Entrepreneurship during the Covid-19 Pandemic: A global study of entrepreneurs’ challenges, resilience, and well-being

Ute Stephan, Przemysław Zbierowski, Ana Pérez-Luño and Anna Klausen
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A global study of entrepreneurs’ challenges, resilience, and well-being

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Summary

Small and medium-sized enterprises (SMEs including the self-employed) account for 90% of businesses globally and provide 70% of employment worldwide. These businesses, typically entrepreneur led, are threatened by the Covid–19 pandemic, meaning that millions of jobs are at risk. This report presents insights from a global study conducted during the pandemic in 2020. We surveyed over 5,000 entrepreneurs in 23 countries that represent 3/4 of the world’s economic output.

Most entrepreneurs faced significant challenges threatening the survival of their businesses. We also see resilience in how entrepreneurs navigated the crisis through being agile, adaptive, and exploring new opportunities, utilizing government support, giving back to society, and even harbouring growth ambitions beyond the pandemic.

Entrepreneurs’ mental well-being dropped by 12% in the pandemic presenting another threat to their businesses. We chart stressors and well-being resources including social support and self-care strategies that entrepreneurs engaged to stay productive.

We close the report (1) by reflecting on five trends for the post-Covid economy and formulate actionable policy recommendations of how entrepreneurs and SMEs can be supported in light of these trends (digitalisation; ‘local’ focus, inclusive business models, developing personal and business resilience), and (2) offer five practical steps for entrepreneurs to protect their well-being.

King’s Business School was established in 2017. Our thinking helps organisations navigate the complexities of global challenges, valuing profit with purpose, success with sustainability through real-world research, impact and engagement. Its innovative global research programme connects with businesses, governments, policy bodies and civil society organisations to identify knowledge gaps, build alliances for joint problem-solving and share state-of-the-art research findings. Learning from these deep-external networks, King’s Business School research is addressing today’s grand challenges associated with new technologies, globalisation, inequalities, sustainability and rapid change in product and finance markets.

The Covid–19 crisis has caused enormous distress around the world and demands urgent research to interrogate how it has impacted upon, and how it will continue to reshape, multiple features of economy and society. We hope that this series of KBS Covid–19 Research Impact Papers will provoke new debate among our UK and international partners in business, civil society and government. We look forward to building new ideas for policy and practice that foster a more inclusive, sustainable and responsible future.
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### Lead-authors

(See details on page 1)
How entrepreneurs adapted their businesses to the pandemic

Entrepreneurs are known for their agility and this was also true during the Covid-19 pandemic: 68% of entrepreneurs surveyed adapted their plans for the business and almost 40% of the entrepreneurs saw new business opportunities during the pandemic. These opportunities were diverse and related to digitalisation, health & wellbeing, local vs. global business focus, sustainability and new business models.

Nearly a third of all businesses surveyed already had online trading and/or delivery in place pre-Covid and thus were well prepared for the pandemic in this regard. 21% expanded their business into online trading and/or delivery in response to the pandemic. 48% of businesses did not use online trading and/or delivery options.

Three out of five entrepreneurs (62%) applied for government support. However, availability of government support programmes differed across countries or entrepreneurs were ineligible to access them (for instance, younger firms lacking a track-record of trading).

Long-term opportunities and realities

Entrepreneurs looked to the future with confidence with nearly half (48%) seeing their business surviving the crisis eventually and almost two in five (38%) expecting their business to grow and be even larger than pre-pandemic. Over 70% of entrepreneurs expected to create new jobs over the next 5 years. Past research indicates that such expectations are a good predictor of actual employment growth over time.

Nearly half of entrepreneurs (46%) believed that the pandemic could have a positive impact on their business in the long-term. Opportunities related to shifts in customer preferences due to the pandemic and ranged from business acceleration, often tied to online services, to cost savings from remote working. Still other entrepreneurs revised their business offerings and the business model itself.

Despite this optimism, many entrepreneurs are in a precarious position: 48% were planning for the next 12 months only and expected to run out of money after 8 months if the current situation continued.

80%-90% of flower business collapsed with blink of an eye

Zahir Uddin Md. Babur, Founder and CEO, Fiber Agro Ltd, Bangladesh

Many companies implemented digital transformations in their business models

Philippe Besançon Varela, Founder and CEO of CFOremoto, Chile

How entrepreneurs' businesses were affected by the pandemic

A staggering 61% of entrepreneurs saw the very existence of their businesses under threat due to a significant decrease in trading activities, although so far lay-offs only took place in 28% of SMEs. This means, nevertheless, that millions of jobs are at risk.

We surveyed 5,206 entrepreneurs (3,796 SME owner-managers and 1,410 self-employed) in 23 countries (mostly between April and August 2020) to map the impact of the pandemic on their businesses and the entrepreneurs personally. The 23 countries represent three quarters of the world’s GDP and over half of the world’s population.

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My own working day quickly extended to 18 hours, though I tried to limit it to 12 hours on Sundays

Bob Drummond, co-founder, Chairman, and CRO of Kami, New Zealand

Personal impact of the pandemic on entrepreneurs' mental well-being

The pandemic put not only strain on entrepreneurs’ businesses, it also increased uncertainty and health-related worries, and restricted social contact and support, all of which diminished entrepreneurs’ mental well-being. Their life satisfaction and experience of stress worsened during the crisis. For instance, entrepreneurs’ well-being (life satisfaction) during the pandemic was on average 12% lower than before the pandemic.

Two fifths of entrepreneurs (40%) reported high levels of uncertainty and unpredictability for their businesses.

Most entrepreneurs worried about their own and their family’s health (58%), fewer were worried about insufficient medical care (34% with substantial variation across countries).

Nearly half of entrepreneurs (49%) were frustrated by the restricted social contact due to the pandemic. On a more positive note, and despite high levels of remote working, only 15% of entrepreneurs reported loneliness at work.

Encouragingly, entrepreneurs reported good levels of social support from those around them (family, friends, other entrepreneurs). Over half (53%) experienced good emotional support (others being willing to listen to their work-related problems most or all of the time). Yet less than a third were able to draw on practical hands-on support (26%) and informal financial help (48%, with substantial variation across countries).

About half of entrepreneurs engaged in self-care, i.e., daily strategies to help them unwind, recover from stress and protect their well-being and productivity. More than half of entrepreneurs reported regularly eating healthy food (66%), sufficient sleep (65%), and nearly half exercised regularly (47%). Half of entrepreneurs made space to recovery mentally from work (50%, e.g., by switching off), while roughly a third found comfort in spiritual and religious beliefs (32%).

In terms of their capacity to be resilient, nearly two thirds of entrepreneurs (65%) felt that they can easily bounce back from adversity and cope with the setbacks, uncertainty, and stress that the pandemic entail.

Societal engagement

Even though for most the survival of their business was at stake, 43% of entrepreneurs volunteered their personal time and more than a half (51%) volunteered their business’ services/products for good causes (helping other businesses, charities, or public workers). A large share did so because of the pandemic (41% in terms of personal time and 44% in terms of business’ services/products).

Over a third of entrepreneurs (39%) reported high social and environmental performance in terms of addressing social and environmental issues through their business.

Conclusion

Our study paints a picture of short- and long-term opportunities but also vulnerability of SMEs and entrepreneurs in the Covid-19 pandemic. Many face real challenges to sustain their businesses going forward whilst also struggling personally with their mental health. Yet there is also evidence of resilience, for instance, in terms of identifying new business opportunities, positive long-term outlook for the business, and the personal resilience of entrepreneurs to cope with the uncertainty, stress and changes that the pandemic brought.

Building on the insights from the survey we reframe the trends for the post-Covid economy and suggest targeted support measures and policy recommendations to help entrepreneurs and SMEs thrive.

