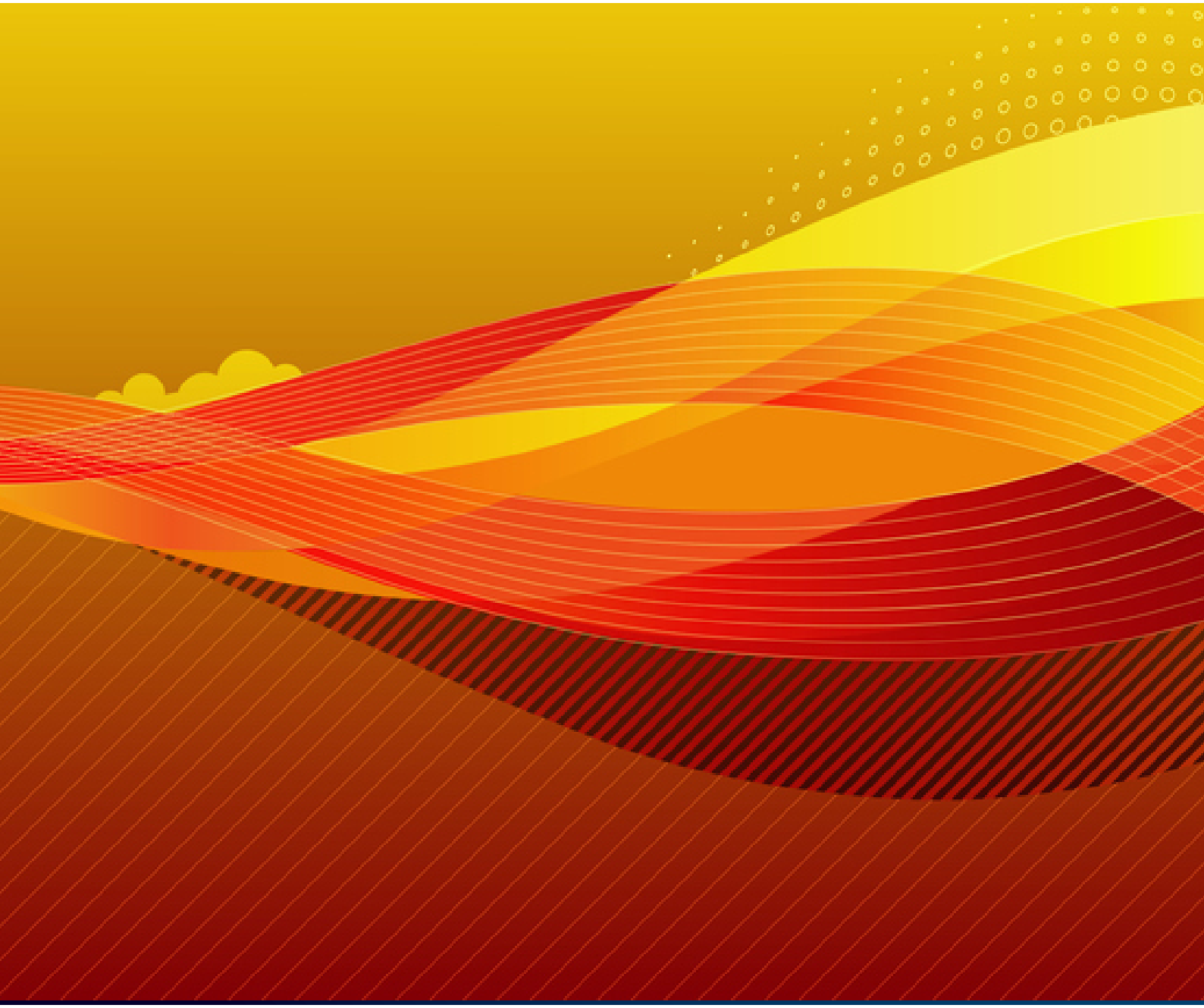
G20/OECD-INFE report on navigating the storm: MSMEs' financial and digital competencies in COVID-19 times



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GPFI Global Partnership for Financial Inclusion

G20/OECD-INFE Report
Navigating the Storm: MSMEs' Financial and Digital Competencies in COVID-19 Times

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Please cite this publication as:

OECD (2021), G20/OECD-INFE Report Navigating the Storm: MSMEs' financial and digital competencies in COVID-19 times, https://www.oecd.org/financial/education/navigating-the-storm-msmes-financial-anddigital-competencies-in-covid-19-times.htm

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Foreword

Micro, small and medium enterprises (MSMEs) make up the majority of enterprises in the world, providing employment and contributing significantly to national incomes. They can play an important role in sustainable, inclusive economic growth and development and improved financial stability, given appropriate conditions and timely support. Successful development and growth of MSMEs depends on supply- and demand-side factors, including adequate financial knowledge and skills.

MSMEs have been particularly hit by the COVID-19 crisis, with an uneven impact across businesses and sectors. Many businesses have adapted rapidly to the new circumstances and the crisis has stimulated innovation and changes in business management. In this context, financial literacy, financial inclusion and digitalisation could play a crucial role in the ability of companies to navigate the storm.

This report analyses the relationship between MSMEs' financial literacy, digitalisation and impact of the COVID-19 crisis. The report relies on a dedicated data collection exercise promoted by the G20 Italy Presidency 2021, using the OECD/INFE 2020 survey instrument to measure the financial literacy of MSMEs. Fourteen G20 and non-G20 members participated in the data collection on a voluntary basis, including the following G20 countries: Brazil, China, France, Germany, Italy, Mexico, Russia, Saudi Arabia, Turkey; and the following non-G20 countries: Georgia, the Netherlands, Peru, Portugal and Spain.

The OECD prepared this report in support of the agenda of the Global Partnership on Financial Inclusion (GPFI) and the Group of 20 (G20) under the G20 Italy Presidency 2021, as well as part of the work of the OECD/International Network on Financial Education (INFE). The OECD is one of the Implementing Partners of the GPFI. This report complements two additional OECD reports prepared for the GPFI in 2021: "G20/OECD Report on Lessons Learnt and Effective Approaches to Protect Consumers and Support Financial Inclusion in the Context of COVID-19" and "G20/OECD-INFE Report on Supporting Financial Resilience and Transformation through Digital Financial Literacy". This OECD report also complements the report prepared by the IFC-SMEFF for the GPFI on "MSME Digital Finance: Resilience and Innovation during COVID-19".

The report reflects inputs and guidance from GPFI member countries and members of the OECD/International Network on Financial Education. The OECD wishes to thank the G20 Italy Presidency 2021 and the fourteen countries that provided data for their support in making this report possible.

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Executive summary

MSMEs have been particularly hit by the COVID-19 crisis, with an uneven impact across businesses and sectors. Many businesses have adapted rapidly to the new circumstances and the crisis has stimulated innovation and changes in business management. In this context, financial literacy, financial inclusion and digitalisation could play a crucial role in the ability of companies to navigate the storm.

This report analyses the relationship between MSMEs' financial literacy, digitalisation and impact of the COVID-19 crisis. The report relies on a dedicated primary data collection exercise promoted by the G20 Italy Presidency 2021, using the OECD/INFE 2020 survey instrument to measure the financial literacy of MSMEs. Fourteen G20 and non-G20 members participated in the data collection on a voluntary basis, including the following G20 countries: Brazil, China, France, Germany, Italy, Mexico, Russia, Saudi Arabia and Turkey; and the following non-G20 countries: Georgia, the Netherlands, Peru, Portugal and Spain

Financial literacy, financial account holding and digitalisation of MSMEs

Chapter 2 describes the level of financial literacy, financial account holding and pre-pandemic digitalisation of MSMEs in participating countries:

- The financial literacy of MSME owners is relatively low in most participating countries. On average across G20 participating countries, only 27% of MSME owners with up to 9 people and 41% of MSME owners with 10-49 people showed high levels of financial literacy.
- Most MSMEs in participating countries hold a traditional account at a financial institution. On average across G20 countries, around one in four MSMEs have an account at an online financial institution that does not have physical branches.
- The digitalisation of many MSME was limited before the COVID-19 pandemic. On average across G20 countries, fewer than 50% of MSMEs with up to 9 people indicating that online payments from clients and to suppliers as a percentage of total payments was quite or very large. Relatively few businesses had a dedicated website to sell their products or services.

The impact of the COVID-19 pandemic on MSMEs

Chapter 3 describes the impact of the COVID-19 pandemic on MSMEs, including on economic-financial terms and on their digital activities:

- Many MSMEs in countries participating in the survey reported a negative impact on turnover and profits from the COVID-19 crisis, as well as lacking cash to pay for expected expenses of the business. On average across G20 countries, some 49% of MSME owners with up to 9 people and 42% of MSME owners with 10-49 people reported lacking cash during the crisis.
- Many MSMEs stepped up their digitalisation during the COVID-19 pandemic. On average across G20 countries, 49% of MSMEs with up to 9 people and 56% of MSMEs with 10-49 people increased at least one digital activity for their business.

- On average across G20 countries, MSMEs that reported lacking cash during the crisis were over 30% more likely to have increased their digital activities than MSMEs not reporting a lack of cash, suggesting that MSMEs heavily affected by the COVID-19 crisis may have had to increase their digitalisation to help overcome the shock.
- Many MSMEs were able to access loans and government support during the pandemic. Out of the MSMEs that applied for a loan, most of them obtained it. On average across G20 countries, 63% of MSMEs with up to 9 people and 67% of MSMEs with 10-49 people reported that they used at least one of the government measures put in place in their country to support the financial condition of MSMEs.

The tools to navigate the storm

Chapter 4 investigates whether factors such as financial literacy, holding formal accounts and digitalisation of MSMEs had a role in mitigating the negative impact of the COVID-19 crisis or facilitated the adoption of digital innovations.

- Financial literacy is associated with positive business outcomes in some participating countries. In Brazil, China, Italy, Mexico, Portugal and Spain, financially literate MSME owners were less likely than those with low financial literacy to suffer from a lack of cash during the COVID-19 crisis, after taking into account personal and business characteristics.

Moreover, on average across G20 countries and after taking into account personal and business characteristics:

- Financial literacy is associated with greater awareness of public support measures for MSMEs, and with a lesser need for government support. Financially literate MSME owners were more likely than less financially savvy ones to report that they had not used government support because it was not needed.
- Financial literacy is positively associated with access to credit. MSME owners with high levels of financial literacy have been almost twice as likely as respondents with low financial literacy to receive a positive response on their loan application.
- MSME owners with high pre-pandemic levels of digitalisation were more likely to report that they stepped up their overall digital activities during the crisis.

Financial literacy, digitalisation and COVID-19 impact across subgroups of MSMEs

The report also looks at financial literacy, digitalisation and COVID-19 impact across subgroups of MSMEs.

As summarised in Box 1 regarding gender differences, after taking into account other personal and business characteristics:

- In some countries, male MSME owners display greater financial literacy and greater use of formal financial accounts than female owners do. In no participating country, female MSME owners display higher financial literacy or are more likely to hold formal financial accounts than male owners are.
- Male-headed MSMEs were less likely than female-headed ones to report a negative impact and a lack of cash from the COVID-19 crisis, and were more likely to have increased their digital activities related to financial products and service, on average across G20 countries.

As summarised in Box 2 regarding business size, on average across G20 countries, and after taking into account other characteristics of the business and the owner:

- Owners of larger MSMEs have higher financial literacy than owners of smaller ones.
- Larger MSMEs are more likely than smaller ones to hold a traditional financial account and to engage in digital activities.
- Larger MSMEs were less likely than smaller ones to report a negative impact and a lack of cash from the crisis, and more likely to have stepped up their digitalisation during the pandemic.

As summarised in Box 3 regarding differences across sectors, on average across G20 countries, and after taking into account other characteristics of the business and the owner:

- Pre-pandemic digitalisation was higher in businesses working in accommodation, food and beverage services, and in information and communication sectors, compared to manufacturing.
- MSMEs operating in accommodation, food and beverage services, those providing other personal services, and in those in construction and real estate, were more likely to report a negative economic impact and/or a lack of cash during the COVID-19 crisis than MSMEs in manufacturing.
- Increases in sales-related digital activities during the COVID-19 pandemic have been more likely among MSMEs operating in wholesale and retail trade, in the accommodation, food and beverage industry, in personal services, and in information and communication, compared to MSMEs working in manufacturing.

1 Introduction

Background

Micro, small and medium enterprises (MSMEs) make up the majority of enterprises in the world, providing employment and contributing significantly to national incomes. They can play an important role in sustainable, inclusive economic growth and development and improved financial stability, given appropriate conditions and timely support. Successful development and growth of MSMEs depends on supply- and demand-side factors, including the possession of adequate financial knowledge and skills (G20/OECD, 2015[1]; OECD, 2017[2]).

