquidity, as local banks tighten financing particularly for exporters, while international financing remains out of reach. • Transaction processes still primarily use paper documentation. Borrowers are unable to invest in process digitalization, given their weak cash positions and poor interoperability of technologies. • The poor performance of international customers leaves local factories unable to access export insurance of factoring. This also diminishes their access to new markets given their lack of working capital. • Most financing occurs with local banks, which unlike foreign lenders, provide flexibility in the face of deteriorating conditions.
West Asia and North Africa: Turkey, Egypt, and Kenya	• Trade finance is underdeveloped in all three nations, with relationships based on personal credit history. As a result, enterprises resort to less reliable financial instruments such as cash against goods or cash against documents. • Both pre- and post-shipment financing is difficult to obtain, especially for MSMEs. Smaller buyers overseas receive particular scrutiny. • Export-import (EXIM) banks sometimes substitute for commercial lending. • While digitalization of banking has occurred for individual customers, it has yet to affect the corporate sector. Trade finance transactions require significant amounts of paperwork as many banks require official documents; the COVID-19 outbreak postponed digitalization initiatives.
Latin America: Brazil, Guatemala, and Mexico	• Because of COVID-19, some vendors confirmed that their overseas customers have extended payment terms from 30 days up to 120 days. Vendors have become increasingly conservative about selecting/maintaining customer relationships. • The financial system in Guatemala is underdeveloped, with little access to trade finance solutions. In a few cases, vendors have been unable to access factoring because of the poor financial profile of their customers in the United States. • For domestic trade, some MSME vendors work on trust and pay cash. The infrastructure to support financial products for these transactions is lacking.

Source: The authors' compilation based on an unpublished study of ICC's Advisory Group on Trade Finance, conducted in the second half of 2020.

The above conditions have operational as well as human consequences. MSME exporters observe that they have had to cut staff or salaries, forego upgrades and investment, postpone professional training for their remaining staff, or close business lines. As one said, "I am better off to take the loss rather than produce on my own account and possibly not be paid." In some jurisdictions, suppliers have organized collective appeals to buyers to share the financial burden, but to little effect (BDNews.com, 2021). Buyers themselves are in dire straits given the cratering in overall demand.

China is the exception to the above conditions. The government has been proactive at enabling financing from the private and public sector and enacting strong policy support. MSMEs operating in China report that the challenges exist in three broad areas: (i) access to markets; (ii) access to liquidity; and (iii) transactional complexity and specificity:[43]

- Access to markets: Some suppliers were able to find new customers in traditional United States and European markets, while local policy support enabled firms facing export difficulties due to decreased foreign demand to sell into China's domestic market.

- Access to liquidity: The financial services sector has responded with mixed results, with a more positive trend after June 2020:

    - Banks provided revolving credit quotas to long-established firms secured with collateral to help finance. On the other hand, MSMEs (especially start-ups) endure a vetting period and experience a much more tedious process to obtain the finance they need. They are also subject to higher interest rates.
    - Private enterprises were aware of fintech platforms such as those of Ant Group and Tencent; however, credit rates are extreme (up to 18 per cent), while the principal tends to be lower than what banks lend.
    - The COVID-19 pandemic caused temporary liquidity difficulties in March-June 2020 due to the cancellations of orders, prolonged payments, and the vendors' write-down of invoices by 15 per cent on average. During this period, some firms were able to renegotiate their financing terms to obtain additional financing.
    - Since June 2020, heightened demand has benefited Chinese exporters and their liquidity has improved.

- Transactional complexity and specificity: Use of digitalization for trade documents is nearly 100 per cent, making the flow of funds among banks, suppliers, and buyers fast and efficient.

43. This is also based on an unpublished study of ICC's Advisory Group on Trade Finance, conducted in the second half of 2020.

Box IV.7
Digitalizing cross-border trade, supply chains, and trade finance

Headquartered in Singapore, the Distributed Ledger Technologies (#dltledgers) has developed a software solution that harnesses a combination of blockchain, AI, and cloud computing to support companies engaged in cross-border trade and supply chains, including trade finance. The fintech firm can help companies to use their working capital more efficiently by significantly reducing the time needed to execute individual cross-border trade deals.

The firm has developed a distributed ledger system (i.e. a dispersed, shared, and synchronized digital database across multiple sites) that supports cross-border trading, and the financing of that trade. It also operates a software solution, SmartFIN, that helps companies find the optimal financing rates for cross-border trade, including letter of credit (L/C) discounting, accounts receivable financing (ARF), accounts payable financing (APF), structured commodity finance, and simple term loans.

Having registered, clients can manage all their cross-border trading activity, documents, and messages on a single, secure dashboard. They can also compare the best rates for trade finance from various banks and lenders, before signing a binding financing contract. Clients can track, in real time, their goods and payments, and refer to all contracts and documents, on a single dashboard. And if they would like to repeat, trading arrangements can also be automated.

At the time of writing, the equivalent of US$ 3 billion in goods trades have been enacted on the #dltledgers's platform. The company currently has branch offices in India, Japan, New Zealand, and the United Arab Emirates, and is focused on trade in the Asia-Pacific region. While principally coping with large enterprises, medium sized enterprises are able to avail themselves of this service, particularly if participating in the supply chains of multinationals that use #dltledgers to trace their inventory right through their supply chains.

Similar, trade finance service could be further linked with some new digital providers in the logistics, delivery, and freight forwarding business (such as Ninja Van in South-East Asia), especially those that allow small firms to share containers and multi-modal shipments. These digital solutions could rapidly lessen some of the hurdles to cross-border trade for MSMEs.

Source: https://dlt.sg.

5. Enhancing MSME financing through adopting environmental, social, and governance (ESG) principles

Since the outbreak of COVID-19, governments in the region have been busy responding to the pandemic; hence, facilitating the environmental, social, and governance (ESG) principles has been less of a priority whereas the aftermath of the pandemic represents an opportunity to build a more sustainable future for the Asia-Pacific region.[44] The ESG principles focus on three issues on: (i) the quality and functioning of the natural environment and natural systems; (ii) the rights, well-being, and interests of people and communities; and (iii) the governance of companies and other investee entities (Principles for Responsible Investment, 2018). There have been several leaders in providing metrics, ratings, and analysis on ESG practices, including MSCI ESG Research,[45] S&P Global Ratings,[46] Fitch,[47] and Refinitiv,[48] among others. Key ESG index benchmarks include: the Dow Jones Sustainability Index (DJSI), FTSE-Russell, JPM ESG Index, and MSCI.[49] This trend has largely been in response to a burgeoning desire by lenders and investors to pursue ESG goals. Recent years have seen a very considerable increase in the number of institutional funds with ESG mandates, with over US$ 50 billion in new capital flowing into ESG-oriented funds in 2020 alone (CNBC, 2021).

Even though most countries do plan for sustainable recovery and building better in the post COVID-19 era, e.g. Indonesia's green financing facility, the Philippines' Green Programme, and the Republic of Korea's Green New Deal, these plans mostly aim at financing sustainable infrastructure (ADB, 2020b). They lack planning to instruct companies in ESG principles or to require ESG disclosures. Sustainable infrastructure is important in its own right, and it does increase the use of green finance; however, it does not push firms to embrace ESG fully.

Embracing ESG can be a competitive advantage for MSMEs regarding access to finance. A great number of both public and private financial institutions have started offering ESG driven loans to MSMEs as ESG principles have been gradually

44. Governments have traditionally led the process of ESG development and been the vital catalyst to enhance its awareness and promoting it. In the Asia-Pacific region too, governments have a critical role to play in ESG promotion through proactive leadership and the adoption of appropriate policy and regulation. Governments' support for ESG in the region was growing before the pandemic, and the role of the stock exchanges in this regard seems pivotal (Lim, 2020).
45. Visit: https://www.msci.com/index-methodology; and https://www.msci.com/eqb/methodology/meth_docs/Executive_Summary_MSCI_ESG_Ratings_Methodology.pdf.
46. See: https://www.spglobal.com/esg/solutions/.
47. See: https://www.fitchsolutions.com/press-releases/fitch-solutions-launches-new-fitch-ratings-esg-relevance-scores-data-product.
48. See: https://www.refinitiv.com/en/financial-data/company-data/esg-data.
49. Available at https://www.spglobal.com/; https://www.ftserussell.com/; https://www.jpmorgan.com/; and https://www.msci.com/.

accepted as one of the key criteria by banks and investors on evaluating potential investees (Park and Kim, 2020). To this point, ESG related finance has succeeded in producing satisfactory returns to investors, while lowering strategic and operational risks, and has demonstrated that financial profit need not exclude the pursuit of other worthy goals such as environmental protection and social inclusion (Chen, Huang, and Ye, 2020; Friede, Busch, and Bassen, 2015; Goss and Roberts, 2011; Kumar and others, 2016; Rezec, 2016).

The outperformance of ESG funds and stronger resilience shown by the firms practicing ESG principles during the COVID-19 pandemic have also proved the necessity of integrating ESG into investment and business activities (OECD, 2020d). ESG focused MSMEs pursuing equity financing will likely find it easier to list on stock exchanges given that investors are seeking sustainable enterprises for green investments. While the majority of MSMEs are not related to ESG issues and initiatives in any serious way, some firms are becoming directly or indirectly connected to ESG practices, particularly in the case of start-up ventures. Such MSMEs seeking external equity financing may evaluate their performance and understanding of ESG to meet investors' requirements on low environmental and sustainable risks.

As more governments develop ESG rating and disclosure systems, it is highly likely that MSMEs performing better on ESG metrics will become more visible, and potentially obtain financing easier. Investors and creditors may also urge or instruct those MSMEs with lower ESG scores to better incorporate ESG principles in their business plans, with the support of different financial and non-financial inputs.[50]

Listed companies also tend to be at the forefront of ESG practices, and often provide trade finance to their MSME suppliers who have adopted the ESG principles. For inclusion in global supply chains, MSMEs embracing ESG will be preferred to those who do not. Multinationals in global supply chains have recently faced unprecedented scrutiny from consumers, buyers, and institutional investors and therefore want MSME suppliers who will protect their brand by sharing ESG values while offering supply chain finance to them.

Under the COVID-19 pandemic, MSMEs seeking finance increasingly need to demonstrate their understanding of ESG to satisfy financial institutions and investors, who will seek the lowest risks and highest returns in all dimensions of operations, not just financial (Philipova and others, 2020). This requires MSMEs to learn and to integrate the ESG principles in their operations; here, policymakers in the Asia-Pacific region can take the lead in educating and advising MSMEs

50. Policymakers may provide another incentive that could be to steer investors towards those MSMEs that have demonstrated their commitment to integrate the ESG principles in their operations. For example, these MSMEs could be favourably listed or highlighted in equity markets if they are capable of listing.

concerning practical steps. Not only will providers of capital evaluate MSMEs' fitness at the time; MSMEs must also prepare for routine scrutiny on an ongoing basis. This is to say that audits of MSMEs on their ESG targets is a distinct possibility in the medium to long term. It will require much coaching and resources to prepare MSMEs for this new reality; however, those that do adapt can expect rewards in terms of lower cost of capital and more convenient access to finance.

Governments and regulatory institutions are enhancing these trends by requiring new ESG financing and disclosure guidelines. In some cases, businesses that implement the ESG principles in their projects are already receiving priority (Abe and Chee, 2017). In Asia and the Pacific, Japan and Australia are the leaders with regard to ESG disclosure requirements, followed by Singapore's disclosure regulation since 2017 and stricter guidelines in Hong Kong, China in 2020 (Philipova and others, 2020).

Policy measures launched for promoting ESG in Asia and the Pacific during the COVID-19 pandemic are listed in table IV.4, which reflects both limits and achievements. Firstly, the countries implementing timely response in terms of ESG are mostly the developed markets in the region. Secondly, environmental risk is the most emphasized factor by policymakers, while the social and governance factors are received less attention, partly because of firms' relatively low awareness on environment and sustainability.[51] Thirdly, notably, in the region, governments are attaching more attention on ESG disclosure through which an MSME can present its more comprehensive corporate profile thus enhancing its competence on achieving financing from banks. In addition, it is worth noticing that in the Philippines, even though the government has yet to take any policy measures, a business association (i.e. the Bankers Association of the Philippines) has already shown their string interest in ESG and held a series of discussions on the ESG principles for adopting effective environmental and social risk management among its banker members. The post-COVID-19 situation will likely encourage more governments in the region to develop ESG driven policy measures.

51. Initially, MSMEs might concentrate on environmental issues in the short term, and social and governance issues in the medium and long term. Concern over environmental degradation is at the forefront of priorities in the Asia-Pacific region, so policymakers may require MSMEs to supply data regarding their ecological footprint first. Doing so would assist the Task Force on Climate-Related Financial Disclosures in their mission; to this point, there has been a lack of participation on the part of MSMEs. Visit: https://www.fsb-tcfd.org/.

Table IV.4: Policy measures undertaken to promote ESG in Asia and the Pacific during the COVID-19 pandemic

Countries	Programm;es	Details	Organizations	Focuses
Japan	Challenge Zero	The programme aims to proactively publicize and support actions to create innovation taken by companies and organizations towards a 'decarbonized society' which the Paris Agreement sets as the long-term goal. Through promoting 'Challenge Zero', Keidanren will encourage ESG investment in companies that take on challenges towards a decarbonized society and collaboration among/across industries, academia, and the government to create innovations (Keidanren, 2020).	Keidanren (Japan Business Federation) in collaboration with the Japanese Government.	Environment
Hong Kong, China	Three initiatives in Hong Kong Capital Market	New reporting guidelines which were published in December 2019 were in effect in July 2020. Three initiatives include: (i) developing a framework for green and sustainable banking, (ii) making ESG-risk adjusted investments a priority, and (iii) establishing the Centre for Green Finance to facilitate knowledge exchange for the Hong Kong banking and finance industry (HKMA, 2019; Moody's Analytics, 2020).	Hong Kong Monetary Authority	Promotion of ESG investment and increasing requirement on ESG disclosure

Continued...

India	Stewardship Code for all mutual funds and all categories of alternative investment funds (AIFs)	In December 2019, the stewardship code for institutional investors was issued. All mutual funds and all categories of AIFs must follow the code from April 2020. Principle 3 of the code states that institutional investor should monitor the investee companies, including monitoring ESG risk and performance (SEBI, 2019).	The Securities and Exchange Board of India (SEBI)	Monitoring ESG risks
New Zealand	Mandatory climate risk report	The country aims to be the first one in the world to require all financial industries to report climate risks. Businesses covered by the requirements will have to make annual disclosures, covering governance arrangements, risk management, and strategies for mitigating any climate change impacts. The rule will be in effect from 2023 earliest (New Zealand Government Website, 2020).	The New Zealand Government	Environment issues and environ-ment-related disclosure
Republic of Korea	Set up of a ESG team and amendments on National Pension Service's guidelines for domestic stock investment	In 2020, a team was launched to review and report on ESG practices of companies and in providing consultation on sustainability matters. It also dispenses information on sustainability and social impact of listed firms of the country to investors. Moreover, a special committee was set in place to implement new guidelines on responsible investment of domestic stock, including evaluation of ESG results (PwC, 2020).	Korea Exchange and National Pension Service	Promoting ESG disclosure and ESG consultation, with a special focus on corporate governance.

Continued...

Singapore	Green Finance Action Plan 2.0	The Monetary Authority of Singapore (MAS) launched its Green Finance Action Plan in 2019. It included four key aspects (MAS, 2020): (i) Strengthening the resilience to environmental risk, MAS will set the guideline on environmental risk management which consists of the expectation to disclose and monitor risks; the mandatory disclosure requirement applies to non-financial sectors. (ii) Developing green financial solutions and markets. (iii) Harnessing technology to enable trusted sustainable finance flows by using and developing fintech applications. (iv) Building knowledge and capabilities in sustainable finance, with the launch of the Singapore Green Finance Centre.	Monetary Authority of Singapore	Risk management and disclosure mainly on environment
Thailand	ESG Information Platform, services of the Securities and Exchange Commission (SEC)	An ESG Information Platform was launched jointly by the SEC and the Thai Bond Market Association. The information hub will support investor and issuers with ESG bond information. The SEC will support companies intending to issue ESG bonds by coordinating external bond reviewer and contacting international organization to reduce issuance cost. Mandatory ESG disclosure for firms listed on the Stock Exchange of Thailand will be required from 2021 (Polkuamdee, 2020).	Thailand Securities and Exchange Commission	ESG information, services for promoting ESG bonds; mandatory ESG disclosure

Source: The authors' compilation.

Hamza (2020) indicates three approaches that private finance can be channelled towards those MSMEs embracing ESG: (i) introduce guidelines on ESG driven investment; (ii) adopt ESG bank lending practices; and (iii) require ESG disclosure. Any and all of these practices can be adapted to the MSME landscape in a given Asia-Pacific nation. The first two suggestions we describe as 'game-changers': transformative policies that will create immense positive impacts over time. These 'blue sky' interventions that come with greater risk of not working, but if they do, they beget systemic change (United Nations, 2020). The last policy, ESG disclosure, is more like a 'best-buy': an initiative expected to yield outsized impacts in the medium term due to the potential for scale in a great number of financial markets at both national, regional, and global levels (ibid.).

It is predictable that for attaining a sustainable recovery and a more resilience society in the post COVID-19 era, some governments in Asia and the Pacific would further strengthen their ESG policy and regulatory measures and eventually pursue the standardization of ESG regulations and ESG disclosure requirements. Such policy direction could aim to a mandatory, or partially voluntary, ESG disclosure procedures with the use of fintech solutions to develop both ESG database and ESG ratings and scoring systems since business has been reluctant to comply with voluntary ESG disclosure. However, the features and capability of MSMEs should be taken into consideration with ESG disclosure regulations, which are supposed to be simple and avoid complex procedures to increase the burden on MSMEs. In this vein, the European Commission has already conducted a review of non-financial performance for companies of all sizes (EC, 2020). MSMEs in the Asia-Pacific region are most likely to follow suit and eventually need to report their ESG activities and their performance once requisite regulatory and institutional frameworks are in place while academics must assist policymakers in developing practical conceptual frameworks, conducting empirical studies, and providing knowledge products and training materials. However, one concern here is that the ESG regulations and requirements in the future may be mostly dedicated to listed large firms rather than MSMEs which often suffer from lack of skilled labour, limited access to knowledge, and insufficient financial resources. In consequence, MSMEs may be easily excluded from the ESG framework that could mitigate their poor access to finances.

In the post-COVID-19 era, MSMEs are more expected to practice ESG and possibly to implement ESG disclosure, as increasingly more investors pay attention to long-term sustainability and firms' capacity on risk management. MSMEs seeking financing could turn to incorporate the ESG principles in their strategies and operations as a means to participate in the safeguarding of their environment and society while still solve their financial needs. It is, however, based on the market's understanding and recognition on ESG, which requires a relatively long time of education, communication, and improving regulations. While MSMEs' awareness of ESG needed to be awakened with effective narratives, governments and regulators have to recognize firstly the potential role of MSMEs in ESG mainstreaming. Sector-tailored guidelines and toolkits and effective funding programmes need to be developed to mitigate the difficulty on knowledge and financial resources on the side of MSMEs, accompanied by government-backed cost-effective consulting services and cooperative partnership where MSMEs could reach ESG knowledge easier. Simple and practical ESG disclosure is expected to be launched to facilitate sustainable investors to make investing decision and to provide ESG data which are used to develop ESG scores and ratings with which investors' investment assessment can be diversified rather than focuses on exclusively financial performance where MSMEs used to be in disadvantaged situation. Governments could harness ESG ratings to provides financial incentives or ESG credentials to MSMEs as an award or identification of good ESG performance to enhance MSMEs' access to finance. MSMEs should also grasp the trend of ESG if they want to stay visible in the market and reach financing access easily. Governments, stock exchanges, and all stakeholders would be the crucial roles to support MSMEs on their ways.[52]

Lastly, there is an emerging consensus that greater scrutiny and standardization is necessary across projects, investments, and operations that bear ESG credentials for financing purposes (EC, 2020). The EU Taxonomy on Sustainable Activities is a major step towards harmonizing how such ESG financing projects are established, credentialed, and disclosed (EC, n.d.). Regulators and market participants will need to collaborate to establish whether the taxonomy can be fairly and easily applied to MSMEs in emerging markets, and what those disclosures and credentials will look like.