Two cross-cutting general trends relate to (1) Personal resilience: an increased awareness of mental well-being, both for entrepreneurs and staff, and as a business opportunity, and (2) Business resilience including developing capabilities to be agile, to spot and exploit new opportunities.

Three specific trends concern (3) Accelerated digitalisation; (4) A renewed focus on ‘local’ concerns and economy, and (5) Inclusive and sustainable business models.

SMEs and entrepreneurs hold much potential to help ‘build back better’ a more inclusive and greener post-Covid global economy.

We conclude the report by discussing five practical steps that entrepreneurs can take to support their well-being and build personal resilience. These draw on insights from the science of well-being, research on entrepreneurs’ stress, and the findings from this study.
Introduction

Entrepreneurship is important to the global economy. Small and medium-sized businesses (SMEs) are estimated to represent 90% of businesses globally (99.8% in the European Union and 90.9% in the US). They provide 70% of total employment worldwide and are a major contributor to GDP (about 50% in OECD countries, 40% in emerging economies).

These businesses, often entrepreneur led, are particularly vulnerable to crises, because they typically have fewer resources than large businesses. Yet job losses in SMEs often go unnoticed in the news as they are much less attention-capturing than job losses in large businesses—even though in the aggregate job losses in SMEs are bound to be larger. Given the scale of the Covid-19 pandemic, understanding the experience of entrepreneurs in these difficult times as well as the outlook they have for what lies ahead in the short- and long-term are critical to sustain and support this vital part of the global economy.

This report draws on data collected from 5,206 entrepreneurs in 23 countries. To be included in the study entrepreneurs had to be CEOs or manage their businesses on a daily basis and they had to own all or part of their business. We included both established and start-up entrepreneurs leading business and they had to own all or part of their business. We included both established and start-up entrepreneurs leading business of different sizes with a maximum of 250 employees, and more likely to be smaller (13.1 employees) than those covered by GEM (4.25 employees), but of similar age (11.2 years old vs. GEM 11.1 years old). Entrepreneurs in our study are slightly older (45.6 years old in our sample, 44.2 years old in GEM sample), more educated (75.6% in our sample hold any university degree compared to 61.4%), manufacturing (13.6% compared to 27.2%) and consumer-oriented services (30.9% compared to 40.4% in GEM) industries. The businesses in our sample are larger (13.1 employees) than those covered by GEM (4.25 employees), but of similar age (11.2 years old vs. GEM 11.1 years old). Entrepreneurs in our study are slightly older (45.6 years old in our sample, 44.2 years old in GEM sample), more educated (75.6% in our sample hold any university degree compared to 29.0% in GEM), and more likely to be men compared to GEM samples of entrepreneurs (68.2% compared to 63.1%). The representativeness of our sample is summarized in the Appendix for sample size by country.

We surveyed entrepreneurs with the help of entrepreneur associations, chambers of commerce and by directly reaching out to SME owner-managers and the self-employed via email. We assessed the representativeness of our sample to capture the impact of the pandemic.

Insights from 5,206 entrepreneurs from 23 countries around the world

Overview

Chapter 1 presents how the Covid-19 pandemic affected entrepreneurs and SMEs. This includes loss in trading, reduction of employment, main challenges, and remote working.

Chapter 2 presents entrepreneurs’ reactions to the pandemic in their business. This includes adaptation of strategic plans, searching out new business opportunities, expansion of online business and use of government support offers.

Chapter 3 offers a view of the long-term opportunities for growth, survival prospects and challenges that lie ahead for entrepreneurs and SMEs.

Chapter 4 explores the mental well-being of entrepreneurs in the pandemic, which underpins their personal resilience and ultimately the resilience of their businesses. Chapter 4.1 documents a drop in well-being, experienced stress and stressors such as uncertainty and loneliness. Chapter 4.2 explores well-being resources and ways of coping including social support available to entrepreneurs and daily self-care strategies to cope with stress.

Chapter 5 delves into entrepreneurs’ societal engagement including personal volunteering, volunteering their businesses’ services/products, and the social and environmental performance of their businesses.

Chapter 6 reflects on trends for the post-Covid economy that emerged from our analyses and how entrepreneurs may be supported based on our findings. It includes specific policy recommendations derived from our findings.

Chapter 7 summarises the implications of our findings for entrepreneurs into five easy to implement steps of how they can protect and enhance their mental well-being.

How to read this report

Depending on the specific questions, we report information in three different ways. For questions that were answered ‘yes’ or ‘no’, we present the percentages of ‘yes’ answers.

Some questions asked entrepreneurs to rate their responses on 0- to 6-point scales (e.g., from 1 ‘strongly disagree’ to 6 ‘strongly agree’), hence we present the average values. Few questions presented multiple answer categories (e.g., ‘expanded to online trading’, ‘online trading already existed’), here we present ‘stacked charts’ to provide more detailed information. Unless otherwise stated, most questions asked entrepreneurs to refer to the last month in their responses to capture the impact of the pandemic.

All graphs and country comparisons take differences in sample composition across countries and alternative explanations into account by adjusting and controlling for the education, age and gender of the entrepreneur, industry sectors, age, size and profitability of the business. The only exceptions are stacked charts of answers with multiple categories. We present data as country averages with 95% confidence intervals (represented by the black bars at the top of each column). Statistically significant country differences exist between countries where these confidence intervals do not overlap.

For life satisfaction (chapter 4), the comparative data was taken from World Value Survey, which meant we could adjust the results only for education, age and gender of the entrepreneur.

Some information is missing for a few countries, either because not all questions were asked due to space constraints in the original survey or because entrepreneurs did not respond to a particular question (missing data).

Methodology

This report draws on data collected from 5,206 entrepreneurs across 23 countries between April 2020 and the end of August 2020. In two countries data collection continued up to December 2020 (USA) and January 2021 (Slovakia).

We found few substantial differences between the early and late responses, and hence combined the data in this report. We surveyed entrepreneurs with the help of entrepreneur associations, chambers of commerce and by directly reaching out to SME owner-managers and the self-employed via email.

We asked associations to distribute invitations to participate in our online survey to their members. Entrepreneurs were not compensated for taking part in the survey. Instead, they were offered feedback on their psychological resources to navigate stress and resilience upon completing the survey.

We assessed the representativeness of our sample of entrepreneurs for each country in our study (see Appendix). We compared our sample to data from the Global Entrepreneurship Monitor (GEM) – the largest research project on entrepreneurship in the world which surveys representative household samples of entrepreneurs. The full comparison and sample description are available upon request. To summarize, businesses in our sample trade more often in the business service sector (53.3%) compared to GEM (21.9%), are less frequently active in extractive (2.6% compared to 6.9%), manufacturing (13.6% compared to 27.2%) and consumer-oriented services (30.9% compared to 40.4% in GEM) industries. The businesses in our sample are larger (13.1 employees) than those covered by GEM (4.25 employees), but of similar age (11.2 years old vs. GEM 11.1 years old). Entrepreneurs in our study are slightly older (45.6 years old in our sample, 44.2 years old in GEM sample), more educated (75.6% in our sample hold any university degree compared to 29.0% in GEM), and more likely to be men compared to GEM samples of entrepreneurs (68.2% compared to 63.1%).

We compared our sample to the GEM samples with differences in sample size or statistical power in our study ranges from 84 respondents in Japan to 1081 respondents in USA (see Appendix for sample size by country).
1. How entrepreneurs’ businesses were affected by the pandemic

This section discusses how the Covid-19 pandemic impacted entrepreneurs. Although some entrepreneurs are coping well, most entrepreneurs report that their business was negatively affected by the pandemic and are worried about the survival of their business. Reduced trading was the most prominent challenge, however, entrepreneurs also experienced delays in payments and encountered problems with paying for the upkeep of their business. As a result, many entrepreneurs had to lay off their staff.