MSMEs have been particularly hit by the COVID-19 crisis. The prolonged halt for many businesses created a drop in revenues and acute liquidity shortages, threatening the survival of many viable businesses (OECD, 2020[3]). However, the impact of the pandemic on economic activity has been very uneven. Some sector have been completely put on hold, while others are expanding. While governments in all countries are supporting micro and small businesses during the crisis, responses vary in terms of policy tools, coverage and intensity. Moreover, many businesses have adapted rapidly to the new circumstances and the crisis has stimulated innovation and changes in business management. In particular, the digitalisation of economic and financial activities is booming, as discussed in the forthcoming IFC-SMEFF report on “MSME Digital Finance: Resilience and Innovation during COVID-19”. In this context, financial literacy, financial inclusion and digitalisation could play a crucial role in the ability of companies to navigate the storm.

The importance of financial skills for MSMEs is recognised by the G20/OECD High-Level Principles on SME financing developed in 2015, which recall the need to "Enhance SME financial skills and strategic vision" in Principle 7 (G20/OECD, 2015[1]). Similarly, the G20 High level Policy Guidelines on Digital Financial Inclusion for Youth, Women and SMEs developed under the Saudi Arabia G20 Presidency in 2020 highlight the role of financial literacy in empowering SMEs (G20, 2020[4]). Also the OECD Recommendation on Financial Literacy and related OECD work remind the need to address the needs of MSMEs for greater financial knowledge and skills, and to collect evidence as a way to support effective policies and programmes for this target group (Atkinson, 2017[5]; OECD, 2020[6]).

Process

Since 2015, the OECD International Network on Financial Education (OECD//INFE), through its working group on Financial Education for MSMEs, developed a survey instrument to measure financial literacy among micro and small MSME owners. The questionnaire was developed building upon the OECD/INFE financial literacy core competency framework for MSMEs (OECD, 2018[7]) and previous similar surveys to measure the financial literacy of adults (OECD, 2020[8]). The questionnaire was discussed and refined through an iterative process during OECD/INFE meetings in 2017-2018. It was then piloted in 2018-2019 in seven volunteering countries (Brazil, Chile, Italy, Lebanon, Portugal, Russian Federation and South

Africa). The OECD/INFE Secretariat used the results of the pilot test to revise the questionnaire and analysis plan.

The questionnaire was further revised in 2020 to take into account the implications of the COVID-19 crisis on businesses and to facilitate its use under circumstances of limited physical contacts (e.g., in case of telephone or online interviews). The revised version was approved during the OECD/INFE meetings in October 2020 for its use in an international survey in 2021, to be conducted under Italy's G20 Presidency.

Aim and coverage

This report analyses MSMEs' financial literacy, digitalisation and impact of the COVID-19 crisis. The report relies on a dedicated primary data collection exercise, using the OECD/INFE 2020 survey instrument to measure the financial literacy of MSMEs (OECD, 2020[9]). Country participation in the data collection was voluntary and included the following G20 and non-G20 countries:

- G20 countries: Brazil, China, France, Germany, Italy, Mexico, Russia, Saudi Arabia, Turkey; and,
- non-G20 countries: Georgia, the Netherlands, Peru, Portugal, Spain.

The aim of the report is threefold. First, it identifies differences among MSMEs in financial literacy, financial account holding, and digitalisation across participating countries (Chapter 2). Second, it describes the impact of the pandemic on both MSMEs' financial conditions and their digital innovations (Chapter 3). Third, it discusses the relationship between financial literacy and digitalisation on the one hand and financial resilience to the COVID-19 shock and digital transformation on the other (Chapter 4).

Methodological information

In reading the report and interpreting its results, it is important to take into account a few methodological considerations:

- The report includes average results across G20 participating countries, and across all participating countries. These averages are computed as the arithmetic mean of the available country estimates in each table or figure.
- Data collection was conducted at country level. Annex A includes a description of the sample in each participating country in terms of the main characteristics of the business and the owner.
- Annex B provides information about the timing and method of data collection in participating countries. Overall, data collection took place between March and September 2021. Most countries conducted telephone or online interviews (or used mixed methods).

2 Mapping the financial literacy, financial account holding and digitalisation of MSMEs

Key messages

- The financial literacy of MSME owners is relatively low in most participating countries. On average across G20 participating countries, only 27% of MSME owners with up to 9 people and 41% of MSME owners with 10-49 people showed high levels of financial literacy.
- Male MSME owners display higher financial literacy than female owners in Brazil, China, Mexico, the Netherlands and Peru, after taking into account other characteristics of the business and the owner. There are no gender differences in financial literacy in the remaining participating countries, and in no country, financial literacy is higher for female owners than for male ones, after taking into account other characteristics of the business and the owner.
- More educated and more experienced MSME owners, as well as owners of larger MSMEs, tend to have higher financial literacy in many participating countries.
- Most MSMEs in participating countries hold a traditional account at a financial institution. On average across G20 countries, around one in four MSMEs have an account at an online financial institution that does not have physical branches.
- The digitalisation of many MSME was limited before the COVID-19 pandemic. On average across G20 countries, fewer than 50% of MSMEs with up to 9 people indicated that online payments from clients and to suppliers as a percentage of total payments was quite or very large. Relatively few businesses had a dedicated website to sell their products or services.
- Higher levels of pre-pandemic digitalisation were observed among MSME owners with higher levels of education, and in larger MSMEs. In several countries, digitalisation was higher in businesses working in accommodation, food and beverage services, and in information and communication sectors, compared to manufacturing.

This chapter describes the level of financial literacy, financial account holding and digitalisation of MSMEs in participating countries[1].

[1] Due to data limitations, Peru is included only in relevant sections of Chapter 2.

Financial literacy

As highlighted in the OECD report on “Financial Education for MSMEs and Potential Entrepreneurs” MSMEs need a wide range of general and specific business competencies, including financial management skills, the ability to effectively negotiate and operate within a business environment, the ability to manage a business and other people, and the sector specific skills that can help them to succeed in competitive and volatile environments (Atkinson, 2017[5]). The COVID-19 crisis has stressed the importance of financial skills to help MSMEs cope with uncertain and challenging times.

In this report, financial literacy is measured as a combination of financial knowledge, attitudes and behaviours, in line with the existing OECD/INFE definition of financial literacy for MSMEs and the scoring guide included in the questionnaire (OECD, 2018[7]; OECD, 2020[9]). In particular, the knowledge score is computed as the number of correct responses to five financial knowledge questions, asking respondents to indicate whether a series of statements are true or false. The financial behaviour score is computed as the count of nine "financially savvy" behaviours, and the attitudes score is computed as the count of three "financially savvy" attitudes. Both the financial behaviour and attitudes score are based on self-reported information. The overall score is based on the sum of three sub-scores, with each component contributing to the overall score on the basis on the number of questions. As the behaviour component is considered the most important one, it also contributes the most to the overall score.

Table 2.1 describes the components of the financial knowledge, behaviour and attitudes scores. The table displays the percentage of respondents who gave correct answers to financial knowledge questions and who displayed savvy financial behaviours and attitudes, distinguishing between businesses with up to 9 people and those with 10-49 people.

Table 2.2 summarises the information on the components of financial literacy, including average overall scores (out of 100) and the percentage of MSME owners with relatively high levels of financial literacy (meaning that they scored above 80 out of 100).

Financial knowledge

In terms of financial knowledge, Table 2.1 shows that most respondents understood well the concept of risk, with over 80% of respondents on average across G20 participating countries correctly indicating that the statement “If a financial investment offers the chance to make a lot of money it is likely that there is also a chance to lose a lot of money” is true. Most respondents also understood well the meaning of inflation (“High inflation means that the cost of living is increasing rapidly”). There is significant variation across countries in the extent to which MSME owners understand the meaning of dividends (by correctly identifying that the statement “Dividends are part of what a business pays to a bank to repay a loan” is false), and the relationship between interest payments and duration of a loan (“A 15-year loan typically requires higher monthly payments than a 30-year loan of the same amount, but the total interest paid over the life of the loan will be less”). Relatively fewer respondents (less than 60% of respondents on average across G20 countries) showed familiarity with the meaning of equity (“When a company obtains equity from an investor it gives the investor part of the ownership of the company”).

Financial behaviour

In terms of financial behaviour, Table 2.1 shows that over 90% of MSME owners on average across G20 participating countries reported keeping track of financial records in formal ways (in paper or electronic form, or thanks to an accountant) and that over 85% on average keep secure data and information about the business. Depending on the country and the size of the business, many owners keep their personal and business finances separate, and engage in positive behaviours to manage different sources of risk, as they indicated that they have already thought about how to fund their own retirement, and would engage

in savvy strategies to cope with theft of business equipment (such as using emergency funds or claiming insurance). Relatively high percentages of respondents also indicated that they compare the cost of different sources of finance for the business, plan beyond the short term by regularly forecasting the profitability of the business, and take into account the impact of external influences, by adjusting their planning according to changes in economic factors. Few respondents indicated that they shop around for financial products and services for the business (47% in firms with up to 9 people and 56% in firms with 10-49 people).

Financial attitudes

In terms of financial attitudes, Table 2.1 indicates that most respondents show long-term attitudes, as they report to set long-term financial goals for the business and strive to achieve them (76% in firms with up to 9 people and 83% in firms with 10-49 people, on average across G20 countries). Fewer respondents indicated that they are confident to approach banks and external investors to obtain business finance (58% in firms with up to 9 people and 72% in firms with 10-49 people, on average across G20 countries). Depending on the country and the size of the business, relatively few respondents disagreed with the statement “I prefer to follow my instinct rather than to make detailed financial plans for my business”.

Overall financial literacy levels

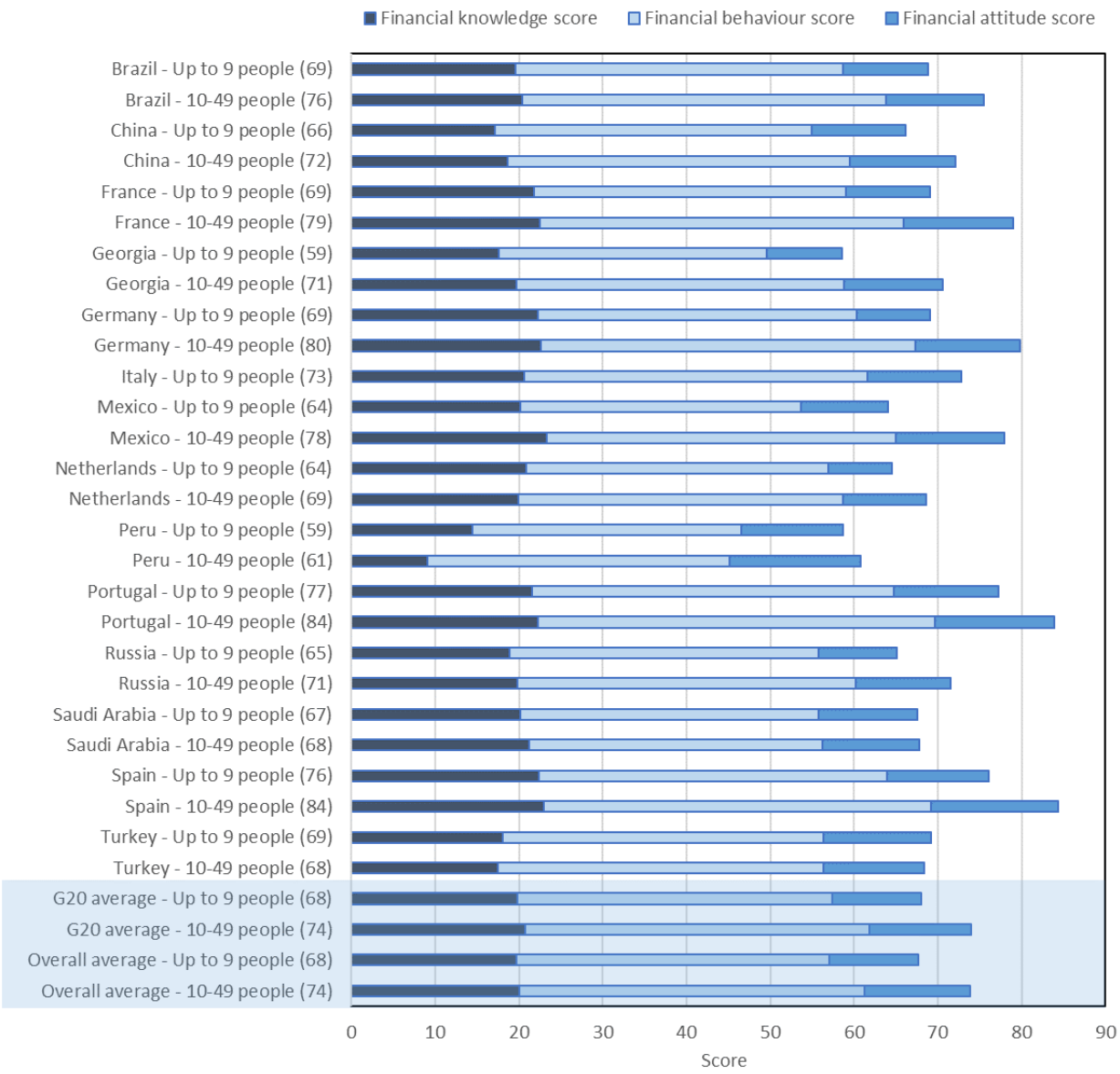
The results show that the financial literacy of MSME owners is relatively low in most participating countries. On average across G20 countries, MSME owners score less than 75 points (out of 100), and only up to 40% MSME owners display high financial literacy levels.