52. MSMEs have a wide range of internal (firm-specific) and external (market context) constraints on performance in general, and internationalization in particular. The ESG focus adds opportunity for some MSMEs in a position to respond effectively, but it is also a very demanding new set of requirements. Also, for many MSMEs, it is not likely to be relevant to their operations. Therefore, perhaps it may be useful just to note the different types of MSMEs in this context (i.e. as per above). Also, given the likely challenges to use ESG as opportunity by the subset of firms, it would be great if some examples could be found at the firm level, i.e. how MSMEs have actually responded to the opportunity.

Box IV.8
MSMEs' climate accounting systems

Due to the advent of digitalization including AI and blockchain or distributed ledger technologies, it is now possible for all businesses, including MSMEs, to record in real time the amount of carbon that they emit from their operations. "In capital markets around the world, the investment thesis is expanding from one focused solely on financial factors to one that includes non-financial factors," says Arun Ghosh, Principal, Blockchain Leader, KPMG U.S. (KPMG, 2020). "We are proposing a climate accounting system for those non-financial factors, starting with carbon, that's designed around emerging technology to create trusted data that is auditable from the ground up. Now, instead of having to look backward via audits to verify reporting, like we do today, companies and their stakeholders will be able to verify cryptographically, in real time, everything coming out of these accounting systems. These systems will be critical to aligning with the changes taking place in the capital markets and evolving regulatory regimes" (ibid.). As MSME finance becomes increasingly tied to the fulfilment of ESG goals, climate accounting systems grow in significance.

Governments can work with MSMEs to install these climate accounting systems as part of new stimulus packages. While it is unrealistic to expect immediate adoption, especially among micro enterprises, policymakers can start with medium-sized enterprises in sectors such as energy where pollution is more prevalent. Rather than rely on punishment or coercion, policymakers can offer discounted loans for adoption of these systems, and inducements for subsequent improvement in carbon emissions reduction.

The key here is to increase productivity without a return to environmental degradation. Investing in MSMEs that promote environmental sustainability and adopt a climate accounting system is a real opportunity in the wake of the devastation the pandemic has wrought. This could be accomplished as part of an overall national carbon reduction policy featuring a holistic approach, perhaps including carbon pricing and carbon taxation.

Box IV.9
Fintech helps MSMEs achieve ESG and sustainability: The case of China

The Government of Huzhou City in China launched a Green Finance One-Stop Platform in 2018, which provides an example of how government can assist MSMEs both in accessing finance and in developing their ESG capabilities. The platform consists of three affiliated functions:

- A lending function that utilizes big data and cloud computing to connect banks, MSMEs, and government agencies such as the Huzhou Administration of Industry and Commerce and the Huzhou Environment Protection Bureau and facilitates information sharing among the players, thereby enhancing connectivity between MSMEs and potential lending schemes of the banks.
- Equity financing that shares the financing needs of MSMEs with potential investors and connects them.
- Credit ratings that incorporate the green scores of MSMEs and their projects using credit rating algorithms that rank the companies and the projects by automatically obtaining and analyzing green rating criteria.

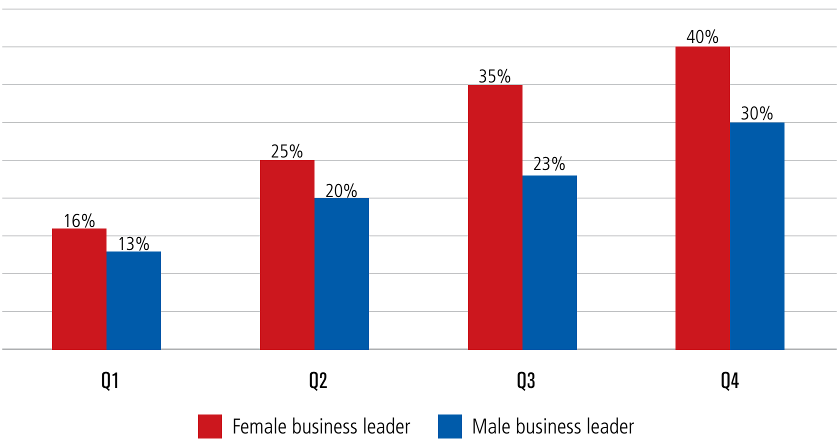
Since its inception, the platform has engaged with 16 000 MSME members, 30 financial institutions, and 80 investors as well as 31 government agencies. Until 2020, the platform had successfully supported 13 000 MSMEs and 73 green projects to obtain funds and loans from the banks and investors. It has improved mutual understanding between MSMEs and investors, increased the efficiency of the local capital markets, and raised awareness of ESG principles among MSMEs. More importantly, the establishment of a green MSME credit rating has enhanced credit information sharing among MSMEs, financial intuitions, and other stakeholders for facilitating MSMEs' access to finance.

Source: Paulson Institute Green Finance Center and Research Center for Green Finance Development of Tsinghua University (2020).

6. Supporting female-led MSMEs: Gender budgeting and gender finance

The present COVID-19 pandemic and ensuring lockdowns and relief measures have laid bare underlying inequalities between female-owned and male-owned MSMEs. While MSMEs are all affected by the COVID-19 pandemic, the crisis has generated a different scale of impact between women and men-led enterprises.[53] The present pandemic has exacerbated gender-based inequalities, while exposing hidden vulnerabilities in the MSME sector. About 64 per cent of female-led MSMEs declared their business operations were strongly affected by the crisis, compared with 52 per cent for companies led by men (ITC, 2020). Women entrepreneurs reported being more strongly affected by the pandemic than their male counterparts, even when the analysis controls for the higher share of women-led businesses in hard-hit industries (ibid.). This suggests that female-led MSMEs may be more sensitive to crises, and additional measures must be undertaken by governments, the private sector, and other stakeholders to both retain the past gains of gender equality and provide additional protections to MSMEs under the pandemic. The following figure IV.3 displays this stark reality:

Figure IV.3: MSME closure gender gap by stringency quartile in May 2020



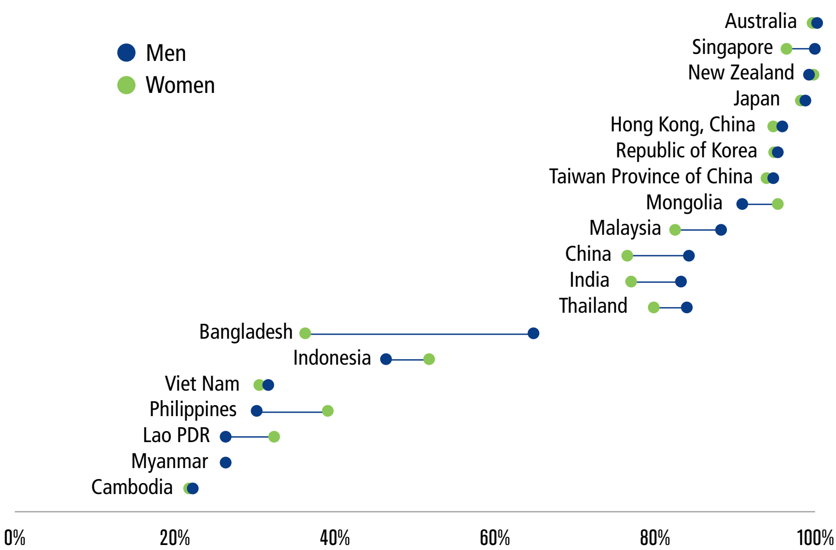
Source: The authors, based on Facebook, OECD, and World Bank (2020).
Notes: First quartile (Q1) = countries and regions with the least stringent lockdown policies; second quartile (Q2) = countries and regions with less stringent lockdown policies fourth quartile; third quartile (Q3) = countries and regions with more strict lockdown policies; and (Q4) = countries and regions with the most strict lockdown policies.

53. Gender gaps can arise from a broad range of market and policy failures in areas such as access to finance, education, and labour markets, as well as in unpaid household tasks and the provision of care to children, the elderly, and disabled family members in times of a crisis (DESA, 2020; ILO, 2020a; World Bank, 2012).

Given these inequalities and the need to 'build back better', governments should consider allocating more funds to support female-led MSMEs, perhaps through a well-balanced 'gender budgeting'. According to Chakraborty, Ingrams, and Singh (2017, p. 1), "gender budgeting is an approach to government fiscal policy that seeks to use a country's national and/or local budget(s) as a tool to resolve societal gender inequality and promote inclusive development". The authors cite economic growth and inclusive development as two primary goals of gender budgeting, and further state that available evidence supports gender budgeting as a tool for more equitable economic growth and the expansion of human rights. The potential payoff is immense; more gender equality in Asia and the Pacific could add up to US$ 4.5 trillion to the region's GDP by 2025 (Woetzel and others, 2018). While a number of nations in the Asia-Pacific region are pursuing gender budgeting in various formats, these efforts are relatively new, becoming more frequent since 2010 (Chakraborty, Ingrams, and Singh, 2017). Given the opportunity to 'reset' policies for growth after the pandemic, policymakers might consider incorporating gender budgeting for agencies responsible for economic development in general and MSME development in particular. For example, part of the budget for an MSME development agency in a given country could be contingent upon meeting certain requirements, such as providing financial support to at least 75 per cent of female-led MSMEs who apply for funding. This would incentivize more equity in the support of women-owned businesses.

Beyond gender budgeting, policymakers throughout the Asia-Pacific region have recognized that additional resources and attention be paid to female-led MSMEs for access to finance. The problem of equal access to finance for both male and female entrepreneurs is a recurring one. According to a recent study, new data from 42 countries, reports, while 70 per cent of both women- and men-owned businesses use their personal savings to fund their ventures, women experience significant limitations to obtain a bank loan or venture capital (Facebook, OECD, and World Bank, 2020). Other studies suggest that women entrepreneurs often face numerous forms of financial discrimination compared to men: they have narrower credit availability, deal with excess scrutiny from loan officers, receive lower approval rates, tend to receive restricted loan amounts, and face usurious interest rates (Bellucci, Borisov, and Zazzaro, 2010; Muravyev, Talavera, and Schäfer, 2009). As a consequence, females' ventures are left underfunded, with limited growth potential. One aspect of gender finance that is relatively easy to address is the imbalance between women and men in holding bank accounts. Major evidence that limits easy access to finance is that women are a large majority of Asia-Pacific's unbanked categories, defined as no access to formal financial services. In developing economies, 67 per cent of men but only 59 per cent of women have an account, though the size of gap varies (see figure IV.4).

Figure IV.4: The size of the gender gap in account ownership varies across economies of Asia and the Pacific, 2017



Source: The authors, adopting the Global Findex Database (2018).
Note: Adults with an account (per cent).

This trend is distinctive in the Asia-Pacific region. The World Bank (2017) estimates that there are 1.7 billion adults worldwide without a bank account, 56 per cent of whom (980 million) are women (Global Findex Database, 2018). Five Asia-Pacific countries comprise 39 per cent of the global total: China (13 per cent, 220 million), India (11 per cent, 187 million), Indonesia (6 per cent, 102 million), Pakistan (6 per cent, 102 million), and Bangladesh (3 per cent, 51 million) (ibid.). Women represent 60 per cent of unbanked adults in China and India (gap of 8 per cent and 6 per cent, correspondingly), despite relatively high levels of financial access for MSMEs in both countries (ibid.). Indonesia, Lao PDR, Mongolia, and the Philippines represent uncommon instances where more females own bank accounts than males (see figure IV.4 again).

The gender imbalance in bank account ownership is most severe in countries with lower levels of financial development. Bangladesh generates the largest gender gap of 29 per cent; half of the population is unbanked and 65 per cent of these are women. Similar gap size exists in both Pakistan and Turkey, also at nearly 30 per cent. In total, the female unbanked living in Bangladesh, China, India, Indonesia, and Pakistan constitute roughly 40 per cent of all women worldwide without a bank account. As a consequence, many women entrepreneurs have no expertise with formal banking services, particularly in rural areas, where formal financial institutions have a limited presence (ILO, 2018). Any effort to increase overall account ownership needs to prioritize financial inclusion for women to improve the access to financial services for female-led MSME among other benefits.

Due to the advent of digital finance, policymakers can remedy this situation of the female unbanked by pushing the use of mobile banking applications more aggressively since the ownership of cell phones is nearly ubiquitous, even in low-income countries. While this solution is already being implemented, it is time to execute it with greater vigour to allow female-led MSMEs' access to the most basic capital: their own bank accounts. We describe this as a 'quick-win' policy: a very specific and implementable initiative in the short term that will deliver an immediate impact (United Nations, 2020).

In addition to expanding bank account ownership, another promising approach is the continued reform for female ownership of assets, particularly land that is the basis for collateral as well as reform of collateral requirements themselves to include movable assets such as receivables. Among other evidences lay the discriminatory regulations and social norms that hamper securing collateral, such as land or livestock, and hence restrict the access to funds for women-led MSMEs. Banks in their turn are reluctant to lend to customers who lack traditional collateral and credit history (Yoshino and Taghizadeh-Hesary, 2018). In some countries of Asia and the Pacific, women are not entitled to have land under their name. Moreover, in cases of formal ownership of an estate, women are less likely to have control over it than men. The COVID-19 outbreaks are known to endanger women's right to inherit land and property as laws often bestow land to male relatives (Holloway, Niazi, and Rouse, 2017). For example, the Governments of Afghanistan, Bangladesh, Pakistan, Nepal, and Maldives do not legislate equal inheritance rights for sons and daughters (World Bank, 2019). As a consequence, a lack of acceptable collateral appears as the most important reason for females-led MSMEs' loan rejections.

Reform has been slow; the World Bank (2019) reports that 56 economies across all regions and income levels made no reforms towards gender equality over the ten-year period, including two countries, Bahrain and Uzbekistan, launched reforms away from gender equality. The fewest number of reforms, 18, occurred in South Asia, including six economies reformed in fastest globally improved 'Starting a Job' index - the laws affecting women's decisions to enter the labour market: Afghanistan, Bangladesh, India, Maldives, Nepal, and Pakistan (ibid.). The 'Managing Assets' index over 187 world economies also demonstrates the highest baseline over the other equality indexes; however, the pace of reforms is the slowest (ibid.). With the opportunity for a reset beckoning after the pandemic, policymakers must not squander the chance to make the regulatory framework around credit and capital more equitable for female-led MSMEs. This involves both a change in societal values that prevent women from participating in the economy, as well as the legal systems that spring from these values (Terrell and Troilo, 2010; Troilo, 2011).

Box IV.10
Multilateral support to women MSMEs against COVID-19 disruptions: Women Enterprise Recovery Fund

The economic disruptions brought by the COVID-19 pandemic to the most vulnerable sectors require a rapid response. MSMEs, particularly women owned businesses, are such a sector which has been severely affected. To respond to that, the Women Enterprise Recovery Fund was launched in January 2021 and is expected to begin pilot testing financial solutions for women entrepreneurs by May 2021 (ESCAP, 2021). The fund is jointly implemented by ESCAP's Catalyzing Women's Entrepreneurship (CWE) programme and the United Nations Capital Development Fund (UNCDF), under its 'no-one left behind in the digital era' strategy. The fund has been also supported by the Dutch Entrepreneurial Development Bank (FMO), the Government of Canada, and Visa Inc. as well as by the Government of Australian through the UNCDF-ASEAN programme (ibid.).

The fund aims to provide urgent relief and support funds for the development and expansion of digital business models and solutions which alleviate financial and other constraints suffered by women-led MSMEs in South and South-East Asia because of the pandemic (UNCDF, 2021). Selected private sector innovators will receive co-funds to pilot and scale digital and financial solutions that enhance the growth and resilience of women enterprises. The fund encourages applicants to propose solutions that will expand delivery networks and promote rural and/or other last-mile access to market and digital financial services to support women MSMEs in the COVID-19 crisis and post-crisis in Bangladesh, Cambodia, Indonesia, Myanmar, Nepal, and Viet Nam. Successful applications will receive funds (up to US$ 50 000), as well as technical assistance, professional mentorship, and connection with investors (ibid.).

Box IV.11
P2P financing for women-led MSMEs: The greater the access, the higher the cost

The global peer-to-peer (P2P) lending market was valued at US$ 68 billion in 2019 and grew at a compound annual growth rate (CAGR) of 25 per cent from 2014-2019. By 2027, the value of the global P2P market is forecasted to reach US$ 559 billion (Khan, Goswami, and Kumar, 2020). China and India have spurred the Asia-Pacific P2P markets that foresee the road to growth on loans to small businesses. Although new regulations may slow Chinese P2P activities, India recently launched a new P2P lending platform to provide loan services under the non-banking financial companies (NBFC) category (ibid.). To leverage the benefits of the P2P lending mechanisms for MSMEs enhancement, policymakers must adopt effective regulatory measures.

Recent studies of an online P2P lending platform in China offers encouraging news for female entrepreneurs in terms of finance (Chen, Huang, and Ye, 2019; Chen, Li, and Lai, 2016). While gender bias in traditional lending has been found across countries, female borrowers are more likely to be funded in the online P2P lending market, as they are deemed more creditworthy than male borrowers (ibid.).

However, female borrowers must pay more. Although P2P women borrowers demonstrate better loan performance, including a lower probability of default, a higher expected profit, and a lower expected loss, women borrowers have to accept higher interest rates to obtain P2P loans (Chen, Huang, and Ye, 2019). This practice enormously benefits lenders who shoulder less credit risk while earning more interest income. See table IV.5 below. While the majority (81 per cent) of the users in the online P2P platform are males, females are more desirable from the perspective of the lenders.

Table IV.5: Two types of gender partialities on Chinese P2P lending platforms

Profit-based statistical prejudice	Taste-based gender partiality against female
Odds of being funded is 33 per cent higher for investment project requested by female borrowers. Odds of default is 52 per cent lower for loans for women borrowers.	Women borrowers have to pay higher interest rates despite their lower default rate. Due to glass ceiling effect, the impact of a borrower's positive credit record is less reflected on lending outcome for female borrowers than for male borrowers.

Source: Authors' adaptation from Chen, Li, and Lai (2016).
Note: Glass ceiling effect in micro-finance markets implies that gender disadvantages of borrowers are stronger at the top of the hierarchy than at lower levels.

This reveals predatory financial behaviour towards women-led MSMEs, who pay more despite being more responsible about their loans. While emerging online P2P lending platforms could facilitate the opening of new financial channels for women-led MSMEs, it also requires policymakers to monitor gender preferences in the financial markets. Ethical expansion of P2P lending has potential for serving women-led MSMEs to equalize access to finance across all genders.