11. Impact on entrepreneurs’ businesses

Worryingly, more than half of entrepreneurs overall (61%) said that the very existence of their business was threatened by the pandemic. The countries with the highest share of entrepreneurs seeing the existence of their business threatened by Covid-19 were China (95.5%), Bangladesh (91.6%) and Pakistan (71.7%), while entrepreneurs in Norway (40.8%), Poland (45.5%) and Denmark (47.8%) were the most optimistic in our study. Even in these countries, however, over 40% of entrepreneurs viewed their businesses under existential threat. This means that in our sample alone, the jobs of 3,162 entrepreneurs and their 41,578 employees are at risk.

In line with these findings, the majority of entrepreneurs (74.9%) in our study reported a loss in trading. Figure 1.2 shows that most entrepreneurs in China (99.4%), Germany (92.7%) and Bangladesh (92.4%) encountered losses in sales, while entrepreneurs located in Norway (57.8%), Italy (60.8%) and Poland (64.2%) reported somewhat less reduction in trading (Figure 1.1). Entrepreneurs described this loss in trading as ‘Volume has dropped for now’ (start-up entrepreneur from Australia), ‘reduction of business volume / reduction of results’ (SME entrepreneur from Bosnia and Herzegovina), ‘I have lost all booked clients – training company’ (self-employed from Canada) and ‘Many clients have put projects on hold, reduced their scope or slowed the project down’ (SME entrepreneur from Canada).

The ups-and-downs of demand in the construction industry through the pandemic – insights from Poland

Michał Wałkuski, Founder and CEO of ConstructoR, Poland

‘The main profile of our business is construction design – the beginning of most of the property investment projects. The time of the pandemic, since March 2020 was very diverse, in a way reflecting the emotions and expectations of investors. At the beginning of the pandemic most of our clients suspended or slowed down their projects. We saw a bit of movement around summer when we experienced the increase in optimism and hope that things will be back to normal soon. During fall and winter, despite the increase in Covid new cases numbers, we saw that businesses around us are trying to get back to normal condition and the pandemic became more of a side issue. Now, we see the big increase in demand for our services, even though that time of year was always difficult for us, as the investment budgets from last year were already closed and new ones were not set yet. We are trying to predict the long-term behaviours of investors and learn if the increased demand is the effect of withholding projects in 2020 or investing the government support money in order not to keep them in cash. In our company, we successfully maintain the continuity of work and employment.’

At a glance: How entrepreneurs were affected

61% of entrepreneurs saw the very existence of their business threatened by the pandemic.

Three quarters of entrepreneurs in our study reported a loss in trading.

28% of entrepreneurs reported problems in paying for the upkeep of their business.

27% of entrepreneurs experienced delays in receiving payments from customers.

20% of entrepreneurs indicated no problems in their business.

Figure 1.1. Existence of business under threat

Is the existence of your business threatened by the Covid-19 pandemic? (% Yes, N = 4751)

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Figure 1.2. Loss in trading

Loss in trading (% Yes, N = 4720)

The ups-and-downs of demand in the construction industry through the pandemic – insights from Poland

Michał Wałkuski, Founder and CEO of ConstructoR, Poland

‘The main profile of our business is construction design – the beginning of most of the property investment projects. The time of the pandemic, since March 2020 was very diverse, in a way reflecting the emotions and expectations of investors. At the beginning of the pandemic most of our clients suspended or slowed down their projects. We saw a bit of movement around summer when we experienced the increase in optimism and hope that things will be back to normal soon. During fall and winter, despite the increase in Covid new cases numbers, we saw that businesses around us are trying to get back to normal condition and the pandemic became more of a side issue. Now, we see the big increase in demand for our services, even though that time of year was always difficult for us, as the investment budgets from last year were already closed and new ones were not set yet. We are trying to predict the long-term behaviours of investors and learn if the increased demand is the effect of withholding projects in 2020 or investing the government support money in order not to keep them in cash. In our company, we successfully maintain the continuity of work and employment.’

ConstructoR was founded in 2006 and employs 5 people. The main profile of the firm is architectural-construction design, however, we accompany the investors at every stage of their construction projects, from the concept up to finishing the construction work.
Compared to the loss of sales, job losses had not yet materialized for most businesses in our sample. Most entrepreneurs (72.1% overall) had not laid off staff yet, although 27.9% had already done so. According to Figure 1.3, less than 15% of entrepreneurs in France (0.04%), Italy (7.4%) and New Zealand (14.7%) had to lay off staff, whereas more than 40% of entrepreneurs in Norway (47.2%), Japan (45.3%) and China (40.6%) reported that their business reduced employment.

In many countries, governments made subsidies available to avoid lay-offs and support entrepreneurs to keep their staff employed. To explore whether this was the reason for the relatively speaking low levels of staff redundancies despite very high level of trading reduction (Figure 1.3 vs. 1.2), we asked whether entrepreneurs had applied for government support to furlough employees (i.e., to cover non-working employees’ salaries by government support). Overall, 28.4% of entrepreneurs in our study reported that they applied for support to furlough employees. As shown in Figure 1.4, over 60% of entrepreneurs in Australia (62.8%) and the USA (62.6%) applied for support to furlough employees, while few entrepreneurs in India (0.7%), Bangladesh (7.4%) and Japan (8.1%) made similar applications for government support. Those country differences should, however, be interpreted with caution as the availability and attractiveness of furlough schemes also differed significantly across countries. In Pakistan, for example, the furloughing scheme was little promoted, had high administrative requirements and was not accessible to entrepreneurs in the large informal economy. Hence, few entrepreneurs used the scheme (see Figure 1.4).

I could not leave my workers and other people involved in my business and tried to support them according to my capability

Zahir Uddin Md. Babor, Founder and CEO, Fiber Agro Ltd, Bangladesh

No blossoming in the pandemic: ‘80%–90% of flower business collapsed with blink of an eye’ – insights from Bangladesh

Zahir Uddin Md. Babor, Founder and CEO, Fiber Agro Ltd & Colors Event Management, Organizing Secretary, Bangladesh Flower Society, Bangladesh

‘The Covid-19 pandemic dealt a huge blow to agricultural industries, and the flower industry is no exception. As a grower cum retailer, it was tough time for me as I could not bring my flower to markets as all sort of transportation was locked down and consumers weren’t able to collect flower directly from field/farm. Most of the retail flower shop has stopped and many events featuring flowers prominently have been cancelled. It was a double loss for me because at one side, I could not sell my flower to markets and consumers; and on the other side I had to harvest all flowers and dump them at my own cost. 80%–90% of flower business collapsed with blink of an eye. In my 12 years of experience I have never seen such a financial impact on flower business. But as a responsible businessman I could not leave my workers and other people involved in my business and tried to support them according to my capability. 2020 was full of uncertainty and hopelessness to me and I would like to forget this year from my memory.’
We asked entrepreneurs about the main challenges they were facing during the pandemic including ‘I can no longer pay my suppliers’, ‘I can no longer pay my employees’, ‘I will soon be unable to pay my employees’, ‘I have problems paying for the upkeep of my business (e.g., loan repayments, rent, utilities, insurance)’, ‘My customers don’t pay me or pay with long delays’, ‘I cannot purchase necessary supplies or materials for my businesses’ and ‘Nothing has changed’. We present the three most frequently reported challenges across countries: late paying customers, problems paying for the upkeep of the business, and, surprisingly, ‘nothing has changed’.

Over a quarter of entrepreneurs (26.8% overall) indicated non- or late-paying customers as the main problem for their business, making it the most common challenge during the pandemic. As shown in Figure 1.5, entrepreneurs in Germany (44.5%), China (40.7%) and Bangladesh (37.7%) reported most problems in paying for the upkeep of their business, whereas fewer than 15% of entrepreneurs in Sweden (13.9%), New Zealand (13.5%) and Denmark (10.8%) reported this as a problem.