Figure 2.1 shows average financial literacy scores in participating countries (as a sum of the financial knowledge, behaviour and attitudes scores). On average across G20 participating countries, owners of smaller MSMEs (up to 9 people) score 68 out of 100 points, and owners of larger MSMEs (10-49 people) score 74 out of 100. While averages in some countries are relatively high, it is important to keep in mind that the questions used to build the scores look at basic knowledge, behaviour and attitudes. Country level results are also reported in Table 2.2.

Table 2.2 also shows that the percentage of MSME owners who showed relatively high levels of financial literacy (meaning that they scored above 80 out of 100) is low on average across participating G20 countries, with only 27% of MSME owners with up to 9 people and 41% of MSME owners with 10-49 people showing high financial literacy.

Figure 2.1. Financial literacy levels of MSME owners

Average financial literacy scores (out of 100)



Note: The overall financial literacy score is computed as the sum of the scores on financial knowledge, financial behaviour and financial attitudes. The overall financial literacy score was scaled to range between 0 and 100, and its value is shown in parenthesis next to the country name. Italy chose to focus on MSMEs with up to 9 people only.
Source: OECD/INFE survey of MSMEs.

Financial literacy by characteristics of the business and the owner

In addition to country differences, it is important to look at how financial literacy varies within countries according to characteristics of the business and the owner.

Table 2.3 shows gender differences across the financial knowledge, behaviour and attitudes scores (without taking into account other characteristics of the business and the owner). In many countries, male MSME owners tend to display higher financial knowledge and behaviour scores than female ones, but such differences are generally small. On average across G20 countries, male MSME owners tend to display higher financial knowledge scores than female owners by about 2 score points (our of 100), and higher financial behaviour scores by about 1 score point (only for MSMEs with up to 9 people). In no country, female MSME owners had higher financial knowledge scores than male ones. Gender differences in financial attitudes are very limited. The existence of gender differences in financial literacy among MSME owners is consistent with evidence on gender differences in financial literacy observed for the overall adult population (OECD, 2020[10]).

Table 2.4 reports differences in the overall financial literacy score, taking into account various characteristics of the business (size as measured by number of employees, and sector) and the owner (gender, education level, entrepreneurial experience) at the same time. [2]

In terms of personal characteristics, men display higher financial literacy in Brazil, China, Mexico, the Netherlands and Peru, after taking into account characteristics of the business and the owner. There are no gender differences in financial literacy in the remaining participating countries, and in no country financial literacy is higher for female owners than for male ones, after taking into account all the other factors mentioned above.

In many participating countries, MSME owners with higher levels of education (upper secondary or tertiary education) have higher financial literacy than MSME owners with less than high school education. In some participating countries, higher entrepreneurial experience is also associated with higher financial literacy.

Regarding business characteristics, the multivariate analysis confirms that, in most participating countries, owners of larger MSMEs (5-9 people and 10-49 people) have higher financial literacy than owners of smaller ones (up to 4 people). There are some differences in financial literacy levels across sectors in some countries, but there is no clear and consistent pattern of financial literacy across different industries.

Holding of financial accounts

In this report, financial inclusion measures focus on the extent to which MSMEs have formal current and savings accounts, whether traditional or digital. The OECD/INFE survey includes several other variables about awareness and use of a variety of traditional and digital financial products that could be used to obtain a broader ideas of MSME financial inclusion; these variables will be explored in follow up work.

Figure 2.2 shows that all or almost all MSME owners have a current or savings account for their business at a bank, post office, credit union or other traditional financial institution with a physical branch (more than 80% of respondents in most participating countries). This may also reflect the fact that in many countries it is mandatory to have a bank account for the formal registration of the business.

Having a current or savings account at an online bank or other online financial institution that does not have a physical branch, as well as having an account that can only be operated on a mobile phone, are less widespread. On average across participating G20 countries, around one in four MSMEs have an

[2] These results are based on a linear regression (OLS), with robust standard errors and sampling weights (if available for a given country).

account at an online financial institution that does not have a physical branch; around one in four smaller MSMEs (up to 9 people) and around one in three larger MSMEs (10-49 people) have an account that can only be operated on a mobile phone. Some 30% or more MSMEs have an account at an online financial institution in the Netherlands, Saudi Arabia and Turkey. More than 30% of MSMEs have an account that can only be operated on a mobile phone in Mexico, Russia, Saudi Arabia and Turkey (only among firms with 10-49 people). Table 2.5 includes detailed country-level results.

Holding of financial accounts by characteristics of the business and the owner

In addition to between country variations, it is important to look at heterogeneity in account holding within countries, considering various characteristics of the business and the owner.

Table 2.6 reports differences in holding a traditional financial account,[3] taking into account various characteristics of the business (size as measured by number of employees, and sector) and the owner (gender, education level, entrepreneurial experience) at the same time. In Georgia, Mexico, Russia and Saudi Arabia, male MSME owners are more likely than female owners to hold a traditional financial account for the business, after taking into account other personal and business characteristics. On average across G20 countries, larger MSMEs are more likely than smaller ones to hold a traditional financial account. Other variations in account holding are limited, as all or almost all businesses have a traditional account.

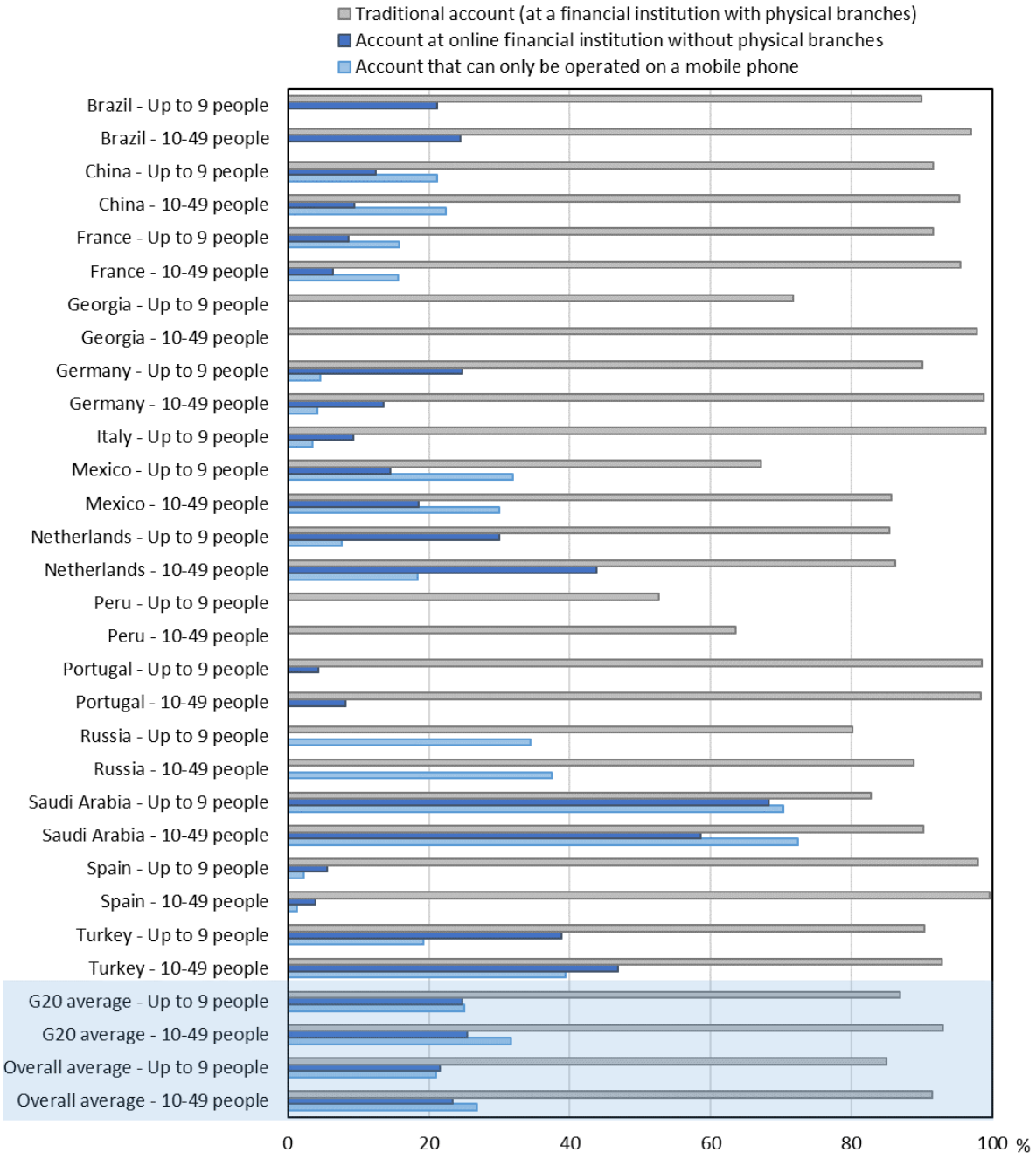
Table 2.7 reports results about holding a digital (online or mobile) account.[4] In Germany, Italy, Mexico and Saudi Arabia men-owned businesses are more likely than female-owned businesses to have a digital financial account, after taking into account other personal and business characteristics. On average across G20 participating countries, MSMEs providing personal services and those in information and communication are more likely to have a digital account than MSMEs in the manufacturing industry. The association between other characteristics and holding a digital financial account is quite varied across countries.

[3] These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country).

[4] These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country).

Figure 2.2. Holding financial accounts

Percentage of MSME owners reporting that they have the following accounts for their business



Note: Brazil, Georgia, Peru and Russia did not ask one or both of the questions about online or mobile accounts as not relevant in their contexts. Data about holding an account that can only be operated on a mobile phone is not reported for Portugal due to comparability issues. Italy chose to focus on MSMEs with up to 9 people only.
Source: OECD/INFE survey of MSMEs.

Digitalisation

This section looks at a range of digital activities undertaken by business and their owners, in relation to financial products and services, and in relation to sales and other business operations, focusing on the situation at the end of 2019, before the COVID-19 pandemic. Chapter 3 will look at how MSMEs' digitalisation has changed since the outbreak of the pandemic.

Digital activities related to financial products and services include:

- Opening a bank account completely online
- Signing a financing contract (e.g. a bank loan) completely online
- Signing an insurance contract completely online
- Online payments from customers as a percentage of total payments from customers
- Online payments to suppliers as a percentage of total payments to suppliers
- Operations on a current account conducted online, as a percentage of total operations on the current account

Digital activities related to sales and other business operations include:

- Having a dedicated website to showcase the products or services of the business
- Having a dedicated website to sell the products or services of the business
- Sales of products or services through your business' website as a percentage of total sales
- Sales of products or services through a shared online platform as a percentage of total sales
- Use of social media for business activity such as advertising or networking

Table 2.8 describes to what extent MSME owners engaged in these activities before the pandemic, distinguishing between MSMEs with up to 9 people and those with 10-49 people.

Regarding activities related to financial products and services, around 32% of MSME owners indicated that they had opened a bank account completely online before the pandemic, on average across G20 countries. On average, around 20% of MSME owners with 10-49 people and around 17% of owners with up to 9 people had signed a credit or insurance contracts completely online. This could be related to a number of demand and supply-side factors, including the fact that not all financial service providers may offer this possibility, or the fact that MSME owners may have preferred signing contracts in person, or may not have signed such contracts (whether in person or digitally) in the indicated timeframe. Fewer than 50% of MSMEs with up to 9 people indicated that online payments from clients and to suppliers as a percentage of total payments was quite or very large, on average across G20 countries but more than 50% of MSME owners reported that the share of online operations on the bank account as a percentage of total operations was quite or very large.

The same table also looks at digital activities related to sales and other business operations. Relatively few businesses had a dedicated website to *sell* their products or services (32% of MSMEs with up to 9 people and 43% of MSMEs with 10-49 people – G20 average), but a few more had a dedicated website to *showcase* their products or services (44% of MSMEs with up to 9 people and 59% of MSMEs with 10-49 people – G20 average). Similarly, online sales of products or services through the business' website or through a shared online platform as a percentage of total sales were quite low in many countries (around 23% of respondents indicated that they were quite or very large - G20 average). The use of online payments from clients and to suppliers, as well as the use of social media for advertising or networking, varied significantly across countries.