7. Strengthening multi-stakeholder cooperation: Financial institutions, governments, and business associations

In the aftermath of COVID-19, cooperation among and within nations will be more essential than ever before, in a bid to lift societies beyond where they were prior to the pandemic. As noted earlier, these goals are not merely economic, but also embrace issues around social well-being and environmental sustainability. Regarding MSME finance, this will require heightened coordination and collaboration between financial institutions, governments, and business associations. Of course, multi-stakeholder cooperation existed prior to the pandemic and is quite common in the arena of MSME financing in some nations, but the extent of this collaboration needs to be strengthened further (Abe and others, 2012).[54] And there should be some cautious optimism that the shared experience of the pandemic, and the hardships that it has brought about, will bolster a sense of working together for common goals.

Financial institutions typically lend money at interest to enterprises, and often require some degree of collateral to help guard against possible loan default. Financial institutions also tend to charge MSMEs higher interest rates, and demand collateral relative to tangible assets often with a discount rate, mainly due to information asymmetry regarding the creditworthiness of MSMEs (Beck, Demirgüç-Kunt, and Peria, 2008; Soans and Abe, 2015). This latter condition usually applies to MSMEs given their credit risk that is commonly seen by financial institutions like commercial banks and credit unions. Providing adequate collateral is an issue for most MSMEs, however, given their relative lack of resources. This creates a 'chicken and egg' conundrum: MSMEs need capital from banks, banks require collateral for the loan, and MSMEs lack the requisite collateral to secure the loan. The consequence is lack of access to capital for MSMEs, stunting economic growth and job creation. One resolution is to involve an independent third party to take responsibility for MSMEs, even partially, and that party can be a government agency or a business association. In this vein, policymakers should encourage MSMEs to seek business associations such as chambers of commerce and federations of industries for their technical assistance, while dealing with financial institutions to resolve both financial and operational issues.

A suitable combination of financial and non-financial services for MSMEs is the most needed support through cooperation with both financial institutions and business associations. In this regard, business associations can add value to MSME lending due to their proximity to their MSME clients as well as their direct knowledge of

54. In China, for example, supply chains usually are an efficient and effective channel for MSMEs to access finance. Large enterprises within the supply chains, instead of business associations, often facilitate supply chain or trade finance for MSMEs by receiving information from MSMEs and vouching for their creditworthiness to banks. They also extend lines of credit to MSMEs by themselves (Trade Finance Global, 2020).

their member MSMEs' financial status and past performance. Business associations are often better placed than financial institutions for identifying potential clients, ascertaining their creditworthiness, imparting professional financial and accounting techniques, and providing other services germane to lending and repayment of debt. Over time, financial institutions should consider: (i) developing capacities to provide information on markets and training materials and facilities for MSMEs: (ii) assisting MSMEs in the development of business plans; (iii) guiding financial and taxation matters; and (iv) advocating the cause of MSMEs at appropriate forums. Such a comprehensive approach through multi-stakeholder cooperation would obviate many difficulties in the MSME sector. This complementary nature between business associations and financial institutions helps to minimize both the risk and transaction costs to creditors and investors and makes access to credit and equity less costly and cumbersome for MSMEs (Abe and others, 2012).

One way for these entities to cooperate is sharing information. An example is the Cambodia Data eXchange, or 'CamDX', which allows secure multilateral data exchange between various information systems over the Internet, under the government's supervision (ADB, 2020c). By adopting Estonia's X-Road model, CamDX is a unified yet decentralized data exchange platform between information systems that offers a standardized and secure way to provide and consume services. Online Business Registration (OBR), which is the first organization to use CamDX, combines at least four main relevant information systems into a single portal, thereby allowing business owners to register and receive licenses to operate their business more efficiently and effectively. The CamDX portal distributes data registered by business owners to respective information systems within the Ministry of Commerce, the General Department of Taxation, and the Ministry of Labour and Vocational Training. The single portal uses CamDigiKey as its authentication service. From these initial efforts, one potential next step would be to link the information platform with ACLEDA Bank, the largest MSME lender in Cambodia.

The following box case present an additional example from Japan:

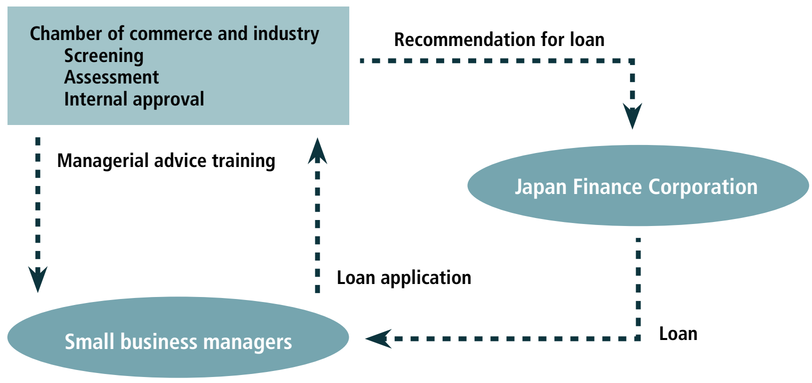
Box IV.12
Multi-stakeholder cooperation in Kyoto, Japan

Multi-stakeholder cooperation among business associations, government agencies, and financial institutions provides additional opportunities to support MSMEs. Such is the case in Kyoto, Japan where the local business chamber has engaged with state-owned financial institutions to provide non-collateralized loans to some of their small business members (Abe and others, 2012). Small business members – with no more than 20 employees – of the Kyoto Chamber of Commerce and Industry (KCCI) are able to obtain long-term loans for both working capital and asset investment, up to US$ 200 000 equivalent, from the

Japan Finance Corporation (JFC), based upon recommendations from KCCI. These loans feature discounted interest rates, and require no collateral or personal guarantee (KCCI, 2021).

In addition to having a good financial record, one of the major eligibility requirements for small businesses is that they must receive training and counselling by the KCCI before receiving such loans (ibid.). One of the advantages of this system is that the chamber can understand the condition of MSME members better than most financial institutions, thus securing their repayment without collateral, while improving the capacity of the members. The JFC itself, as a state-owned financial institution, has the ability to further recommend qualified MSMEs to private financial institutions, thus completing the tripartite loop between the government, business associations, and financial institutions. The institutional framework of the partnership is illustrated in figure IV.5.

Figure IV.5: Institutional framework of multi-stakeholder cooperation in Japan



Source: Adapted from Kyoto Chamber of Commerce and Industry (2021).

Tripartite cooperation can ameliorate access to finance for MSMEs. It is difficult, if not infeasible, for banks to serve MSMEs without the presence of an intermediary such as KCCI. Those chambers address the thorny problem of information asymmetry between financial institutions and MSMEs; the latter often do not have the requisite financial literacy or sophistication to acquire bank loans on their own.

In the aftermath of the COVID-19 pandemic, it is reasonable to expect an acceleration of efforts for multi-stakeholder cooperation in MSME finance. This is so not just to recapture lost economic growth, through greater empowerment of the MSME sector, but also because larger societal goals, such as social inclusion and environmental stewardship, require the willing participation of multiple actors. Business associations in particular are adept at bridging the gap between MSMEs and financial institutions under the government's sponsorship, since the overwhelming majority of membership in these associations are in fact MSMEs (ADB, 2020c). The following table IV.6 provides a succinct overview to strengthen partnerships among MSMEs, business associations, and financial institutions.

Table IV.6: Strengthening MSMEs-business associations-financial institutions partnership

Issue	MSME	Business association	Financial institution
Insufficiency of credit	• Carefully plan for credit needs based on a specific, workable business plan. • Develop and keep supporting documents for verification. • Be open to banks in discussing all financial problems. • Prepare thoroughly for presentation, interview, etc.	• Provide counselling services and training. • Outreach the government for enhancing an enabling business environment through new regulations and policies. • Outreach financial institutions to enhance their understanding about the MSME sector its financial needs. • Foster business development service (BDS) providers.	• Address fear of non-payment via proper assessment of risk and moral support from relevant government agencies. • Update credit databases to include MSMEs. • Conduct joint appraisal with commercial banks/ development finance institutions (DFIs) and BDS providers.

Continued...

Delays in credit sanctions	• Produce all data requirements and documents in one instalment. • Keep financial records current and accurate. • Extend cooperation to the bank in complying with the head office guidelines.	• Provide counselling services and training. • Develop and disseminate knowledge products. • Provide a window to communicate with financial institutions.	• Communicate all data requirements for credit appraisal to MSMEs in one instalment. • Explain the appraisal process in the initial interview. • Continue the appraisal process even if a credit officer goes on leave but one person should ultimately be account for each MSME application. • Follow a single-window approach for appraisal. • Focus on the continuous improvement of the appraisal process including the models used for risk measurement.
High collateral requirement	• Work with the bank and BDS providers to reduce risks. • Offer some collateral if feasible.	• Lobby with the government and the banking and financial sector for changing collateral requirements.	• Get second opinion on need for collateral, perhaps from a BDS provider; consider future cash flow as the primary security for MSMEs.

Continued...

High or unrealistic information require-ments	• Keep financial and operating records current and accurate. • Use computers where feasible. • Appreciate data needs of the bank.	• Provide counselling services and training. • Develop and disseminate knowledge products.	• Prepare a checklist of information on requirements for MSMEs with due care. • Use computers for data storage and analysis. • Standardize the data requirements for loan applications across different institutions.
Compliance with loan agreements, including audits	• Cooperate with the bank in post-sanction formalities for their own benefit. • Submit statements and returns regularly.	• Provide counselling services and training. • Develop and disseminate knowledge products. • Lobby to develop the standards of disclosure requirements.	• Arrange audits to minimize inconvenience to borrowers. • Explain timing and procedures for loan compliance.

8. Concluding remarks

We began this chapter on what comes after the pandemic with a reflection on the 'new normal'. While no one can be sure what the future holds for society in general and MSMEs in particular, we noted two trends. The first is that advances in digitalization and technology are here to stay, and MSMEs are advised to adapt to this trend in their operations and financing as promptly as possible. The second is that, while in the near term the pandemic will hinder achievement of the SDGs, it also presents an opportunity to 'build back better' in terms of orienting MSMEs towards the SDGs, in both the near and long term. It is a matter for policymakers to harness this chance by guiding MSMEs and providing the necessary support. A Chinese proverb depicts a crisis as "an opportunity riding a dangerous wind", but it is also an opportunity that should not be wasted.

We view the pandemic as having been an accelerant to pre-existing trends and technology-driven advances in the realm of MSME financing. In that vein, we discussed how digital payments and fintech are augmenting or supplanting the traditional modes of lending via banks and other financial institutions. It is important for policymakers to understand and embrace this shifting landscape because of the numerous levers it offers for incentivizing MSMEs to improve the common good, while also satisfying their need for capital. In addition, strong policy is needed to aid and abet MSMEs in the context of global supply chains and trade or supply chain finance, for the dual purpose of both access to finance and access to markets.

We then suggested some specific areas of ESG where MSME financing would be operable after providing an overview of how MSME financing might buttress ESG. The use of climate accounting and green finance is already underway among large firms in the Asia-Pacific region and has trickled to MSMEs; now is the time to involve more MSMEs in this effort. Similarly, gender budgeting has been practiced by several nations in the region for a decade; the principles and practices should be extended into the financing of MSMEs, perhaps through tripartite cooperation among governments, business associations, and financial institutions.

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CHAPTER V

Looking Beyond the Pandemic: Building Back Better

Masato Abe, Nick Freeman, and Mike Troilo[55]

"Providing finance that meets the needs of SMEs will involve bundling together products and services that traditionally were provided separately (or not at all) by different companies. Furthermore, whilst banks, lenders, insurers, factoring companies etc. will still have a role to play, the distribution channel may well be different. […] COVID-19 has accelerated the necessity of having easy to use digital financial services. Providers of financial services need to partner outside their industry to leverage the advantages some of the new technology driven models have. In many countries this will require regulatory changes and regulators will have to balance compliance issues, like KYC, and consumer protection, with the need to reach SMEs easily and cheaply – this is not an easy balance to get right."

Susan Holliday, IFC/World Bank.

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1. Introduction

For decades, MSMEs have typically found themselves to be at the back of the line when it comes to access to finance, and yet in 2020 they were at the forefront of the economic impact of COVID-19. Many MSMEs in Asia and the Pacific were – and remain – inadequately equipped to survive the economic maelstrom triggered by the pandemic – they do not have the deep pockets and robust balance sheets to ride out a year-long storm, and pivoting one's business model is hard when that model typically revolves around just one product or service offering. While a large conglomerate can adjust its sails to 'tack' across headwinds posed by the global pandemic, an MSME tends to have fewer resources at its disposal to navigate a path to safety. Larger companies' greater cash reserves also better equip them to navigate this highly unpredictable pandemic, whose total duration is unknowable, and whose policy responses (i.e. lockdowns and re-openings) are subject to many unpredictable factors and highly variable across jurisdictions. For those MSMEs that survive beyond 2021, there is the prospect of a markedly more uncertain economic growth environment in the years ahead. There is also the threat posed to MSMEs as a consolidation of power and market dominance of larger firms because of the pandemic. While the pandemic has felled numerous smaller firms, some of the larger firms have only grown stronger (Georgieva and others, 2021; Lin, Aragão, and Dominguez, 2021). COVID-19's impact on business has exacerbated pre-pandemic market concentration trends. The worry here is that this will lead to reduced business dynamism, resulting in lower economic growth, fewer jobs, and slower income growth, as the entrepreneurial endeavours of new firms are undermined by the power that large players have to stifle competition. That in turn does not bode well for productivity growth.[56]

As we noted in chapter 2 of this volume, the challenge of providing suitable and affordable MSME financing products and services pre-dates the pandemic, and is nothing new. And as discussed in chapter 3, the impact of COVID-19 aggravated this perennial challenge, as cash flows – the lifeblood of most MSMEs – were reduced in numerous sectors. While revenues contracted, the fixed operating costs – such as payroll, utilities, rental, debt servicing, etc. – did not. Unless underwritten by emergency government guarantees and other measures, banks and other finance providers have been understandably hesitant to lend to MSMEs clients

56. An article by Georgieva and others (2021) in the IMF Blog notes that: "The crisis will reshape our economies through profound structural shifts that should spur a wave of young, high-growth firms that innovate and create high-quality jobs. They deserve a level playing field and a fair chance to succeed." But it goes on to caution: "Broader policy support directed to small and medium enterprises is also important, as many small firms have been unable to benefit from government programs designed to help firms access financing during the pandemic. As the recovery takes hold and policy support of gradually withdrawn, it will be even more pressing to ensure that viable small and medium enterprises have access to financing, so they are not put at further disadvantage relative to larger firms."

that could be facing imminent insolvency, so the shortfall between fixed costs and declining revenues could not be plugged by additional debt. Rather, MSMEs have been obliged to expend internal resources, of which they often have little, given that they tend to be lean operations, or cease operations.[57] Even prior to the pandemic, banks and other financial institutions were increasingly finding lending to MSMEs more problematic, as well-intentioned international banking regulations aimed at thwarting money-laundering and funding terrorism were making the transaction costs of doing so greater (Financial Stability Board, 2019; Fisera, Horvath, and Melecky, 2019). If lending to MSMEs was already becoming an up-hill struggle prior to the pandemic, the upward angle of incline has become even steeper in recent years.

While some of the more developed economies in Asia and the Pacific were able to roll out emergency pandemic relief interventions intended to help MSMEs survive the economic storm, less affluent countries were not able to do so, or could only do so at sub-optimal levels. Regardless, these sorts of emergency measures that governments in Asia and the Pacific, and around the globe, have instituted to mitigate some of the worst impacts of the economic crisis are not sustainable in the medium or long term. Indeed, in more normal times, quite a few of these emergency measures would be deemed to be 'bad practice', given their adverse side-effects, from moral hazard to market distortions, their cost and value for money, as well as their inaccuracy in hitting their desired targets. As we have seen, many emergency economic measures enacted in 2020 have not been directed specifically at MSMEs, but at the whole corporate community, including some firms that arguably did not warrant such support. In this context, inadvertently propping up so-called 'zombie companies', and/or large enterprises with more than ample balance sheets to weather the current storm, is a concern for policymakers (Blažková and Dvoulety, 2020).[58] This lack of accuracy has been justified by the urgency and scale of the problem, and a widespread acceptance that there was insufficient time to develop more discerning emergency measures. If a rising tide lifts all boats, then that will have to serve, until a point is reached where more targeted interventions are feasible, and that point arrived in 2021.

This chapter seeks to provide an overview of what a post-pandemic ecosystem for MSME financing might consist of, and how it might be envisioned by policymakers to bring about a positive outcome in this regard. If we are agreed that the current emergency measures are not sustainable, and that improvements can be made to the way that MSME financing in Asia and the Pacific was approached prior to the pandemic, then what does the future hold in store? As briefly outlined in chapter 1,

57. In the United States, as of January 2021, an average of 34% of small businesses had closed their doors, with some cities recording numbers above 45%. See: https://www.visualcapitalist.com/mapped-the-state-of-small-business-recovery-in-america.
58. For example, in the United States, see: https://www.washingtonpost.com/graphics/2020/business/coronavirus-bailout-spending/.

we propose three lenses, or dimensions, through which to consider the future of MSME finance in Asia and the Pacific. The first dimension is a longitudinal one, and advocates for embracing a fintech-driven, post-pandemic MSME finance ecosystem. Rather than the temptation to try and revert to the comfort zone of the past, after a highly traumatic period of COVID-19 volatility and instability, now is the time to take a leap of faith, and lean into the potential that digital innovation appears to offer. The second dimension is a contextual one, and uses the Japanese notion of ikigai to provide a framework by which the future of MSME finance could be more closely aligned with wider sustainability goals, including the growing emphasis on ESG issues. Getting the balance right between the different core competencies of various stakeholders in MSME finance, as well as a shared notion of objectives, will help in creating the right policy agenda. This second dimension is predicated on the notion that improved MSME finance is essentially a means to an end (or ends), rather than an end in itself, at least for most actors. The third dimension is a transformational one, and uses the image of the enso to depict how technological innovations in MSME financial products and services will bring about a change in the way that MSMEs go about accessing finance. For them, it will see financial products and services bundled into other business services that they avail themselves of, rather than as a function of a distinct relationship with one or more banks or traditional financial providers. For those traditional financial providers, the sensation will be more like an 'unbundling' of their financial sector 'department store' approach, and will likely see them respond in various ways to this competitive threat. For example, a shift to so-called 'open banking' where they host innovative financial products and services of smaller, third parties, such as fintech firms, and their 'white label' offerings.[59]

2. Snapping forward, not back

How might the unpleasant experience of the pandemic be leveraged into something that might address one of the most oft-recounted challenges that MSMEs around the globe face: insufficient access to finance? With specific regard to MSME finance in Asia and the Pacific, will COVID-19 ever be regarded, in years to come, as having had at least some silver lining? In this final chapter, we attempt to provide some policy-oriented strategies emanating from the observations and analysis in the preceding chapters, in a bid to offer some useful takeaways that might suggest the optimal way ahead. However, we are cognizant that these remain early days in

59. In this context, the 'white label' concept is where a fintech firm integrates its product or service under the umbrella of an established bank or finance provider, and it is offered to the customer or client – in this case, MSMEs, as a branded offering of the established bank. While the fintech firm's identity is not apparent from the customer side, it does receive revenues from providing the 'back end' inputs, and is able to harness the extensive business network of the established bank. For the established bank, it gets to offer the innovative financial product or service to its client base, essentially by out-sourcing its implementation.

the process of post-pandemic economic recovery, and our ability to see a distant time horizon is limited by the array of issues that the pandemic has kicked up. Nonetheless, it is important that we begin to take stock of what has happened and conceptualize how we should start to rebuild. While most of us would profess that the recent pandemic was an unwelcome surprise, scenario planners have for a long time placed this specific risk – and even the inevitability – of a global pandemic towards the top of their list of perils (McKay and Dvorak, 2020).[60] As such, it has been a 'white swan' event, not a 'black swan' event (Lustenberger, 2020). We also need to recognize that this pandemic will not be the last.