Lastly, 25.9% of all entrepreneurs said that nothing had changed. Especially, entrepreneurs in Spain (41.5%), New Zealand (38.8%) and Italy (37.1%) reported no significant changes to their business during the first phase of the pandemic (Figure 1.7). On the other hand, fewer than 20% of entrepreneurs in Bangladesh (19.5%), Chile (18.6%), Germany (17.6%), Pakistan (17.4%), Bosnia and Herzegovina (15.2%) and China (15%) said that nothing had changed.
1.3. Remote working

One of the main changes of the pandemic was a widespread increase in remote working. This was no different from entrepreneurs, including challenges related to combining remote working with childcare. Over a fifth of entrepreneurs (22.6%) in our study had to start caring for their children at home because schools and nurseries closed. Some noted that their main problem in the business was ‘restricted hours due to kids being off school’ (SME entrepreneur from the UK).

In terms of changes to the entrepreneurs’ main place of work due to the pandemic, a third of entrepreneurs in our study (32.5%) said that they were still working at their business’ premises and thus that no change of their place of work had occurred. As shown in Figure 1.8, most entrepreneurs who reported no change to place of work during the pandemic were located in Bosnia and Herzegovina (81.6%), Norway (58.5%) and France (55.9%).

Less than half of all entrepreneurs (42.1%) increased home working or newly started to work from home. Over a fifth of entrepreneurs (21.3%) indicated that they used to work partly from home but now work more from home due to the pandemic. This specifically applied to entrepreneurs based in Italy (32.4%) and China (31.8%), where more than 30% of entrepreneurs increased the amount of time spent in home-office (Figure 1.8). Another fifth (20.8%) of entrepreneurs solely started to work from home due to the pandemic. As shown in Figure 1.8, this was especially pronounced in Chile (45.4%) and India (47.2%), where over 40% of entrepreneurs newly switched to home-office due to the pandemic. While some entrepreneurs noted the positives ‘doing all of my meetings on Zoom saving loads of travelling time’ (SME entrepreneur from the UK), others also saw ‘reduced productivity due to working from home.' (SME entrepreneur from the UK).

In terms of changes to the entrepreneurs’ main place of work due to the pandemic, a third of entrepreneurs in our study (32.5%) said that they were still working at their business’ premises and thus that no change of their place of work had occurred. As shown in Figure 1.8, most entrepreneurs who reported no change to place of work during the pandemic were located in Bosnia and Herzegovina (81.6%), Norway (58.5%) and France (55.9%).

A further fifth (20.1%) of all entrepreneurs reported that they already worked from home before the pandemic. According to Figure 1.8, the highest number of entrepreneurs who were already working remotely in home-office prior to Covid-19 can be found in Australia (40%), New Zealand (38.5%) and Canada (30.6%).

Lastly, 4.4% of entrepreneurs in our sample were unable to work at all due to the Covid-19 pandemic. As illustrated in Figure 1.8, this was the case especially for entrepreneurs in Germany (26.4%) and Norway (23.3%), whereas none of the entrepreneurs in Canada, Poland and Denmark were facing this situation.

Sure, there have been challenges, but it’s those troughs that let you appreciate the peaks!

Cole Powers, Co-Founder of IntelliCulture, Canada
2. How entrepreneurs adapted their business to the pandemic

In this section, we outline how entrepreneurs reacted to the pandemic. Firstly, we examine how entrepreneurs adapted their business in terms of changing plans for their business in response to the pandemic, whether they sought out new business opportunities during the crisis, and whether they expanded to online trading. Secondly, we look at the use of government support.

2.1. Adaptation of the business: planning, opportunities and digitalisation

Although businesses navigate the pandemic in different ways, there is evidence that an agile stance is beneficial. For instance, research shows that businesses that weathered the 2008 financial crisis well, acted in an agile manner by changing plans for their business, seeking out new opportunities (e.g., targeting new markets and customers) and often significantly changing the way they worked.

We consider how proactive entrepreneurs were in changing plans for their business in response to the pandemic, whether they sought out new opportunities, and how they adapted in terms of online trading.

The majority of entrepreneurs adapted to the pandemic by changing their business planning (68.2%). Figure 2.1 shows that more than 80% of entrepreneurs in Brazil (81.6%) and Chile (81.1%) developed new or alternative plans, while entrepreneurs in Slovakia (52.4%), Norway (56.2%) and Denmark (56.5%) were relatively less agile in adjusting their business’ plans.

While almost 70% of the entrepreneurs in our sample reported changes of plans to their business in response to the pandemic, not all of these changes were made in recognition of new business opportunities. Overall, 39.4% of all entrepreneurs reported that they encountered new business opportunities during the crisis.

Figure 2.2 shows that most of the entrepreneurs who reported recognizing new business opportunities were based in Australia (66.1%), Chile (54.2%) and Japan (54.1%). Australia and Japan are the only two countries where the share of entrepreneurs recognizing new opportunities almost matches the share of those who changed their business plans. The lowest number of entrepreneurs who agreed that there were new business opportunities were located in: Bangladesh (9.5%), China (18.7%) and Pakistan (19%). Entrepreneurs in these countries changed plans but without recognizing new opportunities. The latter might be challenging for the resilience of their businesses going forward. The pandemic has substantially altered the economy and some of these alterations are likely there to stay (see also chapter 6).

Thus, mere adaptations might be not be sufficient to ensure businesses thrive in the long run. In fact, further analyses with regard to well-being suggest that changing plans might be more of an emergency reaction and stressful, while finding new opportunities gives a boost to entrepreneurs’ well-being as well as their long-term outlook for the business (job growth ambitions, reported in chapter 3).
The nature of new business opportunities in the pandemic

Over a third of entrepreneurs (35%) in our study shared more detailed information about the nature of the business opportunities that they recognized with us. Overall, these opportunities helped accelerate the business and fall broadly into five categories: digitalisation, health & well-being, local vs. global, sustainability and new business models & repostioning of the business. Such opportunities help entrepreneurs to understand how entrepreneurs in our sample saw a 30% growth over the first lockdown, while others noted that they had expanded their product/services to new types of customers (especially e-commerce clients). We describe each of the opportunities in turn.

Digitalisation: This included an increase and switch to online products, service, and delivery, but also opportunities for business services related to online security, digital payments, and marketing. Some of these opportunities included deploying artificial intelligence. Entrepreneurs also reported greater customer awareness, an increase in demand for online offerings and delivery. Finally, entrepreneurs reported opportunities related to enabling others to work remotely, to achieve remote teambuilding and generally solutions that would enhance audience engagement online. Opportunities that were mentioned include the ‘Development of online educational courses/services’ (self-employed from Germany), ‘Online training and assessment’ (SME entrepreneur from India), ‘Acceptance of becoming a fully virtual company’ (self-employed from Canada), ‘Direct sales through TikTok’ (SME entrepreneur from China), ‘I believe that demand will increase in the next six months due to digitization needs’ (self-employed from Spain), ‘The clients who did not believe in Online now they are also exploring business online’ (SME entrepreneur from India), ‘Customers are looking for new online solutions’ (SME entrepreneur from Poland), ‘I have taken my services on virtual platforms and the response is quite positive’ (self-employed from Pakistan), ‘A lot of new online connections, increase in social awareness’ (self-employed from Poland), ‘Accelerators are now online, eliminating the costs to travel’ (portfolio entrepreneur from Canada), ‘Virtual event production, crisis communication for entities affected by Covid-19’ (SME entrepreneur from the USA).