MSME owners' behaviour regarding these activities has been summarised into three scores looking at: i) Digital activities related to financial products and services, ii) Digital activities related to sales and other business operations, iii) all digital activities. The overall digitalisation score is computed as the sum of the

scores on digital activities related to financial products and services, and the score on digital activities related to sales and other business operations. The overall score for all digital activities was rescaled to range between 0 and 100

Figure 2.3 reports average digitalisation scores. On average across G20 countries, MSMEs with up to 9 people have an overall digitalisation score of 27 out of 100, compared to an overall digitalisation score of 33 out of 100 in MSMEs with 10-49 people. In no participating country, the overall digitalisation scores are above 50 out of 100, suggesting a limited level of pre-pandemic digitalisation. Table 2.9 reports country level scores.

Digitalisation by characteristics of the business and the owner

Table 2.10 looks at within country heterogeneity in the overall level of digitalisation (combining digital activities related to both financial products and services, and to sales and other business operations), by various characteristics of the business (size as measured by number of employees, and sector) and the owner (gender, education level, entrepreneurial experience).[5]

Higher levels of digitalisation are associated with larger business size and higher levels of education of the owner, on average in G20 countries. Some entrepreneurial experience (between 2 and up to 5 years) is associated with higher digitalisation compared to very limited experience (less than 2 years), but higher levels of experience (beyond 5 years) are not necessarily related to greater digitalisation levels, on average across G20 countries.

In several countries, pre-pandemic levels of digitalisation were higher in businesses working in accommodation, food and beverage services, and in information and communication sectors compared to manufacturing.

Relationship between financial literacy and digitalisation

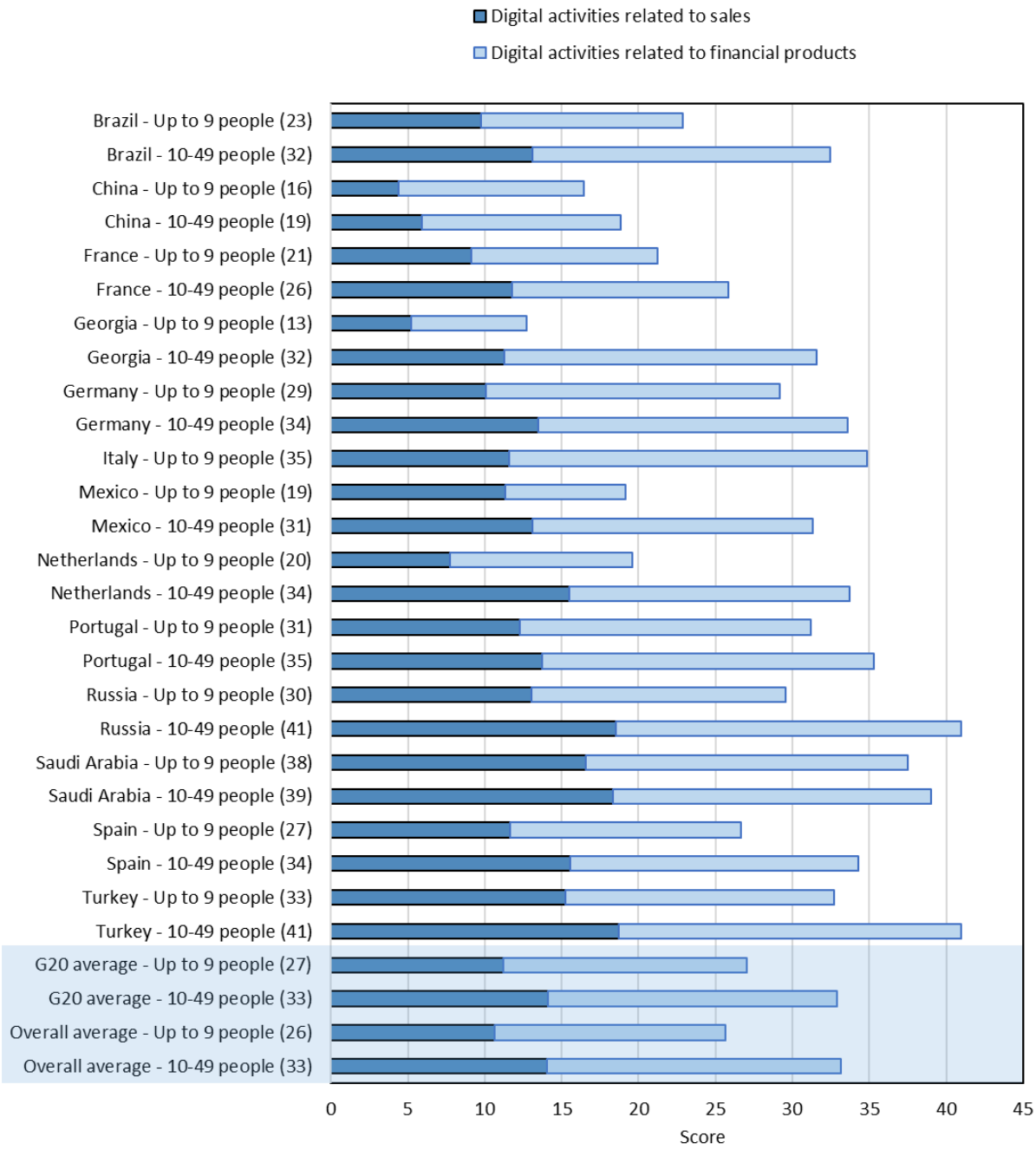
The results also show that the level of digitalisation of MSMEs is positively associated with the level of financial literacy of their owners. Table 2.11 shows that in most participating countries a higher financial literacy score is associated with a higher digitalisation score, after taking into account characteristics of the business and the owner (gender, level of education, experience as a MSME owner, number of employees, and sector).

On average across participating G20 countries, a one score point increase in financial literacy (out of 100) is associated with a 0.2 score point increase in digitalisation (on a 0 to 100 scale), after taking into account the same set of personal and business characteristics as in previous analyses.

[5] These results are based on a linear regression (OLS), with robust standard errors and sampling weights (if available for a given country).

Figure 2.3. Levels of digitalisation of MSMEs

Digitalisation scores (out of 100)



Note: The overall digitalisation score is computed as the sum of the scores on digital activities related to financial products and services, and the score on digital activities related to sales and other business operations. The overall digital activities score was scaled to range between 0 and 100, and its value is shown in parenthesis next to the country name.
Italy chose to focus on MSMEs with up to 9 people only.
Source: OECD/INFE survey of MSMEs

List of Chapter 2 tables

Tables for Chapter 2 are available at www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-navigating-the-storm-tables-figures.xlsx.

Financial literacy

Table 2.1. Components of the financial knowledge, behaviour and attitudes scores

Percentage of respondents who gave correct answers to financial knowledge questions and who displayed savvy financial behaviour and attitudes

Table 2.2. Financial literacy scores

Average scores (out of 100)

Table 2.3. Financial knowledge, behaviour and attitudes scores, by gender

Score point differences associated with gender (men - women)

Table 2.4. Financial literacy scores, by characteristics of the business and the owner

Score point differences associated with characteristics of the business and the owner

Financial accounts holding

Table 2.5. Holding financial accounts

Percentage of MSME owners reporting that they have the following accounts for their business

Table 2.6. Holding of a traditional financial account, by characteristics of the business and the owner

Likelihood of holding of a traditional financial account (current or savings account at a bank, post office, credit union or other traditional financial institution with a physical branch), by characteristics of the business and the owner

Table 2.7. Holding of a digital financial account, by characteristics of the business and the owner

Likelihood of holding of a digital financial account (current or savings account at an online bank or other online financial institution that does not have a physical branch, or account that can only be operated on a mobile phone), by characteristics of the business and the owner

Digitalisation

Table 2.8. Digital activities of MSMEs

Percentage of MSME owners reporting the following digital activities

Table 2.9. Digitalisation scores

Average scores (out of 100)

Table 2.10. Digitalisation of MSMEs, by characteristics of the business and the owner

Score point differences associated with characteristics of the business and the owner

Table 2.11. Correlation between financial literacy and digitalisation

Correlation coefficients between the financial literacy score and the digitalisation score

3 The impact of the COVID-19 pandemic on MSMEs

Key messages

- Many MSMEs in countries participating in the survey reported a negative impact on turnover and profits from the COVID-19 crisis, as well as lacking cash to pay for expected expenses of the business. On average across G20 countries, some 49% of MSME owners with up to 9 people and 42% of MSME owners with 10-49 people reported lacking cash during the crisis.
- MSMEs operating in accommodation, food and beverage services, those providing other personal services, and in those in construction and real estate, have been the most likely to report a negative economic impact and a lack of cash from the crisis, on average across G20 countries.
- Many MSMEs stepped up their digitalisation during the COVID-19 pandemic. On average across G20 countries, 49% of MSMEs with up to 9 people and 56% of MSMEs with 10-49 people increased at least one digital activity for their business.
- Increases in sales-related digital activities during the pandemic have been more likely among MSMEs operating in wholesale and retail trade, in the accommodation, food and beverage industry, in personal services, and in information and communication, compared to MSMEs working in manufacturing, on average across G20 countries.
- On average across G20 countries, MSMEs that reported lacking cash during the crisis were over 30% more likely to have increased their digital activities than MSMEs not reporting a lack of cash, suggesting that MSMEs heavily affected by the COVID-19 crisis may have had to increase their digitalisation to help overcome the shock.
- Many MSMEs were able to access loans and government support during the pandemic. Out of the MSMEs that applied for a loan, most of them obtained it. On average across G20 countries,63% of MSMEs with up to 9 people and 67% of MSMEs with 10-49 people reported that they used at least one of the government measures put in place to support the financial condition of MSMEs

This chapter describes the impact of the COVID-19 pandemic on MSMEs, including on economic-financial terms and on digital activities. As the survey took place in 2021, well after the beginning of the pandemic, it is likely that MSMEs that were particularly negatively affected by the crisis may have closed business before the interviews took place. The fact that the survey covers MSMEs that are still in business in 2021 means that results about the economic and financial impact of the COVID-19 crisis on MSMEs could possibly be underestimated in the current study. In interpreting the results, it is also important to consider that information about the impact of the COVID-19 on the business contained in this report is self-reported and may not exactly match information based on the actual financial accounts of MSMEs.

Economic and financial impact of the COVID-19 crisis on MSMEs

MSMEs have been strongly affected by the COVID-19 crisis along several dimensions. This section summarises self-reported information from MSME owners about the economic and financial impact of the crisis in terms of liquidity, debt, turnover, profits and number of employees.

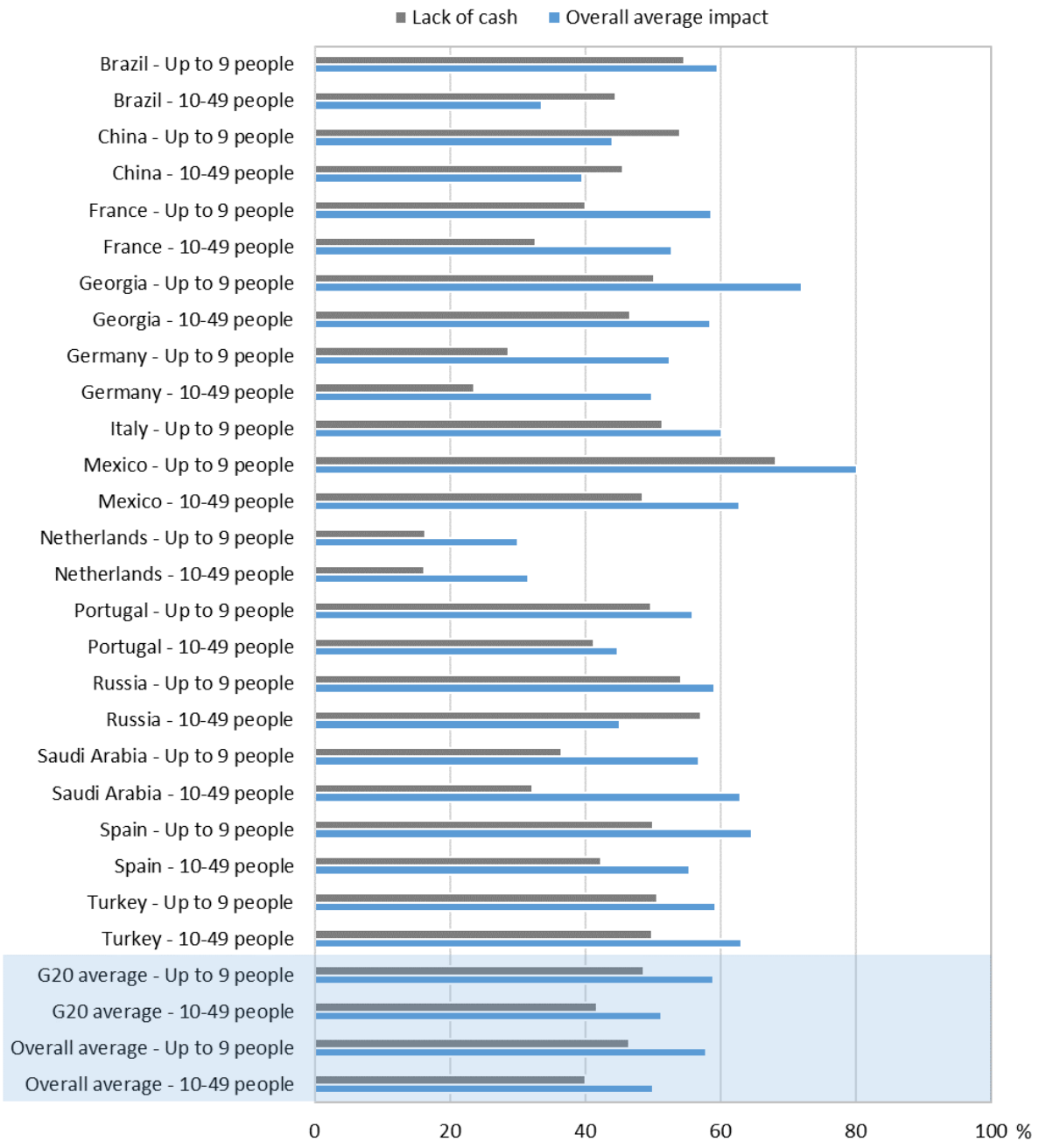
Table 3.1 shows the percentage of MSME owners reporting a negative impact on their business. On average across participating G20 countries, 59% of owners of firms with up to 9 people and 51% of owners of firms with 10-49 people reported that they experienced a negative overall impact of the COVID-19 crisis on their business. This varies from around 3 in 10 MSMEs reporting a negative impact in the Netherlands, to over 70% of firms with up to 9 people in Georgia and Mexico. The survey reports similar figures in relation to the impact on turnover and profits. Fewer respondents reported a negative impact in terms of debt (around 3 in 10, G20 average) and number of employees (around 4 in 10, G20 average), possibly because of the relief measures put in place by governments.