This volume focuses on just one small piece of that post-pandemic jigsaw, as it pertains to MSME finance in Asia and the Pacific. MSME access to finance was already a relatively vexing topic before the pandemic, and a seemingly perpetual challenge for small business owners and policymakers alike, as a spectrum of economic, institutional, and other factors collectively served to inhibit MSMEs' ability to attract the volumes of financing that they desire. Just as the recent pandemic did not remove that challenge, nor did it offer any new solutions per se. But what it did do, after the initial catatonic shock of early- to mid-2020 wore off, was set in train a discussion around how MSME development, including MSME finance, might be made more sustainable and robust in the future. This discussion is not happening in isolation, but rather is part of a wider discussion around new models of sustainable economic development as a whole. There is now much talk of a need to 'build back better'. Lombard Odier (2020) has depicted this mindset shift as entailing a transition from economies that are 'WILD' (i.e. wasteful, idle, lopsided, and dirty) to economies that are 'CLIC™' (i.e. circular, lean, inclusive, and clean) (OECD, 2020a).[61] If we are agreed that such an outcome is desirable, then what role will MSMEs need to play in that process, and more specifically what does that mean for MSME finance? If a more sustainable and inclusive model of economic growth and development is to take hold in Asia and the Pacific, the MSME sector will need to be an active participant in that process; it cannot be something that governments, civil society, institutional finance, and large enterprises pursue alone, with a hope that the MSME sector will somehow follow in the slipstream.

That is the contextual challenge that brackets this volume, and was the first of three main observations sketched out in chapter one: the pandemic has been a massive jolt to the global economic system, and a return to the past is infeasible,

60. For example, see the World Health Organization's forecast in February 2019: http://www.emro.who.int/pandemic-epidemic-diseases/news/the-next-flu-pandemic-a-matter-of-when-not-if.html.
61. For further details, see Lombard Ordier (2020). Also see OECD (2020a). The latter argues that "we need to go beyond growth, to stop seeing growth as an end in itself, but rather as a means to achieving societal goals including environment sustainability, reduced inequality, greater well-being and improved resilience. This requires updating the philosophy, tools and methods underpinning the analysis that influences economic decision-making".

whether desirable or not. Therefore, MSMEs and finance providers alike should not wait for things to 'snap back'; instead, they need to 'snap forward'. This is a chance to 'lean into' the impact and consequences of the pandemic, and lessons learnt, and attempt to derive some benefit from what has been a sudden and unwelcome shock to the economic system, rather than try and pretend it did not happen. Recent years have arguably seen the perennial pursuit of productivity and cost efficiency gains trump the more mundane need for resilience in business. However, the experience from the pandemic will see resilience regain its status as a business attribute that should not be discounted. Larger firms are already looking at ways to 'vaccinate' their own supply chains (Baker and McKenzie 2020; Shih, 2020). This trend may well extend to MSME finance too, with both financiers and firms both seeking to ensure that the provision of financial products and services is sufficiently resilient to withstand the kinds of exogenous shocks posed by a pandemic, or some other global crisis. Finding ways to inoculate lines of funding may result in new ventures and services being developed, with users willing to pay a premium for financial products that can withstand major shocks to the financial system (Gompers, 2020).

Changes in the way business is conducted, as a result of the pandemic, will also spill over into MSME finance. For example, various financial products and services that were provided as a function of a company's participation in a larger supply chain will inevitably be affected if the supply chain itself is re-engineered, in a bid to make it more resilient to exogenous shocks. There is considerable talk at present about a return (sometimes referred to as 'onshoring' or 'proximity sourcing') of manufacturing closer to the major markets, such as the United States and the EU, as the pandemic served to illustrate how vulnerable more extended supply chains can be to disruption (EU 2021; Guan and others, 2020).[62] Advances in AI and robotics – where the only virus threat is one around malicious hacking or programming errors – were already starting to offset the competitiveness of Asia-Pacific manufacturers even before the pandemic (Crabtree, 2018; Hamlin and Roberts, 2017, Trivedi, 2020). This, along with a potential willingness of buyers to pay a premium for a product that is manufactured closer to home, could see manufacturing orders in Asia and the Pacific reduced. Where MSMEs work to fulfil those orders, whether as first, second, or third order suppliers, they will inevitably be impacted, which in turn will have a knock-on effect on their ability to attain – or even need – external financing.

It is indubitably true that most of the proposed solutions to improved MSME finance provision were already being explored before the pandemic, and they remain valid avenues of enquiry after the pandemic. What the recent crisis has done is serve to: (i) underline the importance of resilience in MSMEs and their finance provision; and (ii) adjust some of the priorities around what is most desirable. As

62. For an example on emerging sourcing strategy under the pandemic, see: https://www.redwoodlogistics.com/the-pandemic-has-altered-sourcing-strategies.

with a lot of experimentation around business development, recent years have seen an emphasis on efficiency gains and innovation, and particularly innovation that disrupts established market modalities, notably in pursuit of 'unlocks' that will bring about desirable systemic change, including how MSMEs access financial products and services. That trend will continue, no doubt, but will be tempered by an increased recognition of the need for resilience, in business in general, including MSME finance.[63] For most MSMEs, 2020 was not a year where they focused on incremental growth; it was a year when they focused on survival. Not all of them survived to see 2021. As a result, the attribute of resilience just got a major boost. Success was not measured in terms of growth, but in terms of survival. Financial innovation for innovation's sake is a self-indulgence that MSMEs cannot afford, particularly in developing and less developed countries. Most MSMEs do not need luxury service provision; they need reliable and cheap financial products, services, and provision platforms that are robust, even in difficult times, and that can withstand the kind of stress test that 2020-21 provided.

3. The *ikigai* of MSME finance

Secondly, and hopefully more importantly in the long term, is a contextual shift in what is desired from MSME finance. Except for a few practitioners, MSME finance has never been viewed as an end in itself; rather it is seen as a means to an end. That end has tended to be perpetual growth of businesses and economies: helping micro firms become small, small firms become medium-sized, and so on (Cassidy, 2020; Gancarczyk and Zabala-Iturriagagoitia, 2015).[64] The implicit logic here tends to revolve around the desirability of firms to become larger over time, and thereby enjoy economies of scale and other attributes that can make them

63. Another example of this shift in emphasis, within international business, is a re-evaluation around complex cross-border supply chains and international production networks, as a means of eking out further incremental efficiency gains. These have been in vogue for several decades now, and have been a component of the 'globalization' trend (Coe and Yeung, 2019; McKibbin and Triggs, 2020). But the pandemic served to illustrate how extended and extensive value chains can dislocate quite easily, and have added to growing calls for supply chains to be shortened, and hop across fewer borders, in an effort to be more robust, even at the cost of short-term price competitiveness and efficiency. In the longer term, advances in AI and robotics may mean that shorter supply chains, with production closer to end-user markets, may come to trump the price competitiveness derived from offshore manufacturing platforms. That in turn would be a potential departure from some of the economic and business thinking that has underwritten the established East Asian growth model.
64. It should be noted that there has been a tendency in the past for policymakers to provide well-meaning, but ultimately flawed, support frameworks for MSMEs that actually create inverted incentives that encourage firms to remain small, or at least appear small, so as to continue to benefit from government largesse directed at small business (Benedek and others, 2017; Tsuruta, 2020). As a result, there has been a growing recognition that what MSMEs need most is not preferential treatment, but simply fair and equal treatment with their larger rivals.

more competitive (World Bank, 2020).[65] Thus, firms in most economies have been encouraged, and even sometimes incentivized, to scale up. But that trend may now be mutating, as technological innovations, such as additive manufacturing, also known as 3D printing, disrupt the logic behind economies of scale, and allow for cost and price competitiveness even when operating at a smaller, more bespoke scale of production and service offering, as some of the fixed costs of operating are lessened by the fruits of the digital revolution. If we are seeing a shift in economic development thinking away from the incessant pursuit of growth, then this will have an impact on approaches to MSME development, including MSME finance. It is not so much that the goal posts are being moved, but that a debate around the rules of the game and the scoring mechanism is commencing. A perpetual dash for economic growth is clearly unsustainable, as evidenced by the general ecological weariness of our planet, and is failing to deliver our collective desire for improved livelihoods and the SDGs (Preston and others, 2019; Spash, 2020).[66] Perhaps COVID-19 was a warning, of sorts, that we need to change direction; a message from 'Gaia', if you will.[67]

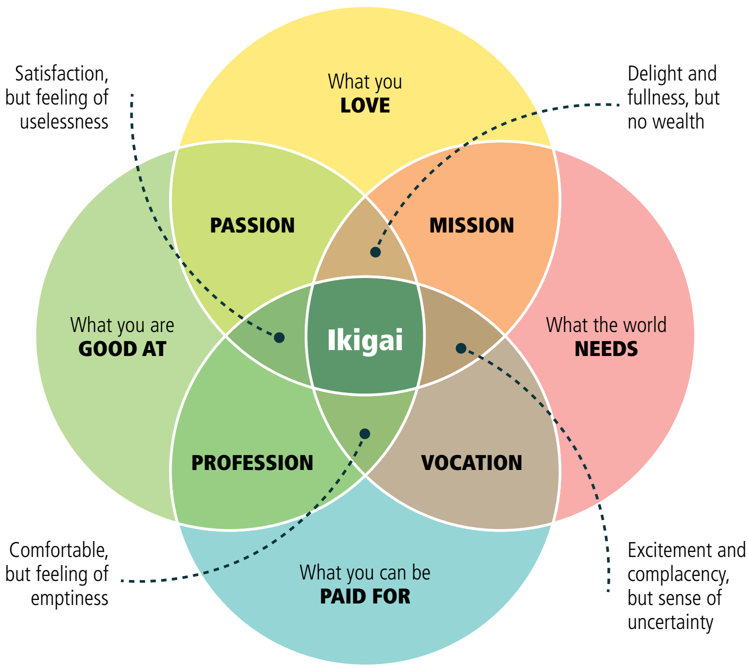
It is within this wider, post-pandemic re-evaluation of economic development and its priorities, that we should posit the challenge of MSME finance in 2021 and beyond, and which brings us to the second observation mentioned in chapter 1: the opportunity that the pandemic provides to re-examine the priorities and purpose of MSME finance, and the optimal means of achieving them.

In order to frame this opportunity provided by the pandemic to re-examine the priorities and purpose of MSME finance, and how to best go about achieving them, we have sought to adopt and convert the Japanese approach of ikigai (see figure V.1). Ikigai relates to a means by which an individual can try to bring about a sense of fulfilment, and reason for being, from attaining a balance of various – and potentially competing – forces, in order to create an optimal balance (Garcia and Mirelles, 2017). In particular, balancing: (i) what one is good at doing; (ii) what

65. Of course, economies of scale are not the sole attribute associated with large firms. As a recent World Bank (2020, p. xvi) report notes, larger firms "are significantly more likely to innovate, export, and offer training and are more likely to adopt international standards of quality. […] Across low- and middle-income countries […] nearly 6 out of 10 large enterprises are also the most productive in their country and sector. These distinct features of large firms translate into improved outcomes not only for their owners but also for their workers and for smaller enterprises in their value chains".
66. For examples of the downsides of growth, see: https://steadystate.org/discover/downsides-of-economic-growth/.
67. In Greek mythology, Gaia is the personification of the earth, and the mother of all life. One area of increasing interest in this regard is the concept of the 'circular economy' as a more sustainable approach to economic development. The circular economy envisages a closed loop system that reduces waste and the use of resource inputs. For more, see: https://www.ellenmacarthurfoundation.org/circular-economy/what-is-the-circular-economy. An alternative approach is the concept of the 'steady state economy', for which see: https://steadystate.org.

one can be remunerated for doing; (iii) what one most enjoys doing; and (iv) what the world needs. That then creates intersections around a personal choice of profession, vocation, passion, and mission, in which the optimal place to be is that of ikigai (Schippers and Ziegler, 2019). Get that balance right, and the ikigai approach would suggest that a fulfilling state of affairs can result. This provides a holistic means by which to frame and consider how to reconcile different pull factors in a bid to achieve the best possible life balance.

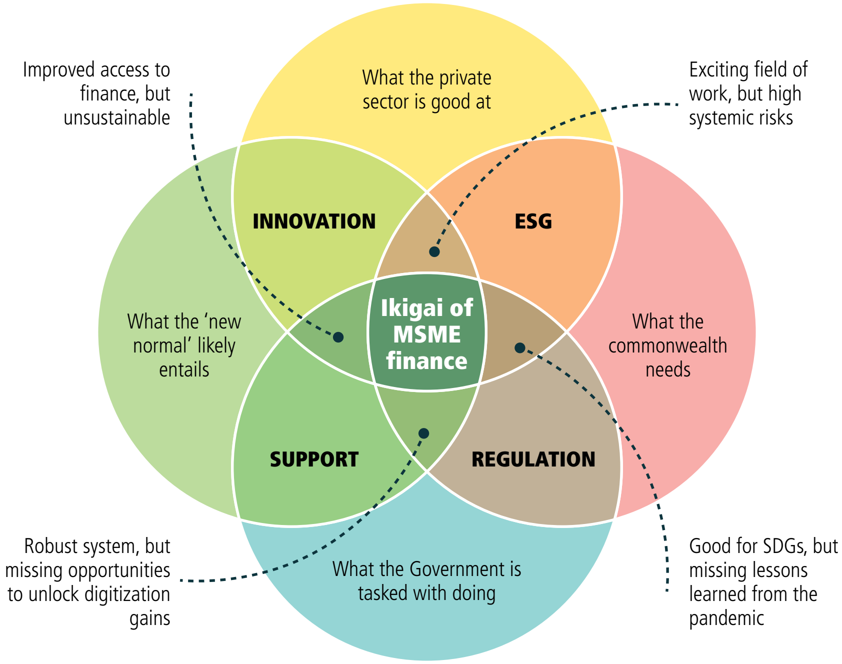
Figure V.1: Ikigai (or a reason for being)



Source: Garcia and Miralles (2017).

Adopting that same approach, and applying it to the issue of MSME finance, we suggest that the 'ikigai of MSME finance', in a post-pandemic context, might look something like figure V.2 shown below.

Figure V.2: The ikigai of MSME finance



Source: The authors, based on Garcia and Miralles (2017).

In this conceptual framework, we balance four potentially competing forces: (i) what the private sector is good at, notably around innovation in financial products and services; (ii) what the government is tasked to do, most notably around managing systemic risk; (iii) what the world, or 'commonwealth' needs in the post-pandemic environment, notably around a growing emphasis on sustainability; and (iv) what the 'new normal' might look like after COVID-19, such as the kinds of structural transformations in markets and economies created by the pandemic. That then offers points of intersection around regulation, support, innovation, and ESG concerns. To give an example, various actors in the private sector – many of them start-ups – in numerous Asia-Pacific economies are experimenting with highly innovative fintech products and services that could radically improve MSMEs' access to finance. At the same time, the respective regulatory agencies are concerned about the potential systemic risks that might result from a too liberal approach to control.[68] Too much regulation could inhibit an economy

68. Typically, private sector investors seek to pursue a high 'beta', while regulators prefer to see a more modest 'beta'. In finance, 'beta' is used to denote the relative volatility of the price of a particular asset, relative to a wider portfolio. A 'high beta' indicates higher investor risk, but also suggests greater return potential.

from enjoying potentially significant, fintech-driven unlocks that could bring about a far more conducive enabling environment for MSMEs. Conversely, too little regulation could trigger an unanticipated systemic crisis that could set back a financial sector, an economy, and the MSME community with it, by years. A means by which controlled experimentation, using regulatory sandboxes, can be pursued, might be an optimal solution.

To be clear, the ikigai approach itself is not a formula by which specific solutions can be derived. Rather, it provides a framework by which to frame the question, and on which key stakeholders can seek to coalesce around what is the optimal balance to aim for, whether at the national, regional, or global level, and whether focused on MSME finance development as a whole, the fintech space, ESG issues, or even individual financial innovations.

As we noted in chapter 4, while institutional investors and large companies have started to place increasing emphasis on issues around ESG, this has been much less apparent in the MSME financing space. From the perspective of MSMEs, this is quite understandable, as accessing adequate finance is challenging enough, without adding further conditions around their adherence to ESG principles. If that adherence to ESG is flipped around, from one of being a burdensome compliance requirement, to being a vehicle by which to access finance more easily, and on more attractive terms, then key interests will be better aligned towards a shared goal. The progress we have seen thus far in ESG has been a product of a number of forces. In particular, a growing contingent of consumers and shareholders, as stakeholders, have increasingly conveyed their growing support for ESG by 'big business', and have been willing to redirect their spending and/or investing power in pursuit of this goal (Henisz, Koller, and Nuttall, 2019; GRESB, 2021; Weber Shandwick, 2018). Institutional financiers and fund managers have sought to respond by bringing ESG considerations into their portfolio approaches, in order not to lose existing subscribers and to attract new subscribers. While some of this has been dismissed as 'greenwashing', nonetheless some genuine progress in the right direction has been achieved, further supported by improved laws and regulations enacted and enforced with varying degrees of success by state agencies (Baker McKenzie, 2019, Cleary Gottlieb, 2020; Krosinsky, 2017; Yu, Luu, and Chen, 2020). Thus, the welcome trend towards greater sustainability and ESG by big business has been successfully modulated through finance provision, and by employing both potential 'carrots' (i.e. rewards) and 'sticks' (i.e. penalties).

The same has not been true for MSME finance, where pressure for smaller firms to embrace ESG has tended to revolve around meeting the compliance demands made by large-scale clients in the relevant supply chains, or face a halt to future orders – largely the wielding of a stick (Huang, 2019; PRI, 2017; Van der Lugt, Van de Wijs, and Petrovics, 2020). The provision of carrots to help incentivize MSMEs to mainstream ESG in their business models has been much less apparent, at least thus far. The reasons for this are numerous, but stem in part from difficulties around the transaction costs of implementing such an approach, given the size of numerous relatively small loans and other financial products. The likely impact, relative to the cost, does not offer value for money. This is where the same advances around digitalization and fintech may offer the prospect of ESG-related solutions, bundled within financial products and services that are better tailored to MSMEs and their financing needs. For example, integrating some aspects of ESG compliance into the process of assessing lending risk, so that a higher level of ESG performance translates into a lower rate of interest on debt, to reflect the reduced levels of risk that adherence to ESG principles are known to provide (Fitch Ratings, 2020).[69] In this vein, the proposed ikigai framework is expected to provide necessary facilitation to develop some workable solutions to those competing issues in MSME finance.