Health & well-being: This opportunity entailed Covid-related offerings related to physical health such as personal protective equipment, Covid tests, vaccine development, disinfection/sanitation products and more generally offerings along the medical supply-chain. Entrepreneurs also saw opportunities directly related to a growth of health-care services and telemedicine. Yet entrepreneurs also identified opportunities related to mental health and well-being including greater awareness of customers about mental well-being and thus demand for well-being-related offerings (e.g., tele-counselling), an interest in stress-mitigating offers and offerings that helped address social isolation. Examples of these health and well-being opportunities mentioned by entrepreneurs were, for instance, related to digitally supported health care services such as ‘Increase in potential telemedical services’ (self-employed from Poland), ‘Diffusion of telemedicine’ (start-up entrepreneur from Italy), ‘telehealth’ (self-employed from the USA), ‘Collective awareness of the usefulness of digital health’ (start-up entrepreneur from Italy), ‘Using artificial intelligence for health care and chatbot’ (SME entrepreneur from India), ‘Covid safety products’ (SME entrepreneur from Sweden), ‘There were also opportunities related to health equipment and Covid-safe products’ (SME entrepreneur from the USA), ‘Some of medical equipment demands suddenly increased’ (start-up-entrepreneur from India), as well as ‘Covid-specific biobanking of samples and data’ (SME entrepreneur from India).

Shift from global to local: While digitalisation is allowing many entrepreneurs to reach more (e.g., international) customers (discussed above), other entrepreneurs noted that the disruption of international business in the pandemic increased awareness of domestic markets, and demand for domestic manufacturing and supply-chains. For instance, there were efforts to reshood production processes to local markets instead of relying on international and overseas suppliers. Examples of opportunities related to the shift from global to local mentioned by entrepreneurs were, for instance, ‘new local farmer collaborations on selling their products to consumer’ (SME entrepreneur from Denmark), ‘Switching manufacturing to the UK’ (SME entrepreneur from the UK), ‘Closer proximity to local customers’ (self-employed from Brazil), ‘Consumer grocery delivery’ (start-up entrepreneur from the USA), ‘Assisting local businesses during the pandemic’ (start-up-entrepreneur from the USA), ‘rural farmer produce – waste to wealth’ (start-up-entrepreneur from India).

Sustainability and inclusion: While the increase of remote working was seen as presenting sustainability opportunities in terms of reduced commuting and travel, other entrepreneurs noted greater awareness around consumption including waste reduction and circular economy business models. Several noted how greater digitalisation can also help social inclusion by enabling cheaper access to services and products that may have been unaffordable before. Equally those in remote areas would find it easier to access services or events that would normally require great effort and cost in terms of travelling. The time of our survey also coincided with the Black Lives Matter movement and entrepreneurs noticed opportunities for more inclusive business models and offerings stemming from the greater awareness of racial inequalities and disadvantage. Examples given by entrepreneurs of opportunities related to sustainability were ‘Attention to waste’ (start-up entrepreneur from Italy), and ‘Circular economy and CSR’ will be at a greater level for sustainable development’ (start-up entrepreneur from Italy). Others noted ‘Pro bono consulting for Covid oriented companies’ (entrepreneur in the USA) as opportunities. Still others saw ‘Increasing market demand for bicycles and e-bikes’ (start-up entrepreneur from India) or were ‘Designing small-scale aquaculture systems as an alternative livelihood avenue, for labourers who recently reverse migrated due to Covid-19’ (start-up entrepreneur from India).

New business models & repostioning of the business: These opportunities typically related to developing new offerings such as consulting to help other businesses, that were given by entrepreneurs of opportunities related to new business models or repostioning were ‘Expanding into other businesses such as emergency prevention and control materials’ (self-employed from China), ‘I have developed and launched online courses to complement my on-the-spot lectures’ (SME entrepreneur from Sweden), ‘I reinvented my business by entering another channel (business thinking)’ (self-employed from Italy), ‘Increasing market demand for bicycles and e-bikes’ (start-up entrepreneur from India) as opportunities. Still others saw ‘Increasing market demand for bicycles and e-bikes’ (start-up entrepreneur from India) or were ‘Designing small-scale aquaculture systems as an alternative livelihood avenue, for labourers who recently reverse migrated due to Covid-19’ (start-up entrepreneur from India).

The upsides of digital: efficiency and new opportunities from the digital adaptation and transformation of business models

Philippe Besançon Varela, Founder and CEO of CFOremoto, Chile

‘We were severely impacted by the pandemic, especially during its first four months. Many of our customers suffered financially, which caused a dramatic reduction of sales for us. However, this shock created new opportunities that we had not envisioned. As a consequence of the pandemic, many companies implemented digital transformations in their business models. This brought us new customers that previously were not interested in our services. We now have a team that is smaller, more united and more agile. We have become more efficient because we no longer do on-site visits to customers… it is all at a distance. It is amazing for me to think that all these positive organizational changes would not have occurred had it not been for the pandemic. Of course, it has been a tough and painful time. Not being to see family and friends… but I count myself lucky as I have not lost people close to me to Covid-19.’
In terms of digitalisation of the business and specifically expansion of online trade and delivery, we found that nearly half of entrepreneurs in our study did not newly expand into online trading during the pandemic (48%). Especially businesses located in Bosnia and Herzegovina (78.9%), Germany (77.8%) and Sweden (75.9%) did not migrate their trading online (Figure 2.3). It is surprising that these countries also had fewer than 12% of businesses with existing online trading.

Nearly a third of all businesses (30.6%) already had existing online trading and/or delivery pre-Covid. A shown in Figure 2.3, the highest percentage of businesses which were already engaged in online trading prior to the pandemic were based in Australia (56.4%), the USA (45.5%), New Zealand (43.2%) and the UK (42.3%).

Lastly, a minority of entrepreneurs in our study (21.4%) newly expanded their business into online trading and/or delivery in response to the pandemic. Most entrepreneurs who newly migrated their business’ trading online were located in China (69.7%) and Colombia (44%), closely followed by Japan (38.9%). It should be noted that the result for Japan is based on few responses that we received to that question.

### Many employers have been forced to lay off staff, instead of recruiting

*Maria Mattson Mähl, CEO of AlphaCE, Sweden*

‘Digital’ does NOT compensate for lost business in recruitment – insights from Sweden

Maria Mattson Mähl, CEO of AlphaCE, Sweden

‘The pandemic has affected us a lot. Normally the physical meeting with a job seeker is central to getting to know them. Now we have been forced to meet them via Teams. The same applies to our meetings with employers. In addition to the digitalisation of our work processes many employers have been forced to lay off staff, instead of recruiting, and that has affected our possibilities to help unemployed people to find a job. At the same time 20-40% of the employers have been expanding their business and need help. Their recruitment process have been totally via Teams or other digital forum.’

AlphaCE started in 2012 and offers supportive initiatives aimed at helping jobseekers into the labour market and match jobseekers with employers. Our focus is mainly on those jobseekers who are far from the labour market. At the moment we have about 70 employees and we are growing.

### 2.2. Seeking government support

Governments tried to ease the economic consequences of the Covid-pandemic by introducing measures targeted at providing relief and support for businesses. The nature of these measures differed across countries. For instance, some governments placed more focused on protecting jobs, others prioritized protecting businesses that create jobs, in some countries the government provided much more limited support altogether.

More than half of the entrepreneurs in our study (62%) applied for government support during the pandemic, such as job retention schemes or deferred tax and rate payments.