Many MSME owners also reported that since the start of the COVID-19 pandemic, the business has been confronted with situations where cash inflows were insufficient to cover cash outflows or to pay for expected expenses of the business (such as paying suppliers, paying taxes, or repaying debt). On average across G20 countries, some 49% of MSME owners with up to 9 people and 42% of MSME owners with 10-49 people reported lacking cash during the crisis.

Figure 3.1 shows that in most participating countries, more than 40% of MSME owners reported a negative economic and financial impact of the COVID-19 crisis, with the exception of the Netherlands and larger MSMEs in Brazil and China. Similarly, in most participating countries, more than 30% of MSME owners reported lacking cash, with the exception of Germany and the Netherlands.

Figure 3.1. Overall economic and financial impact

Percentage of MSME owners who reported a negative economic impact on their business and who experienced situations where cash inflows were insufficient to cover cash outflows or to pay for expected expenses of the business since the start of the COVID-19 pandemic.



Note: Italy chose to focus on MSMEs with up to 9 people only.
Source: OECD/INFE survey of MSMEs.

Economic and financial impact by characteristics of the business and the owner

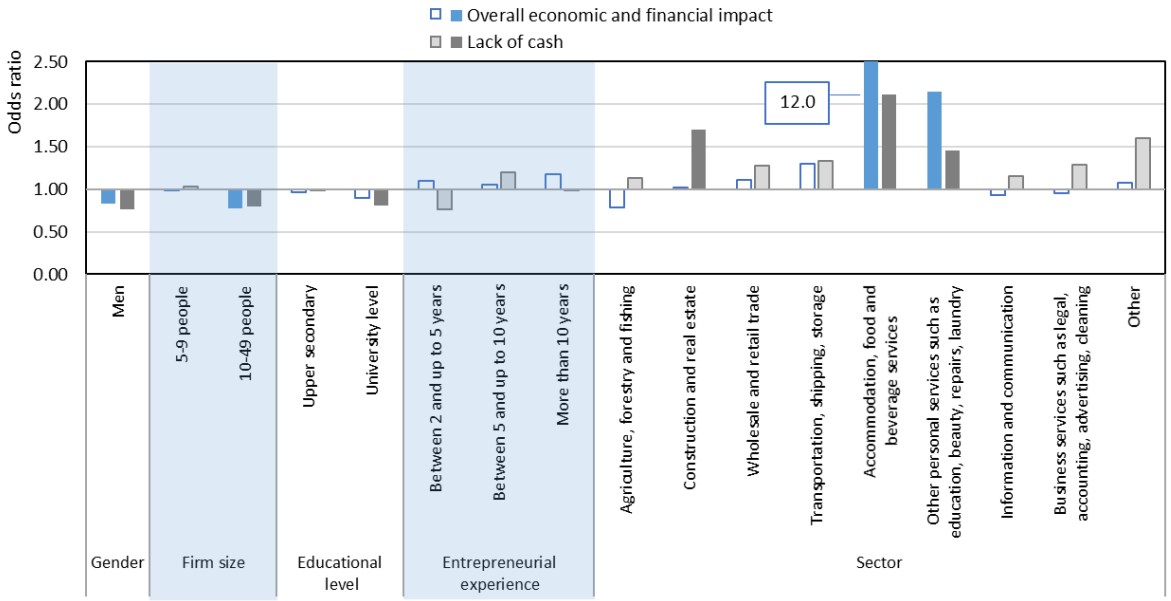
In addition to the strong negative impact on average, some types of MSMEs have been affected even more severely. Figure 3.2 looks at variations in the overall impact of the crisis, by characteristics of the business (size as measured by number of employees, and sector) and the owner (gender, education level, entrepreneurial experience), on average across G20 participating countries. Country level results are reported in Table 3.2 and Table 3.3.

On average across participating G20 countries, MSMEs in sectors related to accommodation, food and beverage services are more likely than MSMEs in manufacturing to report a negative overall impact. Firms in personal services (such as education, beauty, repairs, laundry) have also reported a more negative impact than those in manufacturing. A different impact across sectors may be related to pandemic-related restrictions, and especially to legal restrictions that forced some firms to suspend their business during the pandemic, and that allowed others deemed essential to remain open. On average across G20 countries, male-headed MSMEs were less likely than female-headed ones, and larger businesses (10-49 people) were less likely than smaller ones (up to 4 people), to report a negative impact, after taking all the other factors into account.

Similar results hold for lacking cash. On average across participating G20 countries, MSMEs in sectors related to accommodation, food and beverage services, those providing personal services (such as education, beauty, repairs, laundry), and those in construction and real estate were more likely to report that they suffered from a lack of cash during the pandemic, compared to MSMEs in manufacturing. On average across G20 countries, men-owned and larger MSMEs were also less likely to report a lack of cash.

Figure 3.2. Overall economic and financial impact, by characteristics of the business and the owner

Likelihood of reporting a negative economic impact or lack of cash, by characteristics of the business and the owner. Average of G20 countries.



Note: These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). Comparison categories are: women, firms with up to 9 people, respondents with less than upper secondary education, respondents with less than 2 years' experience as MSME owners, manufacturing firms.
Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

The COVID-19 pandemic and the digitalisation of MSMEs

The restrictions to in-person interactions imposed by governments during the pandemic prompted many businesses to shift their activities on line and to use digital channels, to the extent possible. As discussed in the forthcoming IFC-SMEFF report on "MSME Digital Finance: Resilience and Innovation during COVID-19", the crisis has accelerated the digital transformation of MSMEs. After considering the level of MSMEs' pre-pandemic digitalisation in Chapter 2, this section explores the extent to which the digitalisation of MSMEs has changed during the pandemic, confirming an increase in several digital activities related to financial services and sales.

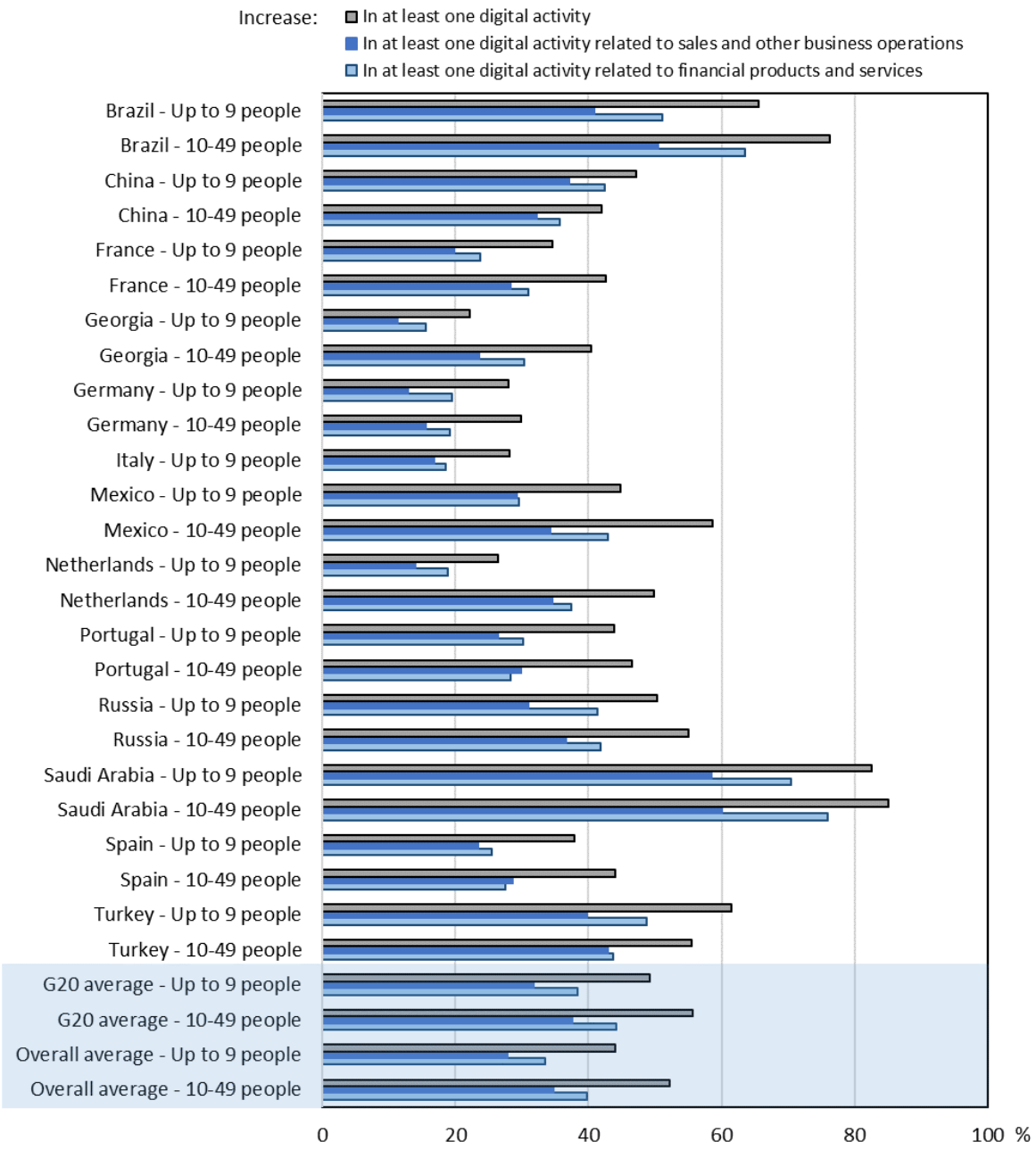
Table 3.4 looks at whether the engagement of MSMEs and their owners in digital activities related to financial products and services had decreased, remained the same or increased since the outbreak of the pandemic. Most respondents did not report opening a bank account completely online or signing a financing or insurance contract completely online since the outbreak of the COVID-19 crisis if they had not done so before. However, more than 20% of respondents on average in G20 countries reported that online payments from customers or to suppliers as a share of total payments had increased. On average across G20 countries, respondents indicating an increase in online payments to suppliers as a share of total payments exceeded respondents indicating a decrease by around 9 percentage points; respondents indicating an increase in online payments from customers as a share of total payments exceeded respondents indicating a decrease by around 12 percentage points. As many as 18% of MSME owners with up to 9 people and 20% of MSME owners with 10-49 people mentioned that the number of online operations as a percentage of total operations on the current account had increased, on average across G20 countries.

Table 3.5 shows whether the engagement of MSMEs and their owners in digital activities related to sales and other business operations had changed since the outbreak of the pandemic. The extent to which MSMEs had websites to showcase or sell their products and services did not change much after the COVID-19 outbreak compared to the end of 2019. However, online sales and use of social media appear to have increased among MSMEs. On average across participating G20 countries, between 17% and 24% of respondents reported an increase in sales of products or services through the business' website or other online platforms as a percentage of total sales and/or use of social media for advertising or networking. The share of respondents reporting an increase in such activities has been higher than the share of those reporting a decrease by over 7 percentage points, on average across G20 countries.