4. The bundling of MSME finance

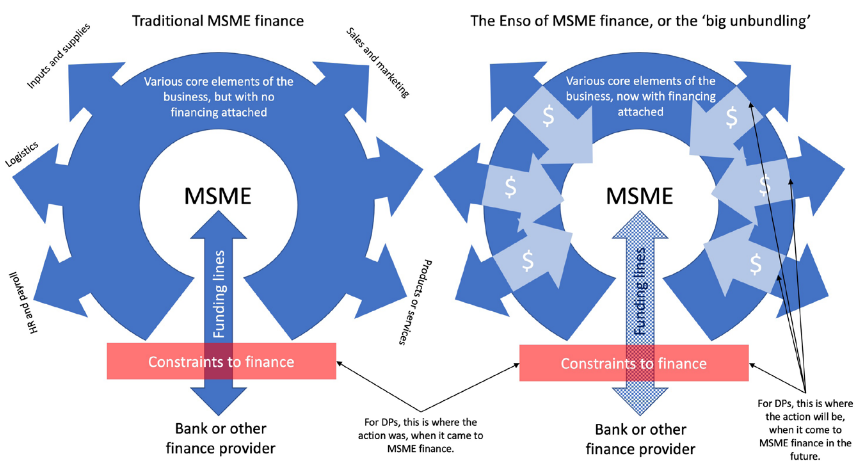
The third observation we introduced in chapter 1 was that advances in fintech will result in the bundling of financial services and products with other business services provided to MSMEs. Previously, a company would have its funding requirements met by one or more banks or finance providers, and for most MSMEs it would typically be a single bank. This relationship was somewhat separate from the core business activities of the MSME and entailed information flowing back and forth between finance provider and recipient (Berger and Udell, 2002; Kagan, 2020). On a macro level, banks are traditionally financial intermediators in an economy, moving idle capital from areas of excess funds to areas of fund shortage (Gobat, n.d.).[70] But on a micro-level, businesses – including MSMEs – have been expected to then allocate those flows of funding from a bank or finance provider – whether it be a loan, or a revolving debit, or some other product or instrument – to those parts of their business where the funds are needed: payroll, rent, input supplies, etc. (OECD, 2015).

Challenges of information asymmetry, a lack of adequate collateral to pledge as debt security, and other risk factors have served to constrain the degree of funding that can flow from finance providers to MSMEs (Baxamusa, Mohanty, and Rao, 2016; Beck, 2007). Those higher risk factors and the relatively high transaction costs of funding small-scale borrowers meant that MSMEs would often struggle to attain adequate finance and face a higher cost of borrowing. In this context, government agencies and others seeking to improve MSMEs' access to finance have tended to focus on ways of mitigating those constraints in various ways, such as through the introduction of credit scoring mechanisms, and providing guarantee schemes, etc. (See the left side of the figure V.3 below.) In other words, the focus of attention has been on the channel between the MSME and the bank.

69. A trend already reflected in Fitch Ratings Agency's introduction of 'ESG Relevance Scores'. See: https://www.fitchsolutions.com/products/fitch-ratings-esg-relevance-scores-data.
70. For details, visit: https://opentextbc.ca/principlesofeconomics/chapter/27-3-the-role-of-banks/.

Fintech has the potential of significantly changing the dynamics of this relationship, in two ways. First, advances in the fintech space could address some of those constraints head on, such as reducing the transaction costs of providing credit to small-scale businesses, and providing alternative scoring mechanisms that banks can employ in order to have a higher degree of confidence about the risks entailed (i.e. lessen the information asymmetry problem). Second, other advances in the fintech space hold the promise of linking the finance provision more closely to the various core aspects of the company's business (see the right side of the figure V.3 below). Such an integration allows the finance to be better integrated with the various functions of the firm, and the MSME has fewer concerns in trying to intermediate its own cash flows. For the finance provider(s), the financing is more closely tied, or bundled with, the specific activities it is being used to fund, and lessens the risk to which the company will misallocate – either accidentally or deliberately – those funds to support alternative activities.

Figure V.3: The 'enso-ing' of MSME finance



Source: The authors.
Note: 'Enso', a term taken from Zen Buddhism, refers to a hand-drawn circle that is executed in just one brushstroke.

To give one example, various platforms – such as Shopify and Amazon – are moving to provide financing for client companies; a role traditionally played by banks (Exton Consulting, 2021).[71] One advantage that these platforms have is that they know more about the cash flows of those client companies, as they transact some or all of their business through their platforms, and the data generated is verifiable. When that data is aggregated ('big data') and analyzed (supported by AI), the level of risk entailed in providing credit or some other form of funding is

71. For Shopify, see: https://www.shopify.com/capital. For Amazon, see: https://sell.amazon.com/programs/amazon-lending.html.

reduced, and so the costs for the company concerned can also be adjusted down. This shift in the way that MSMEs source funding will mean that interventions around improving MSME access to finance will also shift, at least in part, to new areas of fruitful activity, and no longer be focused solely on mitigating the constraints that exist in the direct relationship between companies and their traditional finance providers.

As researchers have noted in the past, MSMEs' ability to access finance is typically determined by both the availability of finite funds and the relative cost of those funds (Arun and Page, 2016; OECD, 2019, 2021; Yoshino and Taghizadeh-Hesary, 2018). Another constraint for MSMEs has been the need to provide adequate collateral to provide as security for funds, given that financiers tend to place less trust in the cash flows reported by borrowers, over which they have less ability to verify (ESCAP, 2020). If those financiers know for a fact what the cash flows of an MSME are, because they are routed through their digital payment systems, then the emphasis on collateral-based lending should also lessen (Chatterjee, 2018). That is good news if we increasingly see MSMEs become 'asset lite' concerning fixed capital and other physical possessions they can offer as security on loans. If MSMEs become increasingly digitalized – or even virtual – in their way of conducting business, they will need other ways of securing capital than pledging physical assets. (One financier already responding to this trend is a Swiss-Singapore venture, Sygnum, billed as the world's first digital asset bank, and providing an array of financial services around digital assets.)[72]

While it might be tempting to suggest that this disruption in MSME finance will be a revolution that completely sweeps away the traditional role of banks and finance providers, probably a more nuanced picture will emerge. Banks are not expected to give up on the MSME finance market without a fight, but will instead seek to adjust, and where possible also try to use advances in fintech to keep market share. They will wish to capture some of the cost saving and risk mitigating advantages that fintech is expected to unlock, whether by emulating them and developing their own 'copy-cat' offerings, acquiring so-called disruptors in the MSME finance space, or entering into alliances with new finance providers. Some banks are shifting to open banking systems that will allow some of the new fintech products and services to sit inside their own systems, as so-called 'white label offerings'. They may also look to develop traditional products and services that newer rivals less able to disrupt, such as around relationship-based and value-add services. Whatever strategy they choose to remain relevant, MSMEs are likely to find themselves better served by financiers in the years ahead.

We are already beginning to see some fintech providers offer their services to established banks and finance providers as a suite of 'back office' services that can bring about efficiency gains (Chuard, 2020; Kagan, 2020). Cloud and 'software

72. See: https://www.sygnum.com/about-us/. One of the latest forms of digital intellectual property is non-fungible tokens (NFTs).

as a service' (SaaS) will allow established MSME finance providers, with extensive distribution networks, to harness machine learning and AI that can analyze and process funding applications at a pace and cost that was previously impossible, and with less reliance on conventional forms of security as collateral (IFC, 2020). This promises to be a major unlock for MSME finance provision, whether in terms of availability and inclusion, and/or cost and efficiency. Advances in open banking and open 'application programming interface' (API) should allow even some of the most traditional finance providers to benefit, without having to invest massively in new infrastructure.[73]

Amazon, Shopify, Ant Financial, Sea, and numerous others are also leveraging their digital business networks and reams of big data to get into 'small ticket' MSME lending that can help their clients to grow, and thereby pump more business through their platforms. These include short-term loans to cover working capital needs, such as Instamojo (of India) providing so-called 'sachet loans' on WhatsApp, to help ease temporary cash flow shortages as a result of COVID-19's disruption to business cycles.[74] Parts of Asia and the Pacific are leading this shift to digital financial services. For example, the adoption of mobile payments by smartphones, at the point of (retail) sale in 2020, is greatest in China, at 32.7 per cent, followed by the Republic of Korea (24.4 per cent) Viet Nam (23.8 per cent), and India (15.7 per cent), well ahead of most European countries, and the United States (at 15.0 per cent).[75] And as of September 2020, the greatest funded fintech start-up venture in the world was Singapore's Grab (mobile wallet), having attracted US$ 9.7 billion in investment; almost twice as much as its next three peers combined: Stripe (payment processing), Robinhood (online brokerage), and Oscar (insurance), all of the United States (Girling, 2020).[76]

The growth of fintech ventures in Asia and the Pacific, and indeed around the globe, has been quite remarkable. To give just a few examples, in 2020 there were estimated to be over 320 fintech start-ups in Indonesia alone, spanning: lending, payments, crowd-funding, investment, insurtech, point of sale services, and blockchain ventures (FintechNews Indonesia, 2020). Also in 2020, there were estimated to be around 430 fintech start-ups in the city-state of Singapore, spanning: AI and big data, crypto-currencies and blockchain, crowd-funding and crowd-lending, payments, insurtech, regtech, wealthtech, investment, lending,

73. APIs entail the creation of applications that access data and features of other applications, services, or operating systems. See 'The growing importance of APIs to banking', in International Banker, 6 April 2020. Available here: https://internationalbanker.com/banking/the-growing-importance-of-apis-to-banking.
74. Visit: https://www.instamojo.com/start/payment-gateway/.
75. Figures provided by Statista Digital Market Outlook at: https://www.statista.com/outlook/digital-markets.
76. Also see: 'Grab ranked the most well-funded private fintech start-up'. Fintech magazine, 16 September 2020. Available at: https://www.fintechmagazine.com/venture-capital/grab-ranked-most-well-funded-private-fintech-startup.

core banking, neo-banking, remittances, etc. (FintechNews Singapore, 2021). A quick glance at the State Bank of Vietnam's website will see that there are over 40 licensed digital payment service providers registered, as of late January 2021, all approved over the last five years, including eight licensed for the first time in 2020 alone (i.e. during a pandemic), and two in January 2021 (The State Bank of Vietnam, n.d.). It is not just at the start-up level that the scope of the digital revolution is disrupting the traditional banking and finance sector. Platform providers like Shopify, PayPal, and Tencent have seen their market capitalizations increase at far greater rates than stalwarts of the Asia-Pacific banking sector, like Standard Chartered, HSBC, or DBS Bank (Taylor, 2017).

Even prior to the pandemic, trends in digitalization were revolutionizing the way that businesses of all sizes, and even individuals, conducted their finances. In China, for example, the most popular digital payment systems used by retail customers include Alipay, WeChat Pay, QQ Wallet, and Baidu Wallet (Daxue Consulting, 2021).[77] MSMEs will no longer have an outward-facing set of financial transactions with clients and customers that are largely separate from a backward facing set of relationships with their financiers; instead, it will all be enveloped by a single financial service umbrella arrangement (Hall, 2020, Lanteri, Esposito, and Tse, 2021; World Bank, n.d.). With greater visibility into the cash flows of individual businesses, digital finance providers will have a much better sense of commercial borrowers' ability to service their debt obligations. As a result, the information asymmetry risk that has plagued lenders for decades could be lessened considerably, and that should have a positive impact on pricing of financial products and services.

> "A significant and transformational shift has already taken place over the last 10 years in which innovative fintech companies, challenger banks, specialist digital SME lenders, E-commerce players and aggregators […] have entered the [US]$ 8.1 trillion SME credit market and already offer a range of solutions to meet the diverse financing needs of SMEs of all sizes. By 2030, we expect much bigger shifts to have taken place including: the continued adoption of digitisation, open banking and a move to open taxation which will allow for data to be effectively mined as part of the credit underwriting process and substantially reduce the time and cost to serve SME borrowers; the introduction of digital and AI-backed underwriting for larger, more complex loans that today are done manually in most countries; the utilisation of blockchain and smart contracts that drive efficiency in the area of securitisation; the introduction of crypto currencies as a currency for lending loan repayment allowing for a better alignment of loan products with SME business cycles and the volatility in their cash flows; and a streamlining of the SME credit ecosystem in which non-financial institutions take over the provision of many of the products and services that traditionally were the exclusive domain of financial institutions." (CreditEnable, 2020).

77. Also see: https://www.statista.com/chart/17409/most-popular-digital-payment-services-in-china.

5. Envisaging the future: a taxonomy

We envisage that current innovations in fintech will trigger a number of significant unlocks for MSME finance, as advances in ICT and big data address some of the largest traditional constraints to MSMEs accessing adequate and cheap funding. For micro enterprises and informal businesses too, many will be beneficiaries of fintech innovations that we are starting to see around micro-finance and retail banking, as well as financial products and services focused on gig economy workers, freelance, and self-employed workers, as well as remittance-based and other service offerings that are primarily oriented towards individuals, rather than corporate entities.[78]

Fintech interventions in retail banking, and even base-of-the-pyramid related areas, are expected to be beneficial for micro enterprises. Some may be pure financial products and services, while others may be the result of grafting financial services on to innovations around sales, marketing, and numerous other business offerings. Indeed, this may pose a medium-term competitive threat to some micro-finance institutions (MFIs) that focus on informal enterprises, unless they too embrace some of the innovations that are driving this trend. Such MFIs are essentially 'one trick ponies' that could struggle to compete with rivals offering a suite of value-added services, in addition to working capital loans, etc.

For formal MSMEs, we see a number of innovative forces coming to bear in the field of finance as follows:

- First, and as intimated previously, advances in fintech have the potential to address a lot of the opacity and risk that surrounds financial provision to MSMEs, and the information asymmetry issue that tends to increase the costs of finance for these firms.[79] Finance providers will know almost as much as their clients about the health of the latter's business, through the transactions and information flow that they can see and analyze, thereby

78. For example, using remittance applications, like World Remit (which recently acquired rival Sendwave), to make payments for small orders shipped to buyers overseas, thereby reducing the need for more conventional and expensive trade finance options (OECD, 2020b). See: https://www.worldremit.com/en/us.
79. Traditional banks have typically cited information asymmetry (i.e. the fact that they inevitably know less about a borrower's business health than the borrower themselves), which equates to a risk that needs to be mitigated through higher loan pricing (Albertazzi and others, 2017). The higher the risk, the higher the cost of funds. Indeed, with the advances in fintech now being seen, the information asymmetry issue may even become inverted, with finance providers – using analytical tools and big data not available to their clients – knowing more about their clients' businesses than the clients themselves. One worry here is that finance providers could then use that privileged access to aggregated data to inform affiliates or subsidiaries, and then unfairly compete with their clients. This would be a fintech variant of 'front running' by investment banks, or a version of the non-competitive practice allegations that have been levelled at Amazon and others in the past.

lessening the risk associated with providing funds. That reduction in risk should result in a reduction in the cost of funds, such as the interest rates set on loans. As new finance providers scale up, risk mitigation through diversity, as well as the insights provided by big data analysis, will only further increase their ability to overcome information asymmetry. Within the fintech umbrella, increasing use of AI is believed by some to hold some of the greatest promise, notably around inclusive MSME finance. Nadia Sood of CreditEnable argues that AI may "hold the promise of eliminating inherent biases around gender, minorities, socio-economic classes and geography, AI and machine learning will cut the cost of capital for SMEs even while reducing default risk for lenders" (Sood, 2020).

- Secondly, advances in fintech have the potential to mitigate, if not wholly remove, one of the single most oft-recounted constraints to MSME finance: a lack of physical assets or other collateral to offer as security for a loan. As finance providers are better able to make decisions based on the actual business volumes of a company, through the periscope of information they can access, they will have less need for clients to pledge collateral as security. Finance providers will increasingly not be traditional lenders, but service providers that are assisting client firms to also conduct the outward facing parts of their business, including distribution, sales, and marketing. One only needs to look at the array of financial services that Alibaba (Ant Group) and Amazon, among others, are providing to their vendors to see that they are usurping the traditional role of banks, at least as it pertains to MSME finance and other aspects of corporate banking.[80] Indeed, there are some observers cautioning about the risks of oligopolistic and anti-competitive issues arising, such has been their rate of success in the market.
- Thirdly, the move to digitalization and more integrated means of finance provision should allow for a markedly more efficient ways of funding MSMEs, and lowering the transaction costs for financiers. Until recently, the costs of manual due diligence, credit risk analysis, preparing contracts, etc. were expensive and time consuming. This particularly inhibited the provision of funds to smaller firms, as the transaction costs of a single loan tended to be the same, regardless of the funding amount, and so finance providers were incentivized to serve larger firms needing larger loans and other products. The only way a smaller firm could address this imbalance would be to incur a higher cost for those funds but those transaction costs

80. In early 2020, Amazon announced a partnership with Goldman Sachs to provide credit lines of up to US$ 1 million to merchants using its platform. Amazon also issues term loans to its partners using a tie-up it has with the Bank of America. "E-commerce players like Amazon and Alibaba that have a rapacious appetite to grow their supplier bases, and the ability to underwrite riskier loans because of their immense access to real-time sales data and the lower compliance requirements they face as non-financial institutions will become the dominant providers of loans to smaller SMEs by 2030" (Sood, 2020, p. 37).

are about to come down, significantly, which should bring more smaller enterprises within the 'fundable umbrella'. We are already beginning to see online financiers that specialize in serving start-ups, entrepreneurs and even freelance consultants, i.e. micro businesses in the making.[81]

- Digitalization also provides an opportunity for financial service providers to start bundling their offerings as a holistic suite of products and services that business can access, as they launch and grow, even starting with business registration and formalization. As an MSME grows, it can graduate through a dashboard of products and services that it needs at that particular time. By integrating its accounting system with its expenditures, credit lines, invoicing, etc., from the outset, it can burgeon more seamlessly than before. In the past, an MSME might have had to retain the services of multiple different business service providers, each with their own ways of doing this, resulting in various mismatches and work-arounds.
- Indeed, we are seeing companies and organizations that were not previously thought of as finance providers moving into the provision of financial products and services to MSMEs as part of a conducive ecosystem that allows small-scale vendors to grow. Perhaps the leading exponent of this is Amazon, with innovations that include (but are not limited to): (i) Amazon Pay, which allows consumers to buy products and services using the Amazon payment system, even when buying outside the Amazon platform; (ii) Amazon Lending for small businesses; and (iii) Amazon corporate credit cards for small businesses. In the first section of this chapter we made a reference to MSME finance as being a means to an end, rather than an end itself, at least from the MSME's perspective. Taking this one step further, MSME finance has the potential to become an embedded element of a wider ecosystem, and less of a distinct activity or function (Brewer, 2020).[82]

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81. For example, see 'mercury.com' and 'banknovo.com', both in the United States.
82. Matthew Saal of the IFC suggests that MSME finance will become 'invisible', and that the "winning approaches to SME finance will be those that allow businesses to focus on their core activities. […] A compelling vision of the future of finance is the acceleration of embedded, contextualized finance, combined with automation (enabled by data linkages to other business processes, IOT, AI, smart contracts and other technologies) that anticipates the need for financing and provides it from the optimal mix of sources." Saal expands his vision of future MSME finance thus: "Internet banking and mobile money place a virtual bank branch in the phone in any business owner's pocket. […] Additional financial connections are being made alongside digitalization of supply chains and sales activities. Digital order and inventory systems allow a distributor to see inventory levels and order patterns and offer financing. Sales via e-commerce platforms and acceptance of electronic payments at the retail level provide data on cash flows and are leveraged to provide credit. The contextualization of finance reduces risk, moderating the cost, and increases availability, convenience, and ease of use. But this more readily available liquidity still requires the business owner to carefully balance the mix […]. Intelligent finance will remove that requirement. […] The system can evaluate outstanding invoices, determine which could be factored or are part of a supplier's prepayment program, and whether the discount required would be more costly than tapping distributor finance or a bank [credit] line. Algorithms would execute the combination of transactions needed

- An additional, somewhat indirect, trend that should benefit MSMEs and their access to finance will be the extent to which these innovations trigger a response from traditional MSME finance providers, whether they be commercial banks, leasing companies, factoring companies, insurers, etc. They will inevitably be confronted with a small number of strategic options: (i) look to develop their own equivalent products and service offerings; (ii) seek to acquire and bulk up some of the cadre of innovators and disruptors moving into their space; and/or (iii) consider alternative offerings and user experience that they can provide to offset this competitive threat, by leveraging their existing knowledge and assets.
- Fintech and digitalization should also allow for a finer degree of granularity in the data and analysis that financial providers have on clients. This in turn should allow for the provision of more bespoke products and services that better fit the character and needs of individual MSMEs, rather than having to select from, and sometimes even adapt their business model to fit, a small number of generic financial products and services.