Especially in New Zealand (97.8%), Poland (87.6%) and France (82.1%), entrepreneurs sought government support (Figure 2.4). The lowest number of entrepreneurs who applied for government support during the pandemic were located in Pakistan (19.9%), India (32.5%) and Colombia (33.3%). Notably young start-up businesses in our study often stated that they were falling through the cracks: ‘I was told that within my first year of trading and without two-years-plus established income tracking I was ineligible for support’ (SME entrepreneur from the USA), and ‘Disqualified – Startup, foreign citizen, new business’ (start-up entrepreneur from the USA).
A crisis favours the prepared – relaunching virtual reality services

Shyam Pradeep Alil, Co-founder, Infusory Future Tech Labs Pvt Ltd, Kerala, India

“We had developed a prototype of a Virtual Reality (VR) based interactive education platform during 2018. But at that time, the cost for a VR headset was about 2 lakhs rupees and for a 30 seat lab, it would cost about 60 lakhs which made us drop this project. In 2020, with Covid-19, schools shut down and all classes became online. The classes became less interactive and boring compared to traditional ones and the teachers struggled to capture the attention of students. We realized that it is the right time to relaunch the project with the pipelines already developed. We thus started developing the app using Augmented Reality in July and launched it in Google Play Store within two weeks. Teaching aid helps teachers to explain complex concepts quickly and effectively. In the last 6 months, TutAR app has delivered 2000+ teaching aids with 25+ educational customers as paying clients.”

TutAR is a digital collection of teaching aids that can be visualized in Augmented Reality (AR). TutAR is a platform-independent application and can run on any mobile devices or laptop or desktop computers. It is effective in both online and offline classes.

Government support to businesses as a lifeline in the pandemic – insights from China

Xu Chunhua, Founder and Managing Director, Guangzhou Evergreen Advertising Ltd, Guangzhou, China; Executive board member of Guangdong Province Chamber of Commerce, China

“The Covid-19 pandemic in spring 2020 hit every business, including us, really hard because Covid-19 caused wide-spread panic, stringent lockdowns were imposed and businesses were forced to shut. Things started to turn around from last summer with businesses resuming operations first and expanding in our sector and others. Two factors stood out. First, the good nation-wide control of the pandemic allowed lives to return to normal and economic growth to rebound. Second, measures of government support to small businesses were timely and helpful, including ease of access to loans and tax reduction.”

Guangzhou Evergreen Advertising was founded in 2007. It provides strategic marketing and integrated media services to big companies in China and is the exclusive media marketing provider and strategic alliance partner of many public and foreign companies.

Focusing attention during crisis

Dr Li Jun, Founder, Chairman and President, Leyard Group, Chairman of Zhongguancun Listed Company Association, Vice President of Beijing Federation of Industry and Commerce, China

“The Covid-19 pandemic is a dead or alive challenge to us and other companies. Yet, it is also an opportunity for business transformation and upgrading. The pandemic not only tests a business’ essential capacity but it also tests a business leader’s adaptability and vision. In response to the uncertain international business environment, businesses must focus their management in three areas: risk management, supply chain management, and financial management.”

Leyard was founded in 1995. It is a global leader in audio-visual technology. It is also China’s Top 100 Electronic Information Enterprises, National Culture and Technology Integrated Demonstration Enterprise, and Beijing’s Top 10 Enterprises of Information industry.

‘Create something from nothing’ – reinventing the business, its offerings and target market in the pandemic

Melissa Challenor-Bevis, CEO of EPIC Service, Australia

‘Having found myself stuck in Perth, I had to pivot my business and turn to advisory consulting services. However, having started an Engineering company in Thailand and having cemented myself in another culture and business environment, I have found the pandemic has provided the best environment to dig deep and create something from nothing, once again.’

EPIC Service started as an engineering design business in Thailand as a 100% Australian owned company. During the pandemic, with no physical access to Thailand, the company pivoted into advisory and consulting services to enable Australian companies to expand into the APAC region through Thailand. The company also assists Thai companies who are seeking advice and connections in Western Australia to expand their operations.

Triumph of the entrepreneur: The government support to businesses during the pandemic

Xu Chunhua, Founder and Managing Director, Guangzhou Evergreen Advertising Ltd, Guangzhou, China; Executive board member of Guangdong Province Chamber of Commerce, China

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3. Longer term opportunities and realities?

Even though we saw in the previous chapters that entrepreneurs’ businesses suffered in the pandemic, encouragingly, entrepreneurs had generally positive expectations for their business in the long term beyond the pandemic. This suggests resilience, although there are also short-term vulnerabilities (e.g., in terms of businesses’ financial position) to overcome.

We discuss these long-term expectations beyond the pandemic, firstly, in terms of entrepreneurs’ general expectations for their business related to survival, growth, and positive long-term impact. Secondly, we explore businesses’ preparedness in terms of planning, which will contribute towards their ability to act upon future opportunities. Lastly, we examine businesses’ financial position and survival prospects.

3.1. Expectations beyond Covid-19: survival, growth, and job creation

In terms of general expectations beyond the pandemic, nearly half of all entrepreneurs in our study (48.3% agreed or strongly agreed) were optimistic that – despite suffering significantly – their business would eventually survive. More than a third of all entrepreneurs (38.1% overall) even expected their business to grow larger than it was before the pandemic.

The two charts below (Figures 3.1 and 3.2) show how strongly entrepreneurs across the 23 countries agreed with statements regarding their business’ resilience (on a 5-point scale from 1 strongly disagree to 5 strongly agree). As shown in Figure 3.1, entrepreneurs in China (3.7), Bangladesh (3.7), India (3.6), Colombia (3.5) and Pakistan (3.5) were the most optimistic with regards to business survival; while entrepreneurs in Norway (2.7), Poland (2.8) and Japan (2.9) were less optimistic.

Figure 3.2 shows that entrepreneurs in Brazil (3.6), Italy (3.6) and Poland (3.5) were most confident about business’ growth beyond the pandemic; whereas entrepreneurs in Germany (2.1), France (2.2) and China (2.5) were less optimistic that their business would be larger than it was before Covid.

The overall positive outlook is also reflected in entrepreneurs’ job growth expectations. Over 70% of all entrepreneurs expected to create additional employment beyond the pandemic, i.e., they expected to create new jobs relative to the employment they offered before the pandemic. Notably, past research following entrepreneurs over time finds that such job growth expectations are a good predictor of actual employment growth in firms including in times of crisis⁹.

Figure 3.1. Business optimism/resilience: survival

![Graph showing business optimism/resilience: survival](image1)

Figure 3.2. Business optimism/resilience: growth

![Graph showing business optimism/resilience: growth](image2)
As illustrated in Figure 3.3, entrepreneurs in China (88.7%), Australia (86.6%) and India (85.6%), were especially ambitious with over 85% of entrepreneurs saying that their business would add new jobs over the next five years. Entrepreneurs in Japan (14.9%), Spain (38.7%) and France (48.6%) least expected new job creation. In Japan (37.3%), Spain (21.6%) and Colombia (20%), 20 or more percent of entrepreneurs even expected a decrease in employment at their business, while entrepreneurs in Brazil (5.3%), Australia (6.1%) and China (6.2%) reported the lowest numbers of expected job losses.

But then, extraordinarily, our customers rallied and started to order subscriptions. Now, we faced new pressures: usage was doubling month-on-month, putting enormous strain on our team supporting new users. My own working day quickly extended to 18-hours, though I tried to limit it to 12 hours on Sundays. The impact on relationships with my partner, family and friends was hard and could have been devastating, but they all understood we were living through an exceptional time and what was at stake so I always knew I had their support. I knew that this lifestyle was unhealthy and unsustainable, but we now had millions of teachers and kids around the world relying on us every day for remote learning, appealing for our support, so what option did we have? We did ramp up our hiring, but interviewing, on-boarding and training new staff first manifests as an additional load on the current team.

In terms of long-term impacts, nearly half of entrepreneurs (45.5%) believed that the pandemic could have a positive long-term impact on their business. As shown in Figure 3.4, entrepreneurs in Australia (65.7%), Italy (65.2%) and the USA (60%) were most optimistic with 60 or more percent of entrepreneurs seeing positive long-term impacts of the pandemic. Conversely, entrepreneurs in Bosnia and Herzegovina (27%), Pakistan (21.7%), France (27%), Slovakia (27%) and China (27.6%) were least optimistic with less than 30% of entrepreneurs expecting positive long-term impacts.