Figure 3.3 shows the percentage of respondents who indicated that they increased at least one digital activity in the three categories considered (financial products, sales, all activities). Over 30% of MSME owners in most countries reported an increase in at least one digital activity since the outbreak of the pandemic. Relatively fewer MSME owners reported increasing at least one digital activity in Germany and among MSMEs with up to 9 people in Georgia, Italy and the Netherlands. On average across G20 countries, 49% of MSMEs with up to 9 people and 56% of MSMEs with 10-49 people increased at least one digital activity for their business. Country level results are also reported in Table 3.6.

Figure 3.3. Increase in digital activities during the pandemic

Percentage of MSME owners who reported an increase in digital activities since the outbreak of the COVID-19 pandemic



Note: Italy chose to focus on MSMEs with up to 9 people only.
Source: OECD/INFE survey of MSMEs.

Digitalisation increase by characteristics of the business and the owner

Just like the economic and financial impact on the business, also changes in digitalisation have varied within countries by various characteristics of the business and the owner. Figure 3.4 looks at variations on average across G20 participating countries. Country level results are reported in Table 3.7, Table 3.8 and Table 3.9.

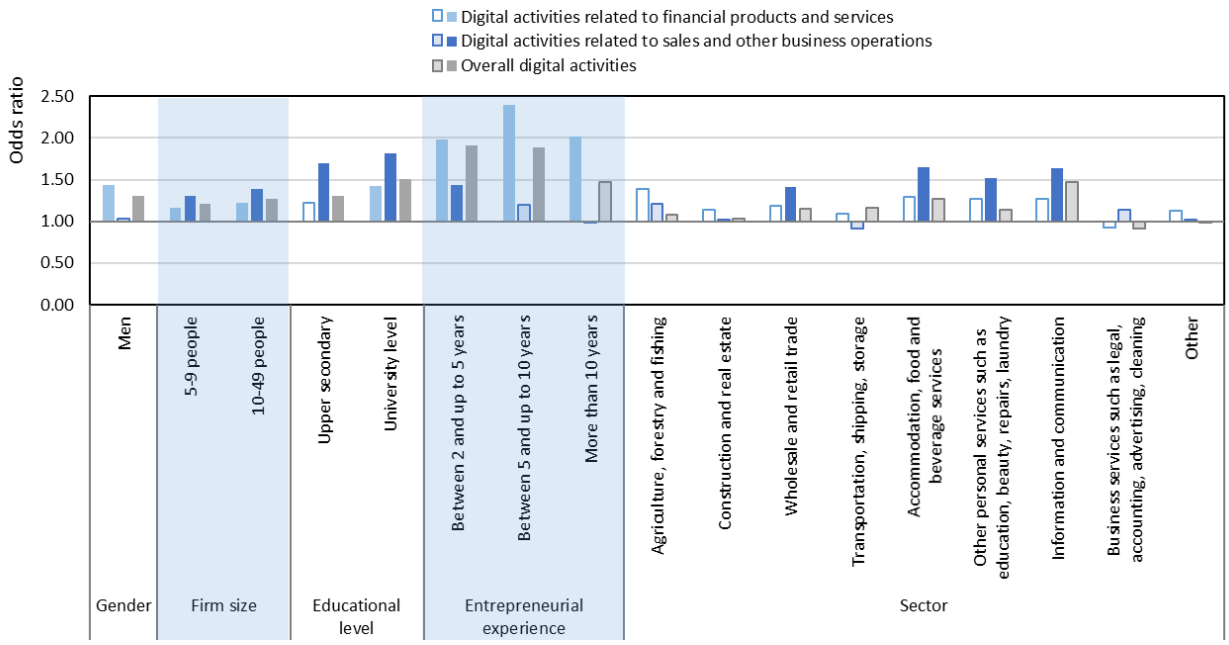
On average across all and G20 participating countries, MSMEs operating in wholesale and retail trade, in the accommodation, food and beverage industry, in personal services, and in information and communication were more likely to report an increase in at least one digital activity related to sales compared to MSMEs in manufacturing. Differences across sector in the increase of digital activities related to financial products were more limited.

Larger MSMEs (with 5-9 people and 10-49 people) were more likely to have stepped up all types of digital activities compared to firms with up to 4 people, after taking other business characteristics into account. Higher education levels of the owner were also associated with an increasing digitalisation during the pandemic.

On average across G20 countries, men-owned MSMEs were more likely than female-owned ones to have increased their digital activities related to financial products and service, and digital activities overall.

Figure 3.4. Increase in digital activities during the pandemic, by characteristics of the business and the owner

Likelihood of reporting an increase in digital activities, by characteristics of the business and the owner. Average of G20 countries.



Note: These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). Comparison categories are: women, firms with up to 9 people, respondents with less than upper secondary education, respondents with less than 2 years' experience as MSME owners, manufacturing firms.
Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

Economic and financial impact of the COVID-19 crisis and digitalisation

Changes in the digitalisation of MSMEs are likely to have interacted with the economic and financial impact on the business, as many firms have adapted to limit the losses to revenues and profits.

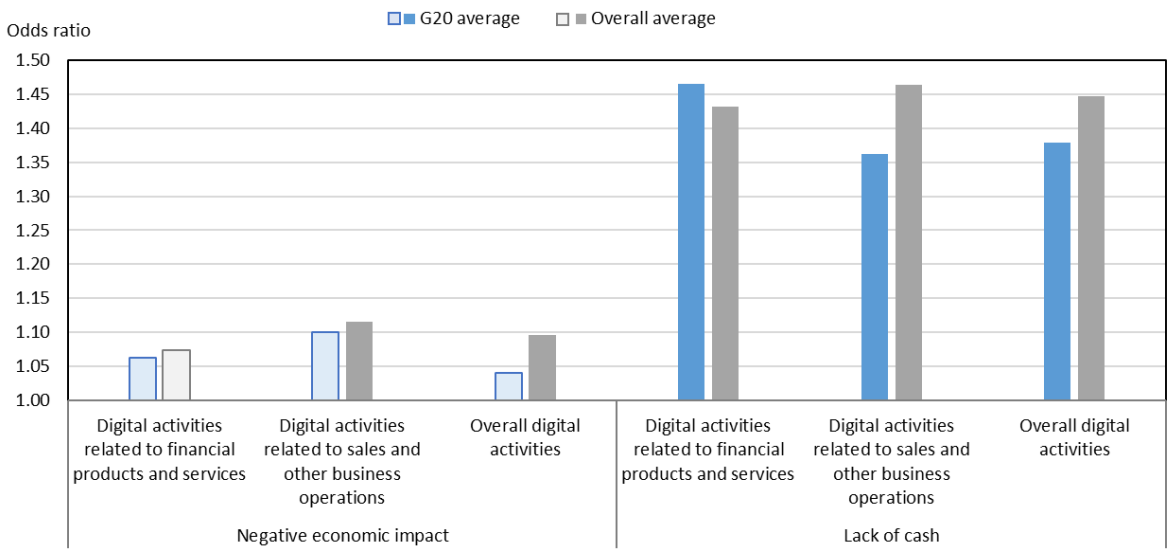
Figure 3.5 shows how the likelihood of stepping up digital activities has varied according to the self-reported overall impact on the business, and according to the self-reported lack of cash, after taking into account personal and business characteristics.

On average across G20 countries, MSMEs that reported lacking cash during the crisis were over 30% more likely to have increased their digital activities than MSMEs not reporting a lack of cash. Similarly, on average across participating countries, MSMEs that reported a negative overall economic impact were also more likely to have increased their digital activities related to sales and their overall digital activities than MSMEs not reporting a negative impact, suggesting that many MSMEs heavily affected by the COVID-19 crisis may have had to increase their digitalisation to help overcome the shock. This is consistent with the results of Figure 3.2 and Figure 3.4, indicating that the MSMEs that were most likely to have stepped up their digital activities, and especially those related to sales, were those in the sectors most negatively affected by the consequences of the pandemic, such as accommodation food and beverages, and other personal services.

Digital activities related to financial products and services did not appear to have changed much with respect to the economic and financial impact on the business. Country level results are available in Table 3.9 and Table 3.10.

Figure 3.5. Negative economic impact and increase in digitalisation

Likelihood of reporting an increase in digital activities. Average of G20 countries.



Note: These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). These results take into account characteristics of the business and the owner (gender, level of education, experience as a MSME owner, size of the business (number of employees), and sector). Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

Accessing external finance and support

This section describes to what extent MSMEs have accessed external support to mitigate the negative impact of the crisis on MSMEs, focusing on access to credit and the use of public measures supporting firms' financial conditions. Governments around the world have put in place a range of policy measures to support MSMEs during the COVID-19 crisis, including cash transfers, debt moratoria, public guarantee schemes, lower interest rates, tax relief and others.

Table 3.11 shows that on average across G20 countries, about 3 in 10 MSMEs with up to 9 people and about 4 in 10 MSMEs with 10-49 people applied for a new loan for the business since the start of the COVID-19 pandemic. Few MSMEs applied for a loan in the Netherlands (4% among MSMEs with up to 9 people, and 10% among MSMEs with 10-49 people), compared to more than 60% of MSMEs with 10-49 people in Spain. Out of the MSMEs that applied for a loan, most of them obtained it. On average across G20 countries, among the MSMES that requested a loan, 87% of those with up to 9 people and 92% of those with 10-49 people reported that their loan demand was accepted.

The table also looks at the use of government support measures. Since public support measures for MSMEs have varied across jurisdictions, Table 3.11 looks at the use of *any* measures made available in each participating country. On average across G20 countries, 63% of MSMEs with up to 9 people and 67% of MSMEs with 10-49 people reported that they used at least one of the government measures put in place to support the financial condition of MSMEs. At the same time, many MSMEs did not benefit from such measures because support was not needed, because the firm was not eligible, or because the owner was not aware of the measures. Among the MSME owners who did not use any government support measure for their business, around 65% of MSME owners reported that their business did not need support, on average across G20 countries. In addition, among the MSME owners who did not use any government support measure for their business, 25% of MSME owners with up to 9 people and 22% of MSME owners with 10-49 people reported that they were not aware of the measures, on average across G20 countries.

List of Chapter 3 tables

Tables for Chapter 3 are available at www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-navigating-the-storm-tables-figures.xlsx

Economic and financial impact of the COVID-19 crisis on MSMEs

Table 3.1. Economic and financial impact

Percentage of MSME owners who reported a negative economic impact on their business and who experienced situations where cash inflows were insufficient to cover cash outflows or to pay for expected expenses of the business since the start of the COVID-19 pandemic.

Table 3.2. Overall economic and financial impact, by characteristics of the business and the owner

Likelihood of reporting a negative economic impact, by characteristics of the business and the owner

Table 3.3. Lack of cash, by characteristics of the business and the owner

Likelihood of reporting a lack of cash, by characteristics of the business and the owner

The COVID-19 pandemic and the digitalisation of MSMEs

Table 3.4. Changes in digital activities related to financial products and services

Percentage of MSME owners reporting a decrease, no variation, or an increase in the following activities related to financial products and services since the outbreak of the COVID-19 pandemic, with respect to the pre-pandemic situation

Table 3.5. Changes in digital activities related to sales and other business operations

Percentage of MSME owners reporting a decrease, no variation, or an increase in the following activities related to sales and other business operations since the outbreak of the COVID-19 pandemic, with respect to the pre-pandemic situation

Table 3.6. Increase in digital activities during the pandemic

Percentage of MSME owners who reported an increase in digital activities since the outbreak of the COVID-19 pandemic

Table 3.7. Increase in digital activities related to financial products and services, by characteristics of the business and the owner

Likelihood of reporting an increase in digital activities related to financial products and services, by characteristics of the business and the owner

Table 3.8. Increase in digital activities related to sales and other business operations, by characteristics of the business and the owner

Likelihood of reporting an increase in digital activities related to sales and other business operations, by characteristics of the business and the owner

Table 3.9. Increase in overall digital activities, by characteristics of the business and the owner

Likelihood of reporting an increase in overall digital activities, by characteristics of the business and the owner

Economic and financial impact of the COVID-19 crisis and digitalisation

Table 3.10. Negative economic impact and increase in digitalisation

Likelihood of reporting an increase in digital activities, by economic impact

Accessing external finance and support

Table 3.11. Use of external finance and support

Percentage of MSME owners who reported applying for a loan and using government support

4 The tools to navigate the storm

Key messages

- Financial literacy is associated with positive business outcomes in some participating countries. In Brazil, China, Italy, Mexico, Portugal and Spain, financially literate MSME owners were less likely than low financial literacy ones to suffer from a lack of cash during the COVID-19 crisis, after taking into account personal and business characteristics.
- Financial literacy is also associated with greater awareness of the public support measures for MSMEs put in place during the COVID-19 pandemic, and with a lesser need for government support. On average across G20 countries, financially literate MSME owners were more likely than less financially savvy ones to report that they had not used government support because it was not needed.
- Financial literacy is positively associated with access to credit. On average across G20 countries, MSME owners with high levels of financial literacy have been almost twice as likely as low financial literacy respondents to receive a positive response on their loan application, after taking into account personal and business characteristics.
- On average across G20 countries, MSME owners with high pre-pandemic levels of digitalisation were more likely to report that they stepped up their overall digital activities during the crisis, after taking into account personal and business characteristics.