Given the above, one might argue that the long-term prospects look good for MSME finance in the post-COVID-19 environment (notwithstanding the challenging global macro-economic backdrop in the near term), at least for those MSMEs that survive the pandemic and its immediate aftermath. We broadly concur with such a view, albeit with a few important caveats, as follows:

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to provide a steady flow of working capital at the optimum mix, dynamically adjusting for market conditions and exposure preferences. […] This is the extension of robo-advice from consumer finance to small business treasury management. The SME robo-treasurer will optimize across funding sources. It could be forward-looking – making sure to build a track record with a new business partner or finance provider, for example, to qualify for better pricing or credit terms in future. Treasury management once available only to corporates with significant finance operations will be placed at the disposal of an SME […]. That layer of technology will take SMEs beyond the current wave of contextualized finance to the age of invisible of finance. […] Different types of providers have a nexus of small business relationships and could offer such a service. For small merchants selling via e-commerce, a marketplace platform that is providing inventory and logistics management and payments collection could be the logical provider. We already see such platforms providing financing products such as working capital for inventory and merchant cash advances. For other SMEs, a digitally enabled bank or microfinance institution will be best positioned. Banks, after all, are one of the oldest platform business models, offering multiple products against a core ledger system. Those that are adept at customer facing technology and willing to offer not only their own products but those of a range of providers, could leverage their connectivity to SMEs, payments, and credit information and administration systems to provide a compelling value proposition. […] These could develop into value-added data services, in partnership with finance providers. The next generation of cloud-based SME accounting systems will incorporate these features for more formalized SMEs, and for some with complex needs, stand-alone optimization systems will connect to the accounting system and multiple finance providers" (Saal, 2020, pp. 47-48).

- The financial sector is typically one of the most regulated sectors of any economy, and quite rightly so. A systemic collapse in the financial system can wreak considerable macro-economic damage, and poor conduct can imperil the savings of millions of citizens. When evolutionary developments in banking and finance provision were relatively sedate, it was fairly easy for legislators and regulators to stay on top of innovations, and enforce laws and regulations that allowed incremental advances to occur, while also protecting the overall system. Crises and scandals would occur in the banking and finance sector, but these tended to be isolated events. Technology and innovation are now changing the industry so rapidly that regulators are hard pressed to keep abreast. The sheer complexity of some financial products and services are themselves difficult for legislators to understand, let alone police, particularly when they originate from actors outside of the traditional cadre of banks and financial institutions. There is therefore an understandable temptation to err towards a regulatory framework where only activities explicitly permitted can proceed, versus a framework where only those activities explicitly prohibited may not proceed. This stymies innovation, and means that a country's MSMEs are at a competitive disadvantage, because they are unable to access new financial products and services that their peers overseas can avail themselves of, creating an opportunity cost. The challenge for regulators and the frameworks they enforce will be to strike the right balance between ensuring that the financial system is adequately protected, while simultaneously allowing new products and services to be piloted, and where successful, scaled up. Regulators will also need to start getting more comfortable with ostensibly non-finance companies moving into the business of finance provision, as part of a wider portfolio of MSME-friendly support services. They may also need to adjust their regulatory mandates in order to ensure that these activities are adequately governed, and enforced.
- As we have seen in some other business sectors, digitalization and technology trends have the potential to pose new threats around uncompetitive behaviour, and the creation of oligopolies that can abuse their scale. Therefore, care needs to be taken to ensure that while the big data power of financiers can offer MSMEs a suite of new, low cost, and easily accessible financial products and services, they do not result in capturing MSMEs in an ecosystem from which they cannot fairly compete, or escape.
- For some established and well-connected actors in the banking and financial sector, the notion of market disruption will be perceived as a competitive threat that needs to be thwarted. Established lobbying networks and other means – both legitimate and illegitimate – of seeking to influence the perceptions of legislators and regulators will probably be leveraged to hinder new rivals, and/or create regulatory moats that protect established institutions. Where this impedes MSME finance at a

cost to the ecosystem, for the advantage of a select few, regulators must monitor and prevent.

- It is probably inevitable that some of the market disruption that fintech will cause in the banking and finance sectors will pose a heightened level of systemic risk. It may also cause actors to tolerate a higher level of risk in a bid to compete in what is becoming a much more competitive and volatile market environment. Rarely does major technological or economic change occur smoothly. Regulators and policymakers will need to remain vigilant to this threat in what is increasingly becoming an international web of financial service providers, and where sovereign jurisdictions are becoming less defining.

Finally, these opportunities and challenges to fintech solutions in MSME finance are summarized in table V.1 below.

Table V.1: Opportunities and potential threats to fintech solutions in MSME finance

Opportunities	Threats
Addressing the information asymmetry constraint.	Regulators and policymakers' lack of understanding on the emerging roles of digitalization and fintech playing in the banking and financial sector in general and MSME finance in particular.
Addressing the collateral constraint.	Inadequate or excessive regulatory environment that inhibits positive, innovation-driven change.
Addressing the high transaction cost constraint.	The emergence of oligopolies that constrain MSME funding and development.
Bundling of financial and non-financial products and services needed by MS-MEs, start-ups and micro entrepreneurs. Non-finance organizations start to provide fintech-based financial products and services, as part of a supportive ecosystem for MSMEs.	Lobbying from vested interests to regulate against positive change
Market disruption that triggers greater competition from finance providers that serve MSMEs.	Market disruption that triggers excessive risk-taking by actors that leads to systemic risk
More bespoke financial products and services for MSMEs.	Unwillingness to cooperate among new and conventional MSME finance service providers.

Source: Authors, based on Elms (2021) and IFC (2020).

6. Concluding remarks

COVID-19 and its economic ramifications did not have a 'first order' impact on MSME finance per se. The impacts were a series of 'second order' interventions and intense stress tests, comprising: (i) changes in the various market and industry contexts in which MSMEs (and finance providers) operate; (ii) changes in the financial sector context and conditions in which banks and non-bank financial providers operate; and (iii) a global macro-economic downturn impacting virtually all businesses, from which the reverberations will last for some considerable time. Thus, COVID-19 has brought about a radically different macro-economic and financial environment, which in turn will trigger significant structural changes for many MSMEs and their finance providers. The pandemic as an accelerant of change, including in how MSMEs finance themselves.

It is not the case that the pandemic has knocked MSMEs and their finance providers into an alternate reality; many of the trends and innovations that we envisage occurring in the near future actually have their origins well before 2020. These include a likely retreat in some elements of the globalization trend and extended lines of cross-border supply chains, which have proven to be insufficiently robust in the face of a global stress test, and were already being questioned before the pandemic. Technology-driven advances in big data, robotics, AI, and IoT, for example, also pre-date COVID-19, but will be drivers of change long after the recent pandemic is a fading memory. The days of a firm having a distinct relationship with its financial providers, wholly separate from its relationship with suppliers and customers, creating the need to bridge the two (and resulting challenges, like reconciling cash flows), are numbered. Instead, tools and platforms will exist that integrate all aspects of a business, and its finances, under a single umbrella.

The cost and efficiency gains from this integration will both reduce the costs of funds for MSMEs, and the risks for their finance providers. This looks to be all good news, except for the more traditional providers of finance for MSMEs, who appear to be slow in embracing, or at least girding themselves for, the impending revolution in MSME finance. Our sense is that a whole range of disruptors and non-traditional finance providers may start to cannibalize the role once dominated by banks, as an economy's financial intermediators. That model of commercial banks serving as an economy's funding valve, sitting between capital-rich savers and capital-poor borrowers, from which they extract a margin, could be overtaken by more refined tools.

Prior to the pandemic, a trend had begun to develop over the last decade or so, whereby traditional commercial banks would continue to provide 'old school' large loans to large corporate entities, and a growing cohort of fintech-enabled providers were increasingly moving into the small business finance space. In advanced economies like the United Kingdom, traditional banks' share of the small business finance market has actually been contracting, with the arrival of financiers like Funding Circle, Iwoca, Kabbage, Starling, and Tide, among others.[83] This bifurcation of finance provision was also resulting in some risk of medium-sized firms being neglected (cf. Abe, Troilo, and Batsaikhan, 2015). We can envisage a scenario whereby these twin fronts start to dovetail, whether through acquisitions or other means, with conventional banks also embracing fintech as preferable to being forced out of the small business finance market altogether.

It is also worth noting the need to continue the process of innovation in the financial sector, including MSME finance, and recognize that the act of innovation itself needs to be financed. While it is tempting to think of fintech as 'manna from heaven', it is the product of hard work and considerable investment. Given the scale of the macro-economic contraction in all economies, and the distress posed to the balance sheets of most companies, it would be naïve to expect that discretionary budgets for research and development will be completely immune from the belt-tightening that is currently underway. Funding in support of innovation, and particularly some of the more 'blue sky' projects, will inevitably be scaled back. Venture capital and other sources of financing for innovation, and so-called 'disruptive business models', was at an all-time high in 2019, and appears to have weathered the economic crisis of 2020 much better than many had anticipated. Nonetheless, momentum could be lost, particularly if financial resources are diverted to less risky and less exciting investment propositions. As with any new type of business that starts to enter the mainstream, conventional finance providers can be hesitant to fund businesses employing technology, providing a new service, or catering to a new market where the risks and returns are poorly understood. As much as fintech ventures are often seen as disruptive competitors to old school finance providers, there will come an inflection point where they too will need to tap large sources of conventional funding to scale up and fuel growth.

As emergency stimulus, liquidity, and other measures are gradually phased out, it will be important that funding needed to support the ideation, design and experimentation, piloting, and commercial scaling up of innovative financial products and services is available. In addition, policymakers and regulators need to provide the legal and regulatory room for this work to occur, whether as

83. This trend of commercial banks moving out of small business finance has also been driven, at least in part, by Basel II and III, and other changes in banking regulation which have made it a more onerous sphere of finance provision, including the shift towards risk-weighted capital requirements for banks. As financing smaller businesses is perceived by regulators to be inherently more risky, this means banks must set aside more capital for loan loss provisioning, relative to servicing larger clients (Bams, Pisa, and Wolff, 2015; Financial Stability Board, 2019; Valladares, 2019). There is actually some debate as to whether lending to MSMEs is genuinely more risky per se, but as long as that perception remains, smaller firms and start-ups will have to struggle harder to access to finance, and having found it, then potentially pay more for it, such as through relatively higher rates of interest, to offset that higher perceived risk (Arun and Page, 2016).

temporary sandboxes to trial new approaches, or as more permanent frameworks. If new financial products and services are to be introduced, there needs to be a modality by which this can be done, while not compromising the integrity of the financial system. The 2020 iteration of the Global Innovation Index cautions that the "amplitude of the crisis created by COVID-19 has engulfed many countries in a wave of emergencies. In the years to come, financial resources will be strained. Risk aversion will be high. As a result, countries and corporations alike will find it harder to pursue investments and innovation" (Dutta, Lanvin, and Wunsch-Vincent, 2020, p. 7). While a valid assertion, one mitigating factor is that spending on research and development is not seen so much as a discretionary cost, but rather a necessary investment to remain competitive in a variety of fields – including financing for MSMEs – at a time of rapid change and disruption. For banks and financiers, not to innovate and invest in new technology runs the very real risk of being left behind.

How might banks and other conventional finance providers seek to pivot their MSME-related products and offerings, in a bid to counter the current advances in fintech? For banks with extensive (and expensive) bricks-and-mortar branch networks, fintech poses a fundamental threat to their business model, as more and more MSMEs shift to mobile and online banking. One option will be to acquire and phase in similar digital-based product offerings, and potentially phase out their branch networks. But there is also the opportunity to examine the potential of leveraging fintech to provide bespoke suites of business financial management tools that MSMEs often need, and currently struggle to access at suitable fee rates.[84] Book-keeping, expense management, business planning, credit management, and payment acceptance are all areas where the current provision of software solutions is insufficient. The trick will be to bundle these as a coherent package of financial services, so that the provider becomes MSMEs' primary bank and business partner.

It is that confluence between fintech and traditional banking approaches where the immediate future of MSME finance in Asia and the Pacific probably lies, rather than a completely binary fork in the road. While we have seen the emergence of so many fintech-driven products and services in recent years, spanning everything that MSMEs might ever want in the financing space, the take-up of these innovative offerings has been constrained, not only by the impact of the pandemic reducing demand, but also by: (i) the 'stickiness' of customer loyalty to established service providers; as well as (ii) entrenched payments and clearing systems that serve as a final protective moat around more established institutions; and (iii) a lack of funding lines themselves to go mainstream. The end result appears to be a marriage of convenience between established financial institutions and innovators. Rather than just disrupting the established market, fintech firms are offering to

84. For details, visit: https://strands.com/solutions/sme-banking/; https://strands.com/products/bfm-business-financial-management; https://info.strands.com/she-banking-whitepaper; and https://info.strands.com/sme-banking-report.

provide so-called white label software services to banks and financiers, for a fee, from which the latter can derive greater efficiency, lower costs, and improved risk assessments. In return, established banks and service providers offer extensive distribution networks and client networks, sources of funding, and 'open banking' systems into which the fintech offerings can be housed and integrated. Potentially at least, that should be good news for MSMEs in Asia and the Pacific, in their perennial pursuit of adequate access to finance.

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CHAPTER VI

Action: Practical Policy Suggestions and Solutions

Mike Troilo, Masato Abe, and Nick Freeman[85]

"[SMEs] are lifelines of most economies; yet are largely underserved and see financing as the biggest impediment to growth. To make things worse, this decade started with an unprecedented humanitarian crisis (Covid-19) and SMEs no longer are just an underserved segment; they also are one of the most severely impacted segments. However, there is a silver lining in all of this that will lead to a radical transformation in the way SMEs are served."

Satyam Agrawal.[86]

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85. Luciana Milani Baglioni, Aoqi Leng, Clara Robert, Tai Lo Yeung, Ruohan Wang, Jiajie Wu, and Nan Zhang provided research assistance to this chapter.
86. 'From underserved to contextual and personalized: Is SME financing finally set to leapfrog this decade?', in IFC (2020b, p. 12).

1. Introduction

In the previous chapter, we sought to provide a broad vision of what MSME finance might look like, looking beyond the immediate future of the next one to two years. In so doing, we advocated the need for MSME finance to snap forward: to exploit the opportunities that the pandemic has provided to 'build back better', and how the principle of ikigai could be employed as a useful framework in guiding MSME finance to meet a spectrum of potentially competing forces. We also emphasized that beyond the immediate time horizon, MSME finance will become bundled with other business service offerings, as a consequence of advances in digitalization and the use of fintech. As with all periods of flux, this will be a disruptive for traditional actors (in this case banks), but has the potential to be of benefit to MSMEs. If the MSME community in Asia and the Pacific were able to tap cheaper and more accessible sources of funding, in greater quantities, and without incurring a greater degree of risk, then the socio-economic benefits for less developed and developing countries in particular could be considerable. But how does one translate that vision into a tangible reality?

In this chapter, we transit from the conceptual to the pragmatic. We focus on specific policy suggestions, albeit with an understanding that the Asia-Pacific region contains a diverse range of countries at various stages of development, and with differing degrees of institutional capacity, resources, and other inputs that can determine outcomes. A one-size-fits-all approach to policy is clearly inadvisable; policymakers always need to tailor advice to be congruent with their specific circumstances. Nonetheless, if one is embarking on a process by which advances and innovation in the provision of financial products and services for MSMEs, what might be the principal pillars in the erection of such a conducive ecosystem?

One point we wish to emphasise is that international organizations supporting MSME finance, such as ESCAP, Asian Development Bank (ADB), and others, will also need to change with the times. The trends we have highlighted will not only disrupt traditional finance providers; they will disturb the status quo for all players. International organizations themselves need to be conversant with the latest developments in fintech and other evolutions in the MSME finance landscape. To the extent that international organizations are training and developing their human resources in these fields, they may wish to consider expanding their efforts. For example, a typical policy to increase access to finance for MSMEs has been to institute a four-tiered banking system, as follows (Abe, Troilo, and Batsaikhan, 2015, citing AAMO 2007):

i. *First tier:* an apex bank (or agency) for MSMEs, at the top, that oversees policy prescriptions, credit guarantee schemes, new financing schemes and programmes, business development services (BDS) and training, and the flow of credit (and equity) to the sector. Above all, the apex bank seeks to augment financial resources for all concerned players, and give them institutional support from time to time.

ii. *Second tier:* national financial institutions, commercial banks, specialized development financial institutions (DFIs), such as export-import banks, credit guarantee agencies, credit information providers (e.g. credit registries), venture capitalist associations and networks, and support institutions, such as national BDS provider associations/networks and national chambers of commerce and industry, then play the role of credit providers or facilitators to the organized sector of MSMEs. In addition, corporate bond markets (and stock markets as an extreme case) also fall in this category for open market borrowings (and share offering).

iii. *Third tier:* sub-national development financial institutions, regional banks, BDS providers, and local chambers of commerce and industry have a manageable specified region or a command area for serving the specific sector.

iv. *Fourth tier:* at the base of the pyramid, micro-finance institutions (MFIs) cover micro-enterprises and self-help groups through the provision of microcredit. MFIs are placed at the base of the system because it has to cover the biggest segment and largest number of enterprises and individual entrepreneurs in the field. The MFI system is experienced, and best suited to keep close contact with clients and to ensure full recovery of loans. They are also equipped to give non-financial support to entrepreneurs.

While the above structure is still valid as an approach through which to assist MSMEs in procuring finance, fintech will radically alter how each tier fulfils its role. We can expect a winnowing of providers at each level below tier 1, as fintech replaces some of the traditional competition and/or consolidation occurs. As a general rule, policymakers should not intervene in the workings of the market; they will instead want to educate MSMEs at each level how fintech can best serve their needs. In order to be effective, policymakers themselves must understand the different types of fintech available, and where their use is most efficient. This will require retooling and further education of human resources in organizations such as ESCAP, ADB, etc.

2. Suggested policy actions

In the rest of this chapter, we consider ten policy suggestions focusing their issue propositions as well as practical solutions, while recognizing that they are not mutually exclusive, and often overlapping. They are on: (i) business services ecosystem; (ii) regulatory sandboxes; (iii) supply chain and trade finance; (iv) digital credit scoring; (v) sector-specific financing; (vi) ESG driven financing; (vii) financing women; (viii) balancing demand with supply; (ix) multi-stakeholder engagement; and (x) regulation of financial digitalization.

2.1. Financing as an integral component of a business services ecosystem for MSMEs

The issue: Many MSMEs and start-ups have struggled to access finance because they lack an established track record with financiers. Lenders and others simply do not know enough about the business, and find it hard to gauge the risks of providing funds, resulting in a decision to reject an application for funding, or to impose high costs. The transaction costs of conducting even basic 'know-your-customer' (KYC) and due diligence further exacerbate the costs for even the simplest of loans.