As a group of entrepreneurs in our study who experienced rapid growth even during the pandemic and the challenges associated with that. One of them pointed to ‘rapid exhausting growth and doubling of team size. We are used to working remotely and online, but with team size doubling over a few weeks our culture and processes are straining.’

By the end of 2020 we added 20 million new users, doubled our team, and revenue had grown by over 1,500%.

Bob Drummond, co-founder, Chairman, and CRO of Kami, New Zealand
The nature of positive long-term impacts.

In terms of the nature of positive impacts, 2,164 entrepreneurs (41.6%) provided qualitative explanations of what this positive impact was. These explanations broadly fall into four categories from doing more of the same in higher volume (business acceleration), to doing the same but more efficiently (business efficiency and resilience), to refocusing the business (business refocus) and capturing new business opportunities.

**Business acceleration** was the most frequently mentioned positive long-term impact of the pandemic. Entrepreneurs saw the pandemic in resulting in more demand for their existing product or service offering. For many entrepreneurs this was directly tied to increased demand for online services and delivery that they were already offering. One entrepreneur noted that the pandemic ‘cements the shift to e-commerce’ (start-up entrepreneur from the UK). Others equally saw the pandemic as accelerating an existing trend to more digital offerings and trading from B2B marketplaces to greater demand (‘An even broader market segment that helps us get started’ (start-up entrepreneur from the UK)).

‘Energizing higher education and training’ (SME entrepreneur from the USA), ‘The pandemic has accelerated the digital adoption, and, as we are into the business of dampening digital fraud, we strongly believe this will help us in long term’ (start-up entrepreneur from India)). Still others noted that remote working would increase demand for learning and coaching products, and products supporting remote working (‘Energizing higher education and training, search engine optimization, and remote learning. Others noted that remote working would increase demand for learning and coaching products, and products supporting remote working’ (SME entrepreneur from the USA)).

**Business efficiency and resilience** referred to improvements in processes and practices to obtain cost savings or cost reductions due to the anticipated need for less office space and savings from remote working (e.g., ‘cost reduction in office accommodation resulting from more staff being able to work from home’ (SME entrepreneur from the UK)), ‘Sustainable growth, reduced direct costs, more access to worldwide markets’ (SME entrepreneur from India)). Some entrepreneurs saw these efficiency savings tied to positive work-life changes for themselves and their staff: ‘It has forced positive changes e.g.; we now work fully remotely and more productively. Staff like this and there is an opportunity to reduce premises cost’ (SME entrepreneur from the UK) and noting ‘improved staff wellbeing with more confidence to allow working from home as they please’ (start-up entrepreneur from the UK). While others noted the positive environmental consequences that come with greater efficiency: ‘Our business will be greener as we travel less and have less of an impact on the environment around us. Smaller office space and more online work’ (SME entrepreneur from the UK). Still other entrepreneurs saw future efficiency in changing employees’ approach (‘Create an organization-wide consciousness towards cost reduction’ (start-up entrepreneur from India)), higher flexibility (‘Need to become more flexible and dynamic in the overall approach and business tactics’ (start-up entrepreneur from India)), hiring qualified employees (‘Access to global virtual talent that is now working remotely efficiently’ (SME entrepreneur from the USA)) and the possibility to cut cost on supplies which is related to online business (‘We have learned to reduce expenses by contracting more suppliers than before’ (self-employed from Spain)).

**Business refocus** captures how some entrepreneurs saw the crisis as a time for strategic review, to review their existing products and services, or indeed change their entire business model (‘Make us think and reconcile our business. Working on lots of changes in our business’ (start-up entrepreneur from India)). Entrepreneurs noted that the pandemic led to a ‘shift in focus’ and allowed ‘time to re-evaluate offering’ to find out how the ‘...businesses can be tailored to respond to changes in the social, economic and health and wellbeing ... in our society’ (entrepreneurs from the UK). For several entrepreneurs, the refocus was linked to online trade (‘expanding to online delivery + refocus and re-energize’ (SME entrepreneur from the USA)), which they saw as coming to dominate their products and services, or indeed change their entire business model (‘Make us think and reconcile our business. Working on lots of changes in our business’ (start-up entrepreneur from India)). While some entrepreneurs viewed the pandemic as a chance to focus on developing new products, others saw an opportunity for a more fundamental refocus towards ‘leaner organisation, more focused on core product’ (start-up entrepreneur from the UK) as well as using the opportunity to try out new products.

**Business opportunities** captured entrepreneurs’ responses that noted opportunities related to introducing new products and services or venturing into a new market. This category is related to the previous one but more explicitly focused on developing entirely new offerings (e.g., new insurance products or online services), often in response to changes in customer behaviours triggered by the pandemic (e.g., more exercise, more home working, less travel, more online trading, and more willingness to engage with technology and digital solutions). Entrepreneurs viewed the greater digitalisation also as an opportunity to enter new geographically distant markets that may have previously only been reachable at great expense.

‘In every crisis you have an opportunity’: pivoting when plans are nullified – starting a business during the pandemic

Adelia Nunes, Founder and CEO of Mais Vida Alimentos, Brazil

‘I started my entrepreneurial journey in early 2019, with a business to sell delivery of healthy meals. We spent 2019 developing the business, studying the home food market, brand, product, licenses, prices, market and so on. Beginning of 2020 everything ready, e-commerce, social networks, everything in order and now we can sell to our customer! Then a month later the pandemic started. It really got us off the ground. Our client was insecure, lost his job, started cooking at home. And now? We stayed open-minded, tuned in to possible opportunities. In every crisis you have an opportunity, don’t you? So I received an auction notice to supply hot lunch boxes to the São Paulo city hall. We immediately sent all the documentation and entered. And in March, we started delivering these lunch boxes in the south region of São Paulo city, close to our company. We had to reinvent ourselves about the business, target audience, customers. This experience has opened up a range of opportunities and we are now participating in public biddings and looking for new customers in corporate markets, such as hospitals, construction industry, TV producers. Finally, we discovered that we have a great potential to provide several solutions and that made us confident to move forward in search of new opportunities even during a pandemic. And it motivates us every day to create solutions and provide quality and great service to each of our clients’. 
3.2. Preparedness to act on long-term opportunities: financial planning and resources

To understand business’ preparedness to act upon future opportunities, we asked entrepreneurs how far in the future they were currently planning. Overall, more than half of entrepreneurs (52.3%) currently focus their planning on the short term and were planning for less than one year ahead. The other 47.7% concentrated on long-term planning and were planning for more than one year ahead.

As shown in Figure 3.5, entrepreneurs in Germany (44.8%), France (39.6%) and Sweden (35.6%) focused on short-term planning and were planning ahead for 3 months or less. On the other hand, long-term planning for 3 or more years was especially prevalent in Bosnia and Herzegovina (53.6%), Chile (43.4%) and Spain (38.5%).

In terms of financial resources (Figure 3.6), the average expected survival of businesses at the time of the survey was 7.7 months. This means that, on average, entrepreneurs in our study expected to run out of cash within the next 8 months, if the current situation continued. This figure is consistent with over 60% of entrepreneurs seeing the survival of their business threatened (as reported in chapter 1). However, it also suggests that the long-term optimism of entrepreneurs reported above might stand on weak foundations in terms of financial resources. Hence, it highlights the importance of governments providing support and financial relief to help entrepreneurs overcome short-term financing gaps.

The cross-country comparison, in Figure 3.6, shows that entrepreneurs in Italy (9.7), Canada (9.6) and Denmark (9.4) had the most solid financial base, with sufficient resources to sustain themselves for nearly 10 months on average. Entrepreneurs in Germany (4.9), Bosnia and Herzegovina (4.4), China (5.5) and France (5.5) were the most vulnerable, facing challenges to sustain themselves in the next five to six months if the pandemic continues.