This chapter brings together the results of the two previous chapters and investigates whether factors such as financial literacy, holding formal accounts and digitalisation (Chapter 2) had a role in mitigating the negative impact of the COVID-19 crisis or facilitated the adoption of digital innovations (Chapter 3), taking into account relevant characteristics of the business and their owner.

The chapter also looks at the relationship between financial literacy, holding accounts and digitalisation on the one hand, and other factors that may have contributed to mitigating the negative impact of the COVID-19 crisis on the other hand, such as access to credit and to government support measures.

In interpreting the results, it is important to keep in mind the cross-sectional nature of the data and that it is not possible to imply a causal relationship between the variables.

Mitigating the negative impact of the crisis

Figure 4.1 looks at the relationship between financial literacy, account holding and digitalisation on one hand, and the economic and financial impact of the crisis on the other.

Financial literacy is associated with positive business outcomes in some participating countries, suggesting that financially literate MSME owners may have been equipped with greater financial knowledge and skills to weather the shock on their business arising from the pandemic. In Brazil, China, Italy, Mexico, Portugal and Spain, MSME owners with high financial literacy were less likely than low financial literacy ones to

report experiencing lack of cash during the COVID-19 crisis, after taking into account personal and business characteristics. Moreover, in China, Italy and Mexico, MSME owners with high financial literacy were less likely to report a negative overall economic impact of the crisis on the business.

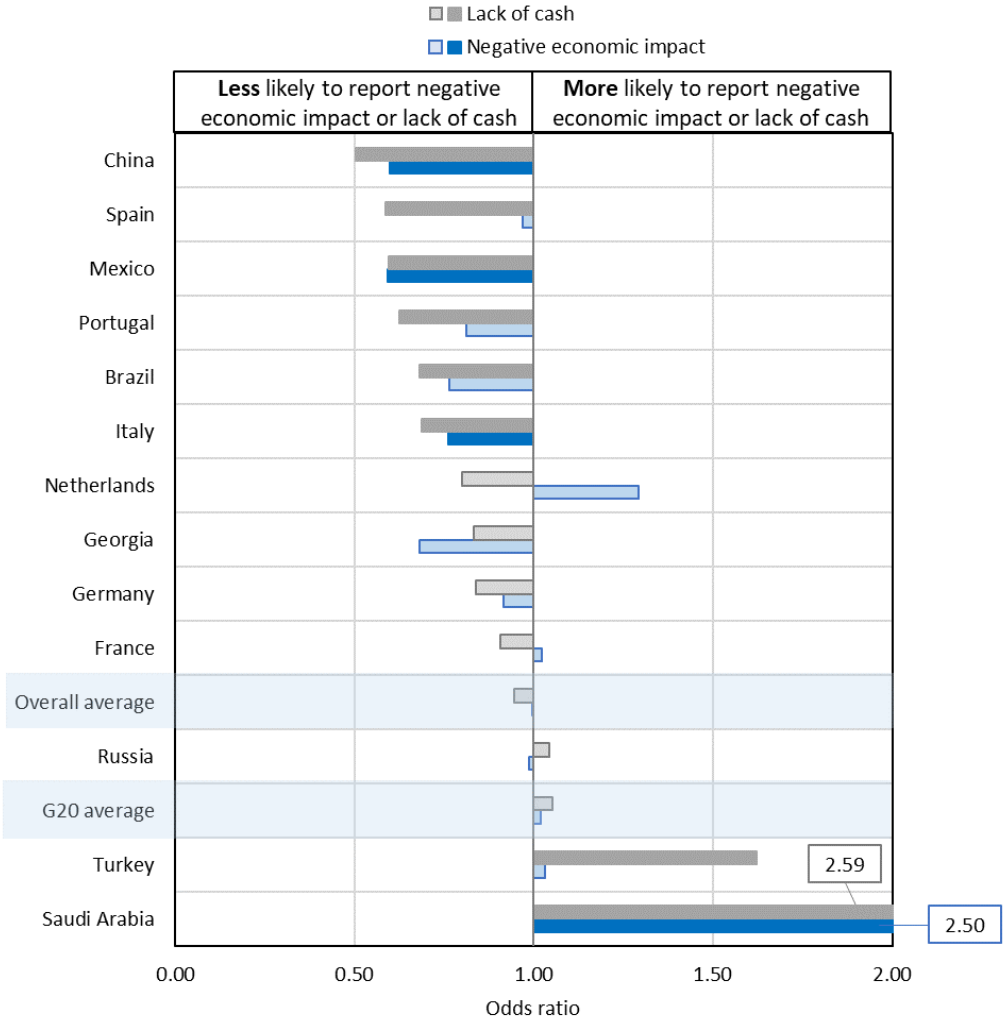
In addition, Table 4.1 shows that in a few countries, the level of pre-pandemic digitalisation is associated with a greater likelihood of reporting a lack of cash during the pandemic. This is possibly related with the results shown in Chapters 2 and 3, suggesting that MSMEs in the sectors with the highest level of pre-pandemic digitalisation were also those most severely affected by the crisis. In most countries, financial account holding is not associated with reporting a negative impact from the crisis or a lack of cash, after taking into account personal and business characteristics. Table 4.1 includes country level results.

Embracing digitalisation

Figure 4.2 looks at the relationship between financial literacy, financial account holding and pre-pandemic digitalisation on one hand, and increases in digitalisation during the pandemic on the other. On average across G20 countries, MSME owners with high pre-pandemic levels of digitalisation were more likely to report that they stepped up their overall digital activities, and especially those related to sales, after taking into account personal and business characteristics. This may suggest that MSMEs that were already engaging in digital activities before the pandemic may have been quicker in (or may have had a greater need of) embracing digital innovation than MSMEs with low pre-pandemic digitalisation. Financial account holding is also associated with an increase in digital activities, while financial literacy is in most countries not associated with an increase in digitalisation. Table 4.2 includes country level results.

Figure 4.1. Financial literacy and the impact of the crisis

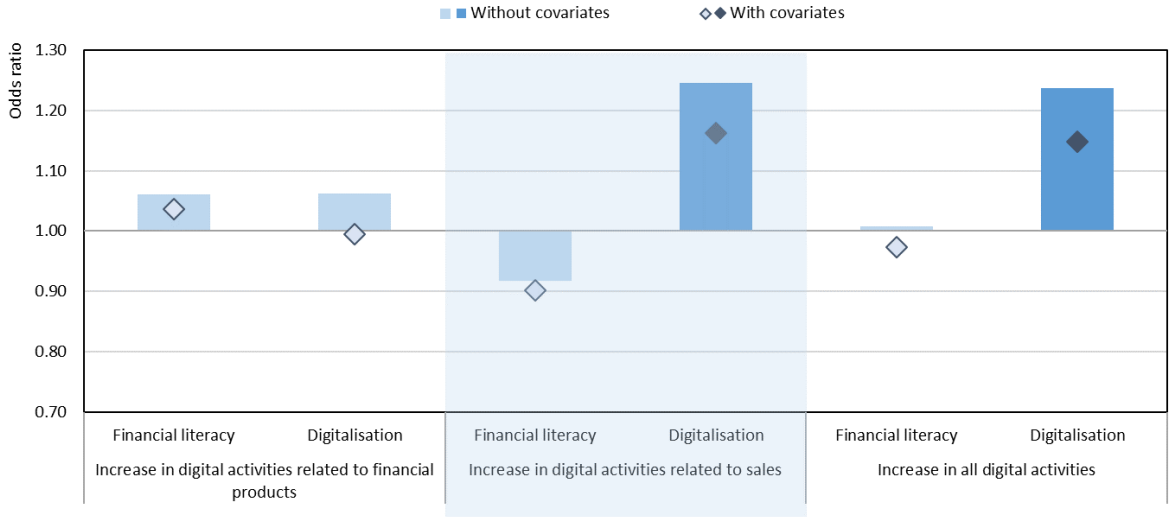
Likelihood of reporting a negative economic impact or lack of cash, by financial literacy.



Note: These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). These results take into account characteristics of the business and the owner (gender, level of education, experience as a MSME owner, size of the business (number of employees), and sector).
Countries are ranked in ascending order of the likelihood of reporting a lack of cash. Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

Figure 4.2. Factors related with increases in digitalisation of MSMEs

Likelihood of reporting an increase in digital activities. Average of G20 countries.



Note: These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). Results "with covariates" take into account characteristics of the business and the owner (gender, level of education, experience as a MSME owner, size of the business (number of employees), and sector).
Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

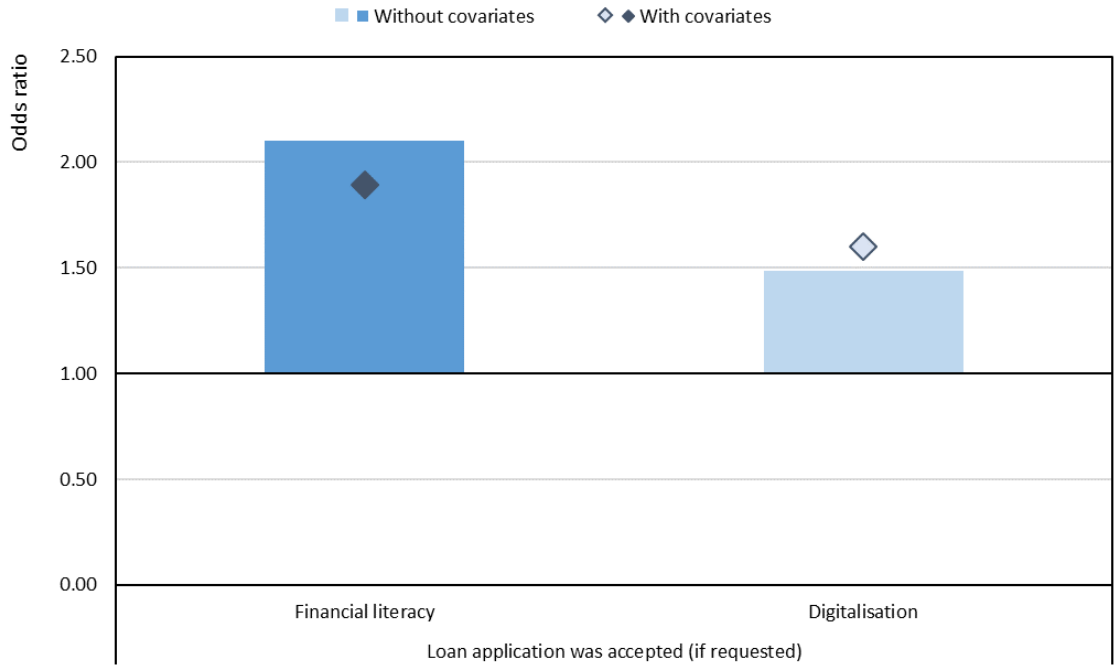
Accessing external finance and support

As described in Chapter 3, many MSMEs have used external finance and support during the crisis, in terms of credit and public measures put in place during the COVID-19 crisis to support firms' financial conditions. This section looks at whether the use of these instruments may have mitigated the negative impact of the crisis on MSMEs.

Financial literacy is positively associated with access to credit. Figure 4.3 shows the association between financial literacy with the likelihood that a loan application (if requested) has been fully or partially accepted. On average across G20 countries, MSME owners with high levels of financial literacy have been almost twice as likely than low financial literacy respondents to receive a positive response on their loan application, after taking into account personal and business characteristics. Similarly, in a few countries, MSMEs holding an account were more likely than firms not having an account to receive a positive outcome from their loan application. Digitalisation does not appear to be related to loan application outcomes in most countries. Table 4.3 reports country level results.

Figure 4.3. Factors related with access to credit during the COVID-19 crisis

Likelihood that a loan application was accepted (if requested), by financial literacy and digitalisation. Average of G20 countries.