The solution: Increasing adoption of digitalization by MSMEs and finance providers alike create a number of opportunities to address this long-standing problem of information asymmetry. First, the digitalization of data generated by an MSME – from operating costs, revenues, earnings, and tax filings – will make it easier for financiers to get a good picture of its underlying business. The use of big data and AI should allow finance providers to generate credit analysis models based on robust analysis, and potentially provide bespoke financial products and services that meet the specific needs of the MSME, instead of the 'one size fits all' nature of most financial products these days. And in a move redolent of old fashioned 'factoring' (accounts receivables finance), finance providers will be able to view the risk of a stand-alone MSME within the broader context of its wider business ecosystem – such as a business-to-customer (B2C) platform like Shopify, for example – in which it operates. From there, it is only a small step to the point where the ecosystem or platform itself has its own financing services to offer participating vendors.[87] The end result is access to finance for MSMEs as an integral part of their business model and digital way of working, not as an external resource that is often hard to attain.

87. Chedda (2020, p. 41) argues that by 2030, MSME finance will not be provided by banks and other traditional sources of funding, but: "mainly provided by companies which control global online marketplace platforms, which connect merchants and customers, and the corresponding international logistics services. The dominant players will be the companies which control the data on merchants and customers and the proprietary algorithms on the marketplace platform. […] Credit lines will be provided to SMEs through the marketplace platform and incorporate the unbanked and underbanked by allowing online payments and deposits using smart phone digital wallet accounts and QR codes, thereby bypassing the traditional banking system." But goes on to caution that the "control of data and proprietary algorithms on the marketplace platform will create high barriers to entry, making it very difficult for new platforms to challenge the incumbent. Therefore, government regulation will be critical to ensure no abuse of power takes place. Existing banking regulations will need to be overhauled in order to adapt to the changing environment and not stifle the growth of lending to SMEs […] while protecting the interests of all stakeholders with regard to fair and equitable treatment".

A tangential approach that Chiarella and others (2021) advocate for banks, but will also benefit end users like MSMEs, is the concept of 'trading as a service' within the financial sector. This concept envisages a partnership between larger and smaller banks to address the problem of supplying funds at scale. Since, in general, only a limited number of banks can truly be at scale in a given asset class, the solution is to combine the potential of smaller banks, who wish to be at scale but cannot achieve it, with larger banks, who are at scale but constantly seeking more in order to increase profitability. By combining the respective strengths of large and small banks in a mutually beneficial partnership arrangement, there is the potential for synergistic gains. In the case of smaller banks, they get to tap into the funding sources of their much larger peers, while leveraging their on the ground networks and more intimate knowledge of MSMEs. The authors note, "in this arrangement, the large banks insource the execution, operation, and technology components of flow trading from smaller banks while these smaller banks preserve the last mile to the client. In the past, institutions have tried more limited versions of these arrangements, but end-to-end services appear to have potential for delivering better results in the current environment".

While networking among larger and smaller banks clearly has been a policy for increasing access to finance for MSMEs, now could be an opportune moment to re-double the efforts for making such arrangements work, with fintech as the key to this MSME finance unlock, by extending the definition of smaller banks to include start-ups and a new cadre of specialized, digitally empowered finance providers, potentially spanning a number of economies, and not just within close geographic proximity to the larger banks.

Policymakers might therefore explore two simultaneous interventions:

- Incentivize data sharing and other forms of collaboration between larger and smaller finance providers, to help build up the pipeline, and bring about proof of concept. While Chiarella and others (2021) emphasize that it is in the self-interest of both larger and smaller banks to cooperate with one another, in fact there is often inertia in an effort such as this. Policymakers may have to sweeten the initial terms of data sharing in the form of ('payment by performance') short-term tax breaks or subsidies to foster cooperation. These incentives should be for the first two years or less, in order to get the process started, at which point commercial viability should drive the process forward, without the need for public subsidy.
- At the same time, encourage MSMEs to reach out to smaller banks, as these are the ones responsible for the 'last mile' to the client. Dealing with smaller banks may also be less intimidating for MSMEs. And explore the potential to catalyze programmes that would assist smaller banks and other finance providers – including fintech ventures – to develop their MSME-oriented capacities.

2.2. Increased use of (and shared learning from) regulatory sandboxes

The issue: As we have intimated earlier in this book, forays into fintech entail a number of challenges and risks that regulators and legislators need to carefully consider. White it might be tempting for state agencies to try and ignore the digitally-empowered revolution in MSME finance that appears to be on the fairly immediate horizon, the promise that some of it contains, notably in unlocking some of the biggest shackles to improved MSME finance provision, means such an approach would come at considerable economic cost. But with the kernel of fintech being data, as opposed to money, it will potentially demand a radical change in the regulatory framework around financial sector endeavour in the private sector. Even in advanced industrialized countries, regulatory authorities, law-makers and their expert advisors are all struggling to keep up with the pace at which fintech is burgeoning, from crypto-currencies to non-fungible tokens (NFTs). So how might a developing or less developed country seek to also stay abreast of these advances, and introduce legislation and regulations that will ensure safe provision and consumption of new financial products and services that hold the promise of bringing about greater and more inclusive sources of funding for MSMEs?

The solution: A number of industrialized and advanced economies have sought to use regulatory sandboxes as a means to trial new financial products, services, and their providers within a 'live', but controlled, market context, from which useful lessons can be learnt by all stakeholders.

Unforeseen difficulties and challenges can be identified, and hopefully addressed, before scaling up, and regulators can get a sense of where and how best to introduce the necessary guard rails. In the case of most sandboxes, a relevant state agency will invite applications from firms that have innovative new products or services that they wish to test in a 'live' but secure environment, with real customers, at a modest scale and with oversight. Both the private sector participant and regulator then use this experience to rigorously test and fine-tune their respective roles, as well as the product or service itself. Once concluded, the participant exits the sandbox, with authorization to roll out the offering at scale. Some examples of the use of sandboxes in the financial sector include those operated by the United Kingdom's Financial Conduct Authority (FCA),[88] and the Monetary Authority of Singapore.[89] Other examples are also found in Australia; Brunei; China; Hong Kong, China; Indonesia; Kazakhstan; Malaysia; and Thailand, among others.[90] In June 2020, it was announced that Viet Nam was preparing to have a fintech regulatory sandbox.[91]

88. See: https://www.fca.org.uk/firms/innovation/regulatory-sandbox-prepare-application.
89. See: https://www.mas.gov.sg/development/fintech/sandbox.
90. See: https://www.cgap.org/regulatory-sandbox/interactive-map.
91. See: https://www.lexology.com/library/detail.aspx?g=d7059851-c151-45c6-942b-17b80ec05b89.

However, the extent to which some less developed and developing countries can pursue their own sandbox exercises to test out new financial product and service offerings could be limited. In this context, there is the potential for shared learning and collaboration from sandbox testing, even if the regulatory environments will differ from country to country, potentially necessitating different regulatory responses. Nonetheless, the insights learnt in testing an innovative new product or service offering in one sandbox will have value in other country contexts, and could accelerate the permitted rolling out of an MSME finance offering across a wider geographic area, compared with a more incremental process of country-by-country approvals.

2.3. Expanding supply chain and trade finance

The issue: For MSMEs in less developed and developing countries in particular, a major constraint to growth is posed by insufficient access to supply chain or trade finance. Penetrating overseas markets can offer some of the most lucrative areas for expansion, given the modest spending power of many domestic markets, but without trade finance in place, this is hard to attain. On an aggregate scale, the inability of MSMEs to export then limits the ability for less developed and developing economies to generate foreign exchange earnings across a diversity of sectors, making them dependent on just a handful of sectors, and therefore more exposed to exogenous shocks. The paucity of supply chain finance available for MSMEs outside of the more advanced economies has actually worsened in recent years, as regulations intended to thwart money-laundering and financing terrorism have resulted in a trend among international banks to scale back their networks of correspondent banking relationships (Barajas and others, 2020). Multilateral development banks and others have sought to fill this gap with various initiatives, typically on a country-by-country basis, but these tend not to address adequately the systemic issue (ADB, 2020). Indeed, this issue has been exacerbated further by the pandemic, as the risks being posed to trade and supply chains has increased the costs of trade finance, and lessened the appetite of financiers to provide this service to all but their core clients. According to some reports, this most recent trend has become so pronounced that it is impacting adversely on the balance of payments for some less developed countries, depleting their foreign exchange reserves, and even adding to liquidity issues within the domestic banking sector (IFC, 2020; OECD 2021). Also see Auboin and Meier-Ewert (2003).

The solution: We envisage that advances in 'fintech' and e-commerce could pose a more holistic solution, as digital platforms are developed that not only reduce the transaction costs of undertaking trade finance agreements, but also the risks to financiers of underwriting cross-border trade deals, as a consequence of the greater visibility provided by digitalization. As both the transaction costs and risks are reduced for trade financiers, the greater should be the number of MSMEs in less developed and developing countries that can access supply chain and trade finance services, at viable cost levels. One example of this is airwallex.com, launched in 2015, which now has ten offices around the globe.[92] It uses proprietary cross-border payment technology to provide a global payments system for small businesses, in a range of currencies, with no fees, and a forex margin that is no more than one per cent above the current interbank rate.

Policymakers might also consider several other alternatives. According to the ICC (2020), some necessary steps for supporting trade credit would comprise:

- Delay full implementation of some aspects of Basel III that serve to constrain trade finance, particularly for exporters in less developed and developing countries, so as to ease capital constraints.
- Temporarily expand the mandate and funding of credit export agencies to ease liquidity concerns, and potentially provide greater coverage in cases where the increased demands posed by regulatory advances, such as Basel III, that are resulting in a reduction of trade finance for exporters in less developed and developing countries.
- Continue training of banks to underpin support of companies involved in international trade and supply chains.

2.4. Credit scoring in the digital age

The issue: Conventional forms of risk analysis and credit scoring do not lend themselves well to MSME finance, for a number of reasons. These include the cost of providing robust credit scores, and doing so in a way that is commercially viable enough to be sustainable over time. While credit scores and other ratings for large corporates and their debt, including bonds and other debt paper, has been made to work, replicating this at a much smaller scale for MSME debt has proven to be much harder. The traditional way of creating a credit rating requires analysis of multiple years of audited financial reports and other historical financial data that many MSMEs simply do not have (Kung'u, 2015). As a result, MSMEs find themselves at a disadvantage when it comes to accessing finance, as the cost of conducting case-by-case credit analyses becomes prohibitive, and MSMEs are once again at the back of the line for funding, and/or expected to incur higher costs to access finance.

The solution: Digitalization, big data, AI, and other technological advances are creating an opportunity to develop new forms of (unconventional) credit scoring, based on alternative data already being captured, that can be used to provide robust risk analyses in support of MSME finance. By using non-traditional information sources, such as daily payment and deposit transactions, data gleaned from

92. For details, visit: https://www.airwallex.com/.

mobile operators and utilities firms, transactions with larger-scale buyers, etc., innovative credit scoring algorithms have the potential to accurately forecast the financial well-being and overall credit risk (including probability of default) of MSMEs that would have previously been viewed as un-scorable.[93] This potential unlock for MSME finance is exciting, and Singapore-based CredoLab is leading the way in this field, using behaviour meta-data derived from smartphones and Internet use to generate credit scores for entrepreneurs and small businesses in Singapore and Indonesia.[94]

There are two recommendations for policymakers:

- *Education and training,* first for policymakers, and then for MSMEs. While it is not necessary for policymakers to be experts in big data, AI, and algorithms, it behoves them to learn the basics and their applications to bridge effectively the sources of these technologies and the users and beneficiaries, e.g. the MSMEs.
- *Dissemination of best practices.* The private sector is ever the source of frontier technology. Policymakers should expose the financial institutions in their own nations, e.g. MSME development banks, to the example of CredoLab to foster quicker and more efficient construction of credit scoring.

2.5. Harnessing sector-specific financing expertise

The issue: For some specialist areas of MSME business, there is a need for more focused finance provision and expertise than can be provided by generic corporate banks and other funders. According to Banking Circle (2021), almost half of MSMEs surveyed across Europe have searched beyond their current bank for banking solutions that better suit their needs, yet nearly 90 per cent report being satisfied with the core account services their bank offers. From the perspective of the banks, 50 per cent report that moving to digital services is a major challenge, yet nearly two-thirds insist that they are keeping pace with technological change even as MSMEs seek alternative providers, i.e. fintech, for faster and cheaper solutions.

The solution: As online banking and other financial services shift away from bricks-and-mortar networks that are bound by their geographic footprint, this allows for new kinds of niche financiers that are able to develop expertise in more specific business fields, and where the necessary portfolio diversity comes from a national, regional, or even global spread of clients. For example, there are banks that cater exclusively to 'next generation' tech, innovation, healthcare, and life science firms,

93. Also see Vidal and Barbon (2019).
94. Visit: https://www.credolab.com.

such as Silicon Valley Bank and Brex.[95] Asia-based equivalents of these kinds of banks, fund managers, and other financial service providers will no doubt evolve in the years ahead.

Financial institutions should reduce interests and provide technical assistance to their MSME clients, so that they can enhance their financial literacy and re-organize their finances (through refinancing and restructuring, for instance). They also must provide diversified credit services for MSMEs with reasonable costs and reachable networks. The government's financial support to concessional loans is crucial in this regard. In order to reach out to a large size of MSME clients, both the governments and financial institutions must develop adequately communication channels to reach out to them. In this regard, media, non-governmental organizations (NGOs), and business associations, such as chambers of commerce, federations of industries, and trade unions, must be fostered to play an important role in disseminating information on the measures taken in order to keep the business community informed (ABD, 2020a, OECD 2020).

2.6. Leveraging ESG's impact on MSME financing

The issue: MSMEs have yet to adopt most environmental, social, and governance (ESG) principles and policies, in their operations in general, and in their financial strategies in particular, due to a lack of information and resources. Making up a majority of businesses in the region, MSMEs exert considerable impact on the environment and society. Assisting MSMEs to practice ESG principles could strengthen their risk mitigation and long-term viability, while allowing them to contribute to environmental sustainability and social resilience.

In the post-COVID-19 era, MSMEs will be expected to increasingly practice ESG and possibly to implement ESG disclosure, since more investors such as asset managers will pay attention to long-term sustainability, inclusiveness, and to a firm's capacity for risk management. Large firms within supply chains that practice ESG principles are also likely to demand that MSME suppliers incorporate ESG principles. MSMEs may adapt their performance and increase their understanding of ESG to meet investors' requirements for lower risk and sustainable performance. As more governments are developing standards to identify 'green companies' and establish ESG rating systems, it is expected that MSMEs performing better on ESG and with higher green scores would be at an advantage in obtaining financing.

In certain countries, digital systems for ESG data and ratings dedicated to MSMEs have enabled investors to incorporate ESG principles into their investment decisions. This trend is likely to allow easier access to finance for MSMEs that

95. See: https://www.svb.com; and https://www.brex.com/about.

have incorporated ESG into their operations. Investors are more likely to be diversified in their assessments of firms beyond mostly financial performance – a traditional disadvantage of MSMEs – to increasingly include broader factors shaping corporate reputations, such as resilience, risk management, and carbon emissions. Incorporation of ESG into the operations of MSMEs will continue to be a challenge, particularly in comparison to big firms, given the costs and managerial skill required.

The solution: Considering the difficulties that MSMEs may face in the initial stages of implementing ESG initiatives, as well as in sustaining the momentum of ESG, solutions must cover both the knowledge and financing required. Initial steps would involve raising MSMEs' awareness of the value of ESG with effective narratives and examples, and a recognition by public regulators of the potentially significant contribution of MSMEs to ESG. Sector-tailored guidelines or toolkits and effective funding programmes need to be implemented to address the lack of knowledge and limited financial resources of MSMEs.

Government-backed consulting services and cooperative partnerships could greatly enhance the capacity of MSMEs. Simple and practical ESG reporting procedures would also facilitate MSMEs' participation in the ESG process while assisting in investors' decision-making. Governments could also use ESG ratings or ESG credentials anchored in technology-based data systems to identify MSMEs performing well with respect to ESG metrics. Lastly, ESG performance could be strengthened through continued education, training, and effective communication.

2.7. Financing women-led MSMEs

The issue: There is a growing amount of data and analysis on how women, and women-led MSMEs, have been disproportionately impacted by the economic consequences of COVID-19. The reasons for this, and the points of transmission, are varied, but include the fact that some of the sectors most severely impacted by measures introduced to limit the pandemic have tended to be ones where: (i) women make up the largest proportion of employees (e.g. garments and hospitality); and/or (ii) a substantial proportion of the companies in these sectors are women-led (e.g. tourism and hospitality, retail, and services).[96] With specific regard to access to finance, women-led MSMEs in numerous countries have traditionally found it more difficult to find funding from banks, MFIs and other

96. Other reasons include (but are not limited to) the fact that: (i) women-led companies are more likely to be informal, and so are often not on the 'radar' of policymakers, and/or ineligible to apply for government assistance; (ii) women-led firms tends to have less access to collateral to provide as security; and (iii) women are often limited their access to finance due to national culture and social norms such as their roles in families and households.

sources of credit, again for a range of socio-economic and even cultural reasons. Thus, when governments have instituted liquidity injections and other emergency stimulus measures to support MSMEs during the COVID-19 crisis, principally working through the established banking and financial services actors, women-led firms encounter the same degree of exclusion. If women-led MSMEs are relatively 'under-banked' during more normal times, then – unless emergency stimulus measures are deliberately geared in some way towards women-led businesses – they will inevitably encounter the same problems during times of economic stress.

One mitigating factor to note here is that, directly because of this greater difficulty in accessing finance, many women-led MSMEs are actually much more resilient during times of economic and financial dislocation, and are better able to rely on their own resources, innovation, and business acumen to ride out crises. There is also some evidence to suggest that women entrepreneurs tend to have a lower level of risk appetite than their male peers, and therefore are less exposed to economic shocks when they occur (Brindley, 2005). If less access to finance means that women-led MSMEs are more dependent on cash flows to survive, then the economic lockdowns of 2020-21 will arguably have been more devastating, as their ability to 'ride out' a crisis is lower.

The solutions: We envisage that a number of the innovations relating to access to finance for women-led MSMEs, and that were being developed prior to the pandemic, have the potential to address this issue, at least in part, in the coming years. As energies around emergency stimulus and liquidity measures are gradually scaled back, it will be important that resources are redirected back towards addressing the hurdles that have constrained the ability of women-led MSMEs to access finance. For the providers of finance, the large cohorts of under-banked women-led businesses should offer a commercially attractive proposition. Advances in big data and the ability of financiers to provide products and services that are based more on cash flow analyses of clients, should start to redress the long-held gender imbalance in MSME finance. It will be important that the disruption and distraction of the pandemic does not derail these development trends.

Policymakers might consider:

- Tying budget resources to milestones in funding female-owned MSMEs, i.e. gender-based budgeting.
- Increasing pools of capital available only to women-owned businesses.
- Expanding the financial literacy training of female MSME owners, so that they are better able to access existing financial offerings, from established and new providers alike.
- Other measures not directly related to finance, but which would eradicate barriers to female labour force participation, such as improved provision of healthcare and education.

2.8. Stimulating demand as well as supply

The issue: Much of this chapter, and indeed this book, has focused on the supply side of the MSME finance issue, as this has traditionally been where the principal limitations tend to exist; demand (for MSME finance) almost always exceed supply. But just as traditional approaches to improving MSMEs' access to finance recognized the need to also conduct demand-side interventions, principally in order to better position MSMEs to access finite financing, the same is true of some of the newer approaches that are being driven by advances in fintech. As much as innovations in digitalization hold the promise of revolutionising the provision of MSME finance, they cannot also be expected to automatically galvanise the demand side of this relationship. MSMEs cannot be 'switched on' to the potential of fintech purely by osmosis; rather, they need to be educated on what the potential benefits are, and guided on how best to avail themselves of these new offerings.

The solution: We can see considerable potential for relevant state agencies and other facilities focused on MSME development to conduct interventions that can guide businesses on the benefits to be derived from advances in fintech and digitalization-driven financial products and service offerings. Working with MSME finance providers, both well-established and new, there will be a continuing need to provide guidance to firms that can be trusted. This in turn necessitates keeping up-to-date with advances in the MSME finance space, and generating knowledge products and other tools that firms can readily digest and act upon.

2.9. Multi-stakeholder collaboration to bridge gaps and bring mutual benefits

The issue: MSMEs face difficulties in accessing finance from commercial banks and other financial institutions, because they are unable to meet the requirements of these institutions. Loans to MSMEs are considered relatively higher risk by financial institutions, and thus they typically require higher interest on loans as well as collateral. However, by their very nature, MSMEs are limited in terms of what they can offer as collateral. In most cases is that the transaction does not proceed and MSMEs miss out on an opportunity to grow their businesses, banks lose potential clients, and governments do not witness as much job creation and economic growth as they would if this gap could be addressed.

The solution: The addition of one or more third parties – namely business associations, such as chambers of commerce, and/or government – into this scenario could help bridge the gap between MSME and financial institution, incentivizing the institutions to lend to MSMEs, and making it less risky to do so, while also better equipping the MSMEs to apply for loans. One venue for collaboration is in information sharing. A chamber of commerce could facilitate information sharing by, for example, developing a single portal online, thus streamlining the process for

MSMEs. Reducing the information asymmetry between bank and MSME reduces the perceived risk involved in a transaction between the two. Another valuable role for chambers of commerce is in training, for example, training MSMEs in financial literacy. This can help reduce the rate of NPLs from MSMEs, which not only boosts the MSMEs who have received loans, but it could also help foster a change in the mindset of financial institutions regarding MSMEs, as MSMEs prove to be less and less risky to do business with. Chambers of commerce are also able to better educate MSMEs about financial institutions and their needs, and vice versa, as well as serving as intermediaries between the two. It is therefore helpful for governments to encourage MSMEs to form business associations, and to provide ongoing support to these associations after they are formed.

2.10. A regulatory framework for fintech

The issue: As discussed earlier in the chapter (issue 2.1), fintech holds tremendous potential for MSMEs in getting beyond traditional constraints on accessing finance. However, due to the fact that fintech is new, rapidly evolving, and quite unfamiliar to policymakers, there are is also potential risk in this area, and policymakers must be careful to strike the right balance in how it is regulated.

Fintech being so new and evolving so quickly means that it is quite unlikely that very many policymakers would have an in-depth understanding of this area. This, in turn, makes it challenging to properly regulate. Furthermore, many of the financial products on offer are quite complex and difficult to understand. There is a very real risk in allowing a completely free flow of fintech products and services, especially since many of the providers may not have the necessary capital on hand to cover risk. But the great potential of fintech for MSMEs, as well as its utility for regular people during the pandemic, and for rural people who ordinarily may have great difficulty in physically accessing a financial institution, never mind getting a loan, means that policymakers should not regulate it too tightly and risk eliminating these benefits and stifling innovation.

The solution: Policymakers can adopt a range of approaches, with respect to regulating fintech, namely:

i. Case by case forbearance: Regulators allow new fintech products and services to be launched in the market on a case-by-case basis.
ii. Incremental change: Regulations are adopted in a gradualist manner, as fintech applications evolve.
iii. Structured experimental approach: Fintech products and services are tested through specified controls, and are carefully observed.
iv. Single window: Fintech products and services are allowed to be introduced into the market under a simplified framework.

v. Hands off: Fintech products and services are allowed to go to market under regulatory supervision, and intervention may come later.

It is recommended that policymakers consult with a variety of experts to inform their decisions on how to regulate fintech. Entrepreneurs in the fintech industry itself will have the greatest expertise, but will likely be inclined to recommend a very lax approach. Traditional financial sector experts will have deep knowledge of the types of blind-spots of fintech firms and potential systemic risks, but may recommend very tight control over the sector. In this case, certain international organizations and development agencies with relevant expertise could have valuable and more neutral contributions on the issue.

3. Concluding remarks

There are perhaps two main takeaways we wish to emphasize, as we end this chapter and before concluding the book. The first is that the suggestions provided here are subject to local knowledge, and need to be tailored to be congruent with the specificities of particular economic contexts. We have proffered what we think will be useful from our study and experience with MSME finance in the Asia-Pacific region, but this region has always been highly diverse, and in the aftermath of the COVID-19 pandemic it may become even more so. Given the constantly changing landscape, we would strongly urge policymakers to adapt our recommendations to their own country contexts, as they know it far better than we do. Those adaptations will not only increase the likelihood of success, and hopefully bring about the desired impact, but also be part of the learning and adaptation process itself that we are all now experiencing. Embracing innovation, being adaptive, and exploring new avenues are some of the core attributes that lie behind the advances we are now seeing in MSME finance. They are a function not only of private sector endeavour, but also the valuable inputs of regulators, legislators, advisors, and other stakeholders. Fintech offers the potential of diversifying and 'democratizing' MSME financing, where the most potent advances need not originate from advanced economies, to then trickle down to developing countries at a later date. As we saw with M-Pesa a decade or more ago, some of the most successful game changers can emanate from developing countries.

The second main takeaway is that international organizations, such as ESCAP, need to be willing to change and adapt, in the same spirit that they recommend banks, other financial institutions, and MSMEs to do. This will require the management of these organizations to invest time and money to train and equip their staff to be effective in what looks to be a brave new digital world. It will also necessitate a change in mindset, so that people will learn to 'think digitally' when it comes to MSME finance. While it is natural to reach for traditional responses to the challenges MSMEs face regarding access to finance, now policymakers should be thinking in terms of digitalization, fintech, and the bundling of financial services as a first resort, not a last one, or as some kind of discretionary 'add on'. The road to adopting such a mentality will not be easy, but it promises to be rewarding, unlocking the full potential of MSMEs across the Asia-Pacific region, as we start a new chapter, and begin to focus on the post-pandemic economic recovery trajectory.

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CHAPTER VII

In Conclusion: Lessons Learned

Masato Abe, Nick Freeman, and Mike Troilo[97]

"The Covid-19 pandemic has led to a devastating global health and economic crisis. Governments and central banks have rightly responded with unprecedented financial measures and stimulus packages to bridge economies through to a recovery. Under these challenging circumstances we should not lose sight of the fact that climate change and environmental issues remain as urgent and vital as ever. The systemic risk posed by climate change to our economies and the financial system has not reduced. Indeed the pandemic has reinforced this point. The sweeping disruption to our daily lives and huge swathes of our economies from lockdown measures is a real-life stress test of what we could potentially experience in an increasingly unstable climate or disorderly transition shock."

Network for Greening the Financial System (2020).[98]

97. Authors are listed in alphabetical order.
98. 'Statement on the need for a green recovery out of the COVID-19 crisis', 8 June 2020. See: https://www.ngfs.net/sites/default/files/medias/documents/green_recovery_statement_-_june_2020.pdf.

'Never let a crisis go to waste'; so the saying goes. We can learn much from any extreme event, such as the pandemic of 2020-21, which serves as a stress test for many of our assumptions and ways of working. This is certainly not to suggest that the COVID-19 crisis was beneficial, but if useful lessons cannot be derived from the experience, then it misses an opportunity to be better prepared for the next crisis event. Public health experts caution that this will not be the last pandemic, and that societies need to be better prepared.[99]

This book has sought to shed some light on what might be some of the principal lessons in the field of MSME finance, and with particular reference to Asia and the Pacific. It is the authors' hope that the observations and analyses provided here will be useful to policymakers and other decision-makers that oversee activities pertaining to MSME finance, and that some inspiration can be drawn from the pages that have preceded this concluding chapter. The issue of how to improve MSMEs' access to finance in Asia and the Pacific may appear to be just one small part of the economic puzzle that confronts us all, as we try to revive the global economy. While true, a sizable part of the economic recovery process that confronts the region will be determined by the ability of the MSME sector to return to robust growth, which in turn necessitates having access to sufficient and appropriate sources of capital. Put another way, a macro-economic recovery in Asia and the Pacific that does not include MSME sector growth will be not only hard to achieve, but also point to a non-inclusive and potentially fragile recovery. While the MSME sector and the mainstream financial sector often seem like two rather detached parts of most countries' economies – and explains in part why MSMEs often struggle to access finance, because of that relative detachment – the signs, even before the pandemic, were that fintech and other innovations were poised to stimulate a greater degree of convergence between the two. As the economies of Asia and the Pacific seek to rebound in 2021 and beyond, such a convergence (i.e. one that brings about improved access to finance for MSMEs) will be a key determinant of attaining this goal.

One impact of the pandemic has been to alter a range of business practices, including consumer behaviour, if only in terms of serving to accelerate existing trends in play. For example, COVID-19 really put the wind under the wings of burgeoning e-commerce activity. According to recent analysis by McKinsey (2021), global e-commerce sales grew six-fold between 2010 and 2019, from US$ 572 billion to US$ 3.5 trillion, and then really took off in 2020. In the United States, "ten years' worth of growth [in e-commerce] took place within three months when the pandemic broke out" (ibid., p. 2). Similar rates of exponential growth took place in other economies, triggering change in warehousing, logistics and last-mile delivery, as well as revving up experimentation in electric vehicle (EV) transportation, dynamic delivery, converting shopping malls to storage hubs, and

99. See: https://www.axios.com/who-chief-covid-19-wont-be-last-pandemic-68d2a328-c4a0-4dac-87ed-9d0b950ea1c9.html.

so on. But growing e-commerce activity has also driven a sharp increase in the need for e-payments, and this may be one of the legacy effects of the pandemic on MSME finance, for a number of reasons. First, if MSMEs adjust to smoother (B2C) e-commerce and (B2B) payment systems, then they are laying down the kind of financial infrastructure that will allow them to pursue other forms of digitally-driven financial transactions. And the data generated can be harnessed in order to avail themselves of innovative new fintech product and service offerings. Secondly, the incomes being generated by the e-commerce trend is prompting some of the largest players and platforms in this field to start providing financial products and services to their suppliers. Amazon's forays into fintech in India is just one example.[100] Alibaba (Ant), Apple, Google, Shopify, and others are pursuing similar strategies, including within the Asia-Pacific region. Singapore-based Sea and Grab are just two examples of Asian-based firms that have steadily moved into, and injected significant capital into developing, the fintech space.[101]

For policymakers and regulators, this fintech-driven trend nonetheless poses a formidable challenge, and is not without downside socio-economic and financial risks. One the one hand, there is the need to guard against systemic perils, while on the other hand not limiting the type of financial innovation that could liberate MSMEs from the kinds of funding constraints that have dogged them in the past. Not only do the means and delivery systems of MSME finance seem destined to change, but so too do the actors, as new providers – whether extremely large or very small – enter this space. If financial regulation was once about policing money flows, it now seems likely that it will increasingly revolve around digital information, which poses new challenges around protection and security. Some of the solutions will almost certainly originate from innovations underway in regulation and its implementation, sometimes referred to as 'regtech'. We will also probably see financial sector regulators and other state agencies permit the wider use of sandboxes that will allow controlled experiments to be run on various new financial service offerings, ahead of any wider roll-out and the need for systemic regulatory oversight.

Banks and other traditional providers of financing for MSMEs are confronted with a host of new competitors and start-up ventures seeking to introduce fintech products and services, potentially cheaper and more accessible than what has been

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100. See Reuters, 'Amazon's new offerings make India centre of fintech push'. 1 September 2020. Available at https://www.reuters.com/article/us-amazon-com-india-payments/amazons-new-offerings-make-india-centre-of-fintech-push-idUSKBN25T0JL.
101. Founded in 2009 as an online gaming company, Sea Ltd. is listed on the NYSE, and operates a digital financial services component, including SeaMoney. As of early May 2021, Sea had almost 34 000 employees, and a market capitalization in excess of US$ 78 billion. Grab was established in 2012 as a ride hailing business, but has since expanded into e-commerce and delivery, as well as digital payments. It operates in eight countries and over 400 cities, mostly in Asia. As of April 2021, Grab was also planning to list in the United States through a merger with a special purpose acquisition company, at an estimated valuation of around US$ 35 billion.

available until now, and fill various gaps in the market, including in developing countries. Some exponents see fintech as holding the key that will unlock a range of new funding opportunities for the global MSME community. But banks and other established finance providers are unlikely to simply withdraw from the business of providing finance to the MSME. Rather they will seek to respond with their own alternative products and services, whether through partnerships, acquisitions, strategic investments, or other ways of riding the fintech wave. Regardless, it looks as if MSMEs will be the beneficiaries of increased attention by financial providers, and that has got to be a good thing, we would posit.

For development finance institutions (DFIs) and other development partners working to improve MSMEs' access to finance in Asia and the Pacific, some of the key points of intervention are about to change. The focus of attention will shift away from conventional methods to improve the flow of information and uncertainty between traditional finance providers and MSMEs, so as to reduce the latter's perceptions of risk – such as the use of credit scoring and guarantee schemes – and more towards the development of conducive ecosystems that can catalyze and foster new financial service products and offerings. And the private sector partners in this endeavour will extend to include a more diverse range of companies that have interactions with MSMEs. The challenge of getting financing to MSMEs will certainly not disappear, but the optimal means of addressing that challenge will widen in scope, congruent with the myriad advances underway in fintech. We think some of the most exciting areas for interventions in MSME finance will actually be at intersections between what have been, until now, broadly separate silos of MSME development. For example, in the case of some less developed and developing countries, the interaction between remittance services, P2P lending and MSME working capital funding. Digitally-driven advances in fintech, and the data being created, will allow for new synergies to be unlocked that can help underwrite MSME development.

Conversely, some of the fintech offerings around trade finance, cross-border payments, and foreign exchange conversion have the potential to make it far easier for MSMEs to export relatively small quantities directly to overseas markets, rather than through intermediaries that will only work at scale. But the potential for synergistic cross-overs are not limited to within the financing 'tent' alone, as AI and cloud-based innovations around business analytics and a range of other value-added services for MSMEs could also contribute to ways of addressing some of the most challenging problems that MSME finance has had to contend with, whether around perceived risks, costs, lack of collateral, or a track record of managing debt. The precise areas of synergistic cross-over, and the interventions available, will vary depending on the kind of MSME, and in particular, its primary focus of business. For example, an MSME involved in B2C retail commerce will probably see new financial service and product offerings that are derived not only from advances in fintech, but also 'retail-tech'. And the latter will span a range of sub-activities, such as in-store solutions, e-commerce and online payments, storage, and logistics (fulfilment), and even delivery services. And all of these – including financial offerings – will be further bolstered by new service offerings around data and cyber-security, and protecting digital assets.

To give a few specific examples, the data generated by customer loyalty and reward programmes, as well as 'buy now, pay later' services (such as Paidy in Japan[102] and Klarna in Sweden[103]), could be used to predict retail MSMEs' cash flows, from which financial services could be offered, and even underwritten (a variant of supply chain finance). Similarly, some of the tech-driven advances in supply chain visibility, on-demand warehousing, micro-fulfilment, and other ways to make inventory and logistics more efficient, will also deliver data that can support the provision of financing. And this excludes start-up MSME ventures that will actually provide these tech-driven new and more specialized service offerings to other MSMEs, and be able to access venture capital funding to do so. Funding in retail-tech ventures by investors has been running high since 2019, in lock-step with e-commerce growth during the pandemic, resulting in some of the first 'unicorns' (i.e. companies with valuations in excess of US$ 1 billion) being created in the retail-tech sector.[104] But these advances will not be confined to MSMEs in the retail sector alone, as similarly tech-driven innovations in other fields of business services will create alternative opportunities to create new financial product and service offerings for MSMEs, from tourism and hospitality to handicrafts and small-scale manufacturing.

As the earlier chapters elucidate, the COVID-19 pandemic and our recovery from its economic impact provides an opportunity, should we seek to grasp it, to re-think established patterns of doing business, including MSME sector development and MSME finance. The innovations and tools with which to do this largely pre-date the pandemic, and did not evaporate during the pandemic. What has (hopefully) changed is our increased willingness to put these new tools to good use, and unlock the benefits they can potentially offer. After the buffeting received from the global pandemic, it is inevitable that risk appetites in the private sector, financial, and public sectors alike have diminished. A recent survey of corporate boardrooms noted that the proportion placing a priority around innovation and growth had lessened from 77 per cent in 2019 to 70 per cent in 2021 (i.e. a drop of 7 per cent), while the proportion citing corporate resilience as a boardroom

102. For details, see: https://paidy.com/docs/en/.
103. Visit: https://www.klarna.com/international/.
104. According to CB Insights, global investor funding of retail-tech business in the first quarter of 2021 (US$ 28.9 billion spanning over 520 deals) was more three times greater than a year earlier (US$ 9.3 billion spanning 490 deals, and just US$ 7.5 billion in the last quarter of 2019). See CB Insights 'Retail Tech Report, Q1 2021'. Available at https://www.cbinsights.com/research/report/retail-tech-trends-q1-2021/. Over a third of those deals were in Asia and the Pacific (35% in the first quarter of 2021, and 38% in the first quarter of 2020), ahead of Europe and broadly on a par with North America.

priority had grown from 44 per cent to 60 per cent (i.e. an increase of 16 per cent). One could therefore imagine that interest in taking even informed risks, let alone bold leaps in the dark, would be limited. But this broad, and almost certainly correct, assumption needs to be balanced with a growing recognition that some of the established norms prior to the pandemic – including in the field of MSME finance – were not sustainable, and came with risks. The pursuit of ESG principles, for example, will bring about greater levels of resilience and sustainability for actors on both the demand and supply sides of the MSME finance marketplace, as well as for regulators that oversee it.

Numerous MSMEs and others have taken calculated risks to pivot their business models, in a bid to survive the pandemic, and try to come out of it in better shape. This kind of approach is something that policymakers, development partners, and finance providers could and should learn from. It is more than just 'building back better'; it is 'building forward better'. An excellent example can be seen in Sri Lanka, where the impact of the pandemic prompted, after several decades of procrastination and delay, converting some of the country's in-person tea auctions into an online process. Initial results suggest that not only are these auctions proceeding successfully, despite an inability to conduct them as before, but that they are conducted faster, more cost effective, and generating higher prices. (IMF, 2021). While the pandemic served as a push factor that made this advance possible, it will continue long after COVID-19 has passed; the innovation is 'sticky' enough and successful enough to out-live the pandemic.

This could be one of the silver linings emanating from our experience during the pandemic, as the demands of the panic trigger greater flexibility, ingenuity, and innovation in the pursuit of new solutions. Policymakers around the world were, generally speaking, relatively slow to react to the public health challenge posed by COVID-19; they should not repeat the same mistake in reacting to the financial sector opportunities that will follow the pandemic. The next few years promise to be exciting ones for all those engaged in the field of MSME finance, whether in Asia and the Pacific, or beyond the region.

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