Note: Base: MSME owners who applied for a new loan for the business since the start of the COVID-19 pandemic. These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). Results "with covariates" take into account characteristics of the business and the owner (gender, level of education, experience as a MSME owner, size of the business (number of employees), and sector).
Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

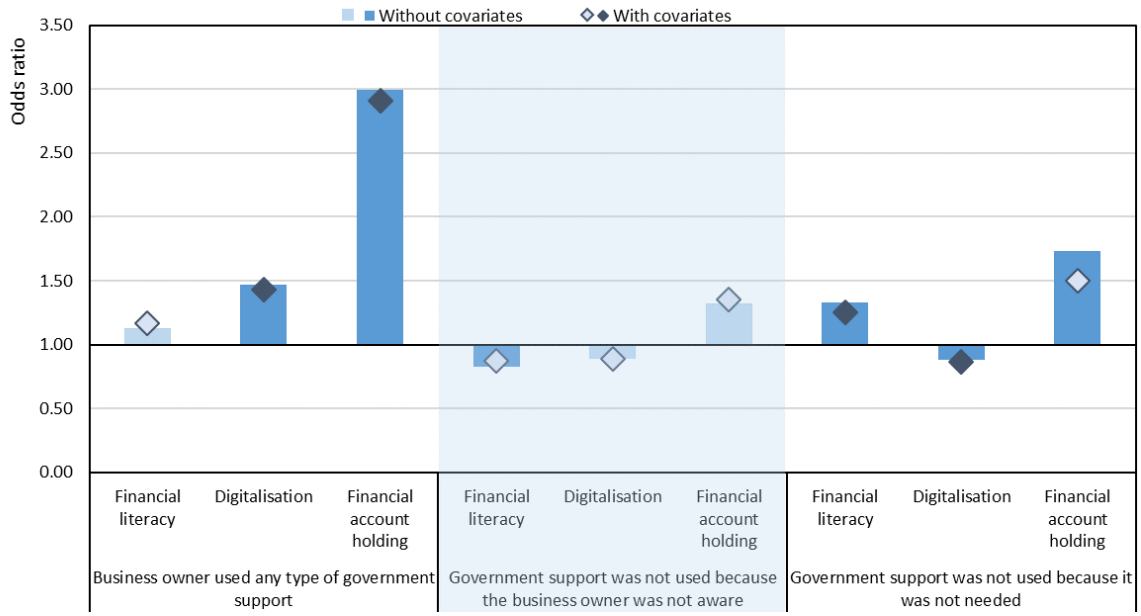
Governments around the world have put in place a range of policy measures to support MSMEs during the COVID-19 crisis, including cash transfers, debt moratoria, public guarantee schemes, lower interest rates, tax relief and others, as described in the IFC-SMEFF report "MSME Digital Finance: Resilience and Innovation during COVID-19".

The results suggest that financial literacy was associated with greater awareness of public support measures for MSMEs during the COVID-19 crisis, and with a lesser need for government support. Figure 4.4 looks at whether financial skills, holding an account and digitalisation were related to awareness and use of any measures made available in each participating country. On average across G20 countries, financial literacy was not associated with a higher likelihood of using government support, after taking into account personal and business characteristics. However, among MSMEs that did not use government support, financial literacy was associated with a higher likelihood of not using government support because it was not needed, and with a lower likelihood of not using if because the owner was not aware. The results of Figure 4.1 and Figure 4.4 taken together suggest that, in some countries, MSME owners with higher financial literacy may have had the knowledge and skills to mitigate the negative impact of the crisis on their business, and may therefore have had a relatively lower need for government support compared to low financial literacy owners. Whenever high financial literacy MSME owners needed government support during the crisis, they were more likely to be aware of it compared to low financial literacy owners.

Figure 4.4 also shows that, on average across G20 countries, MSMEs with high pre-pandemic levels of digitalisation were more likely to report that they used at least one form of government support offered in their country, after taking into account the characteristics of the business and the owner. Among MSMEs that did not use government support, pre-pandemic levels of digitalisation was also associated with a lower likelihood of not using government support because it was not needed. These results are consistent with the findings of previous analyses, suggesting that MSMEs with high pre-pandemic levels of digitalisation also appeared to have been strongly impacted by the crisis. Financial account holding is also positively and strongly related with the use of government measures to support MSMEs, possibly because the use of formal financial accounts may have been associated to the disbursement of public support. Table 4.4 reports country level results.

Figure 4.4. Factors related with access to government support during the COVID-19 crisis

Likelihood that the MSME owner used any type of government support (left panel), likelihood that government support was not used because the business owner was not aware - if not used (centre panel), and likelihood that government support was not used because it was not needed - if not used (right panel). Average of G20 countries.



Note: The base for the centre and right panels is MSME owners who did not use government support for the business since the start of the COVID-19 pandemic. These results are based on a logit regression, with robust standard errors and sampling weights (if available for a given country). Results "with covariates" take into account characteristics of the business and the owner (gender, level of education, experience as a MSME owner, size of the business (number of employees), turnover, and sector).
These results do not include the Netherlands, because their survey did not include the questions about government support measures.
Significant odds ratio are shown in a darker tone.
Source: OECD/INFE survey of MSMEs.

List of Chapter 4 tables

Tables for Chapter 4 are available at: www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-navigating-the-storm-tables-figures.xlsx

Table 4.1. Relationship between financial literacy, financial account holding and digitalisation, and the economic and financial impact of the crisis

Likelihood of reporting a negative economic impact or lack of cash.

Table 4.2. Relationship between financial literacy, financial account holding and digitalisation (pre-pandemic) and the changes in digitalisation of MSMEs

Likelihood of reporting an increase in digital activities.

Table 4.3. Access to credit

Likelihood that a loan application was accepted (if requested).

Table 4.4. Access to government support during the COVID-19 crisis

Likelihood that the business owner used any type of government support, that the business owner was not aware of government support and that government support was not needed.

5 Concluding remarks

The results presented in this report confirmed existing evidence that MSMEs have been severely hit by the COVID-19 crisis, and have shed new light on the extent to which the impact of the crisis has varied not only in term of sectors and size, but also in relation to the financial literacy and digitalisation of MSMEs. Many MSME owners have had to use their financial skills, develop new financial management strategies, and adapt their business to a greater digitalisation in order to cope with the challenges posed by the pandemic.

Building on the results of the survey, the following paragraphs provide some concluding remarks, for G20 and non-G20 economies alike, to consider now and in the future.

Continuing to collect and analyse evidence on the financial literacy, financial inclusion and digitalisation of MSMEs

The G20 and OECD member countries, including through the G20/OECD High-Level Principles on SME Financing and the OECD Recommendation on Financial Literacy, have recognised the importance of developing the financial skills of MSMEs and of the importance of assessing levels of financial literacy in the population, including among MSMEs, to identify gaps in knowledge and skills, and to monitor progress (G20/OECD, 2015[1]; OECD, 2020[6]; G20, 2020[4]). The OECD/INFE has also recognised these needs by developing an internationally relevant survey instrument (OECD, 2020[9]).

This report is clear evidence that G20 countries and non-G20 members are committed to collecting data about the financial literacy, financial inclusion and digitalisation of MSMEs in order to inform their policy interventions. Continuing to collect data using (appropriately updated versions of) the OECD/INFE survey is ever more important given the rapidly evolving business and financial landscape, and considering that the digitalisation of finance will continue to bring new opportunities and challenges to MSMEs.

Countries and economies that have not yet participated in this survey are welcome to do so in the future, not only to provide national baseline evidence but also to support the development of international evidence and analysis on needs, gaps and challenges of MSMEs in terms of financial literacy and digitalisation.

Enhancing MSMEs' financial literacy and digitalisation

The results of the report have corroborated the idea that the financial literacy of MSME owners may have had a role in mitigating the negative impact of the COVID-19 crisis, as financial literacy was associated, at least in some countries, with a lower likelihood of reporting a negative impact and lacking cash during the pandemic. It also appears that financial literacy may have been related to a reduced need of resorting to the relief measures put in place by governments, and with greater awareness of government measures.

The report has also shown that many MSMEs embraced digital innovations during the COVID-19 crisis, both in their use of financial products and services, and in relation to promoting and selling their own products and services. The results of Chapter 3 also suggest that MSMEs that were negatively affected

have been those that stepped up their digital activities the most, possibly as a response to the restrictions imposed by governments to contain the pandemic and as a way to continue business activities under lockdowns.

Continuing to support the financial literacy of MSME owners and MSME digitalisation are likely to remain important elements to support the financial resilience of MSMEs now and in the future, to help them navigate the changing financial environment and weather future shocks.

Addressing the needs of the most vulnerable MSMEs

As summarised in Box 1, Box 2 and Box 3, the financial literacy, digitalisation and COVID-19 impact of MSMEs have varied significantly in terms of business size and sector, as well as in terms of the gender of the owner. The report also discussed heterogeneity of the results in terms of the level of experience and educational attainment of the business owner. While this international report focuses on the main characteristics of the business and its owner, the survey allows policy makers and researchers and to conduct more fine grained analyses looking at a richer set of factors.

Policy interventions for MSMEs, including financial education ones, need to take these aspects into account in order to address the needs of different subgroups of MSMEs. Looking at the immediate consequences of the COVID-19 crisis, female-headed MSMEs, micro businesses (up to 4 people) and MSMEs working in severely affected sectors (and especially those operating in accommodation, food and beverage industry, and those providing other personal services) are likely to be among those in need of the greatest support. Going forward and looking beyond the COVID-19 pandemic, female-headed MSMEs and micro businesses are likely to need support to further develop their financial skills and digitalisation the most, as a way to strengthen the resilience of their business to future crises.

Box 1. Financial literacy, digitalisation and COVID-19 impact by gender

This box summarises results by gender throughout the report.

In some countries, male MSME owners display greater financial literacy and greater use of formal financial accounts than female owners, after taking into account other personal and business characteristics:

- Male MSME owners have higher **financial literacy** than female owners in Brazil, China, Mexico, the Netherlands and Peru, while there are no gender differences in financial literacy in the remaining participating countries. In no country financial literacy is higher for female MSME owners than for male ones.
- In Georgia, Mexico, Russia and Saudi Arabia, male MSME owners are more likely than female owners to hold a **traditional financial account** for the business. In Germany, Italy, Mexico and Saudi Arabia, men-owned businesses are more likely than female-owned businesses to have a **digital financial account**. In no participating country female owners are more likely than male owners to hold a traditional or digital financial account.

On average across G20 countries, after taking into account other characteristics of the business and the owner:

- Male-headed MSMEs were less likely than female-headed ones to report a **negative impact and a lack of cash** from the COVID-19 crisis.
- MSMEs owned by men were more likely than female-owned ones to **have increased their digital activities related to financial products and service**, and digital activities overall, during the pandemic.

Box 2. Financial literacy, digitalisation and COVID-19 impact by business size

This box summarises results by business size (number of people working in the business) throughout the report. On average across G20 countries, after taking into account other characteristics of the business and the owner:

- Owners of larger MSMEs have higher **financial literacy** than owners of smaller ones.
- Larger MSMEs are more likely than smaller ones to hold a **traditional financial** account.
- Larger MSMEs are more likely than smaller ones to engage in **digital activities**.
- Larger MSMEs were less likely than smaller ones to report a **negative impact and a lack of cash**.
- Larger MSMEs were more likely than smaller ones to have **stepped up their digitalisation during the pandemic.**

Box 3. Financial literacy, digitalisation and COVID-19 impact by sector

This box summarises results by sector of activity throughout the report. On average across G20 countries, after taking into account other characteristics of the business and the owner:

- MSMEs providing personal services and those in information and communication are more likely to have a **digital financial account** than MSMEs in the manufacturing industry.
- **Pre-pandemic digitalisation** was higher in businesses working in accommodation, food and beverage services, and in information and communication sectors, compared to manufacturing.
- MSMEs operating in accommodation, food and beverage services, those providing other personal services, and in those in construction and real estate, were more likely to report a **negative economic impact and/or a lack of cash** than MSMEs in manufacturing.
- **Increases in sales-related digital activities during the pandemic** have been more likely among MSMEs operating in wholesale and retail trade, in the accommodation, food and beverage industry, in personal services, and in information and communication, compared to MSMEs working in manufacturing.

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Annex A. Sample description

Tables including a description of the sample in each participating country in terms of the main characteristics of the business and the owner are available at:

https://www.oecd.org/daf/fin/financial-education/G20-OECD-INFE-report-navigating-the-storm-tables-figures.xlsx

Annex B. Methodology

Table A B.1. Timing and method of data collection

Information based on country reports.

Country	Sample size	Timing of data collection	Method of data collection
Brazil	1011	26 May to 21 June 2021	Telephone survey (CATI)
China	2500	2 April to 11 May 2021	Mixed methods
France	1002	31 March to 21 April 2021	Telephone survey
Georgia	1002	26 June to 18 July 2021	Telephone and Face-to-face survey
Germany	2366	10 to 26 March 2021	Online survey
Italy	2076	March to May 2021	Almost all respondents (99 per cent) used a dedicated online platform. Other respondents chose to fill out a (faxed) paper format of the questionnaire
Mexico	753	2 August to 10 September 2021	Telephone survey
Netherlands	1151	9 May to 4 June 2021	Online survey (CAWI)
Peru	600	19 May to 30 August 2021	Mixed methods, mainly through telephone, virtual or in person
Portugal	1541	13 July to 1 August 2021	Online survey
Russia	1023	6 to 21 July 2021	Mix methods: telephone and online survey (CATI + CAWI)
Saudi Arabia	1217 (Sample size for MSMEs with up to 49 people: 1094)	21 April to 23 June 2021	Face-to-face survey
Spain	1120	22 March to 21 May 2021	Online survey
Turkey	1050	16 April to 17 May 2021	Mixed methods: face-to-face, telephone and online survey (CAPI, CATI and Online)

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