Relating these findings to business growth expectations beyond the pandemic (Figure 3.2), we can see that entrepreneurs in Italy – whose businesses had the most solid financial base (on average) compared to other countries – were among the most confident that their business would grow and be larger than before the pandemic. Conversely, entrepreneurs in Germany, France and China – where businesses were the most vulnerable in terms of financial position – were among the least optimistic about business growth beyond the pandemic.

This Covid period has been a great source of challenge and learning

Zahid Mubashir, Founder and CEO, Business Research & Support Channel, Pakistan

‘Every problem is an opportunity in disguise’

Zahid Mubashir, Founder and CEO, Business Research & Support Channel, Pakistan

‘BRC was started with my partners Irfan Ahmad and Asghar Aziz, and since has grown into one of the largest rural brand activation firms in Pakistan. Our journey has several ups and downs, which is part of the game like every other entrepreneur in the world. Service and loyalty for the clients have always been a top priority for us, which made us choose only one exclusive client in a specific industry at a specific time.

During the early months of 2020, all activation businesses and budgets had to discontinue due to the nature of business from a health and security perspective. This was the most devastating situation for the business encountered so far. But every problem is an opportunity in disguise. We decided to diversify as fast as possible, online commerce was a natural go-to area in that period. We collaborated with Government and launched an online business for perishable products at discounted rates to facilitate the public in challenging times. Now, we are planning for the expansion of that business at a national level. This Covid period has been a great source of challenge and learning.’
4. The pandemic and entrepreneurs’ mental well-being: from worries and stressors to resilience and coping

The pandemic impacted entrepreneurs’ mental health negatively. In this chapter, we first examine how this impact differed across countries looking at entrepreneurs’ overall well-being (experienced satisfaction with life overall) and their level of stress. We also consider, Covid-specific stressors and worries including those related to health and available medical care, the heightened uncertainty, limited social contact and loneliness during the pandemic (Chapter 4.1). Chapter 4.2 summarizes entrepreneurs’ coping resources and strategies to deal with the stress including self-care. We examine how entrepreneurs could draw on social support to deal with personal and financial challenges, how they implemented self-care strategies to look after their well-being and recover from stress on a daily basis, and their personal psychological resilience.

4.1. Well-being, stress and stressors

Well-being

We captured overall mental well-being through life satisfaction (scaled from 1 (lowest) to 10 (highest)), which is a validated widely used indicator of well-being.

Entrepreneurs’ life satisfaction during the pandemic in our study was on average 6.6, which was significantly lower compared with representative samples of entrepreneurs prior to the pandemic (the average pre-Covid was 7.5). While both values are over the mid-point of the scale suggesting that entrepreneurs are satisfied, the well-being of entrepreneurs surveyed during the Covid-pandemic was 12% lower compared to representative samples of entrepreneurs’ pre-pandemic.

Figure 4.1 shows the life satisfaction of entrepreneurs in our study (dark blue, ‘Covid’, 3,286 entrepreneurs) and compares their life satisfaction to representative samples of entrepreneurs prior to the pandemic (teal, ‘pre-Covid’, 3,941 entrepreneurs) across 19 countries. The country means in Figure 4.1 are shown with their 95% confidence intervals (represented by the black bars at the top of each column) and are adjusted for differences in sample composition (education, age and gender of the entrepreneur). The strongest differences are between countries where these confidence intervals do not overlap between the teal and the blue columns.

Entrepreneurs in Chile, France and Japan were worst affected. Their well-being was 22%, 22% and 26% lower during the pandemic relative to entrepreneurs pre-Covid. Entrepreneurs in these countries also had the lowest absolute level of well-being across the 22 countries in the study. Entrepreneurs in Brazil, Pakistan, Spain, and Sweden were also badly affected (with a reduction in well-being of 15% and more). Entrepreneurs’ well-being in the USA, Italy, Poland, and China appeared less affected by the pandemic with reductions in well-being being less than 5%.

At a glance: The pandemic and entrepreneurs’ well-being

-12% of entrepreneurs reported getting sufficient sleep.
47% of entrepreneurs regularly exercised and 60% reported eating mainly healthy food.
50% of entrepreneurs found enough time to mentally recover from work.
32% of entrepreneurs found comfort in their religion or spiritual beliefs.
49% of entrepreneurs experienced restricted social contact as a stressor during the crisis, but few felt lonely at work (19%).
57% of entrepreneurs experienced good emotional social support from family, friends and other entrepreneurs.

Nearly a third of entrepreneurs (32%) received hands-on support and 28% could draw on informal financial support from family, friends and other entrepreneurs during the pandemic.
Stress levels

A further indicator of mental well-being is how stressful entrepreneurs perceive their life currently (perceived stress). We asked entrepreneurs how frequently they felt overwhelmed, out of control and generally nervous, irritable, and upset over the past month (using a widely used measure to assess stress). Perceived stress is scaled from 0 (lowest) to 40 (highest). Research finds that higher stress scores predict poorer mental and physical health and are an early warning indicator of illness.

Overall, the average perceived stress score in our sample was 16.8. Comparing this score to what we would typically expect to see in the population in non-pandemic times (ranging between 12 and 14) reveals that entrepreneurs in our study report elevated levels of stress. A further comparison with a large UK online sample of non-entrepreneurs during the pandemic suggests that UK entrepreneurs in our study are similarly stressed as the general population (the average stress score was 17.1 in that study and 17.5 for UK entrepreneurs in our study).

Health-related worries and stressors

We also explored Covid specific stressors. The nature of the pandemic meant that health and medical care were key concerns, as were uncertainty and social isolation (the latter are explored further below). Using a 5-point scale (1 strongly disagree to 5 strongly agree), we examined how much entrepreneurs worried about their own and/or their family’s health and how afraid they were of insufficient medical care during the pandemic. Figures 4.3 and 4.4 show the mean agreement scores of entrepreneurs across 21 countries for each statement.

Overall, more than half of the entrepreneurs in our study (57.7%) agreed or strongly agreed that they were worried about their own and/or their family’s health. As shown in Figure 4.3, entrepreneurs in China (4.1), Bangladesh (3.9) and Chile (3.9) were most worried, whereas entrepreneurs in Denmark (2.6), New Zealand (2.7) and Germany (2.9) were less concerned about this.

Over a third of all entrepreneurs (33.5%) agreed or strongly agreed that they were afraid of insufficient medical care during the pandemic. Looking at the cross-country comparisons in Figure 4.4, entrepreneurs in Bangladesh (3.8), Bosnia and Herzegovina (3.7) and India (3.4) were most afraid of not receiving sufficient medical care, while entrepreneurs in Denmark (1.7), France (1.9) and Germany (1.9) were less concerned about this.
Uncertainty – not being able to know what happens next – is fundamentally stressful for everyone. Although entrepreneurs are said to cope well with uncertainty, they are not immune to its stressful effects. Moreover, Covid-19 intensified the relatively high levels of uncertainty that entrepreneurs face anyway. As one entrepreneur in our study summarized when asked about the main problems s/he faces: ‘Everything is uncertain’.

A key aspect of uncertainty is that Covid-19 enhanced unpredictability (e.g., about when the next lockdown would be imposed and lifted or how fast Covid-19 would spread). In light of this unpredictability, it was often unclear for entrepreneurs what business decisions they should take or how to adapt their work. Entrepreneurs had to deal with unforeseen problems, face uncertainty about the future of their business, and make decisions where they are unsure about the effects on their business.5,6 Uncertainty was assessed with multiple questions and scaled from 1 (strongly disagree) to 5 (strongly agree).

More than a third of all entrepreneurs in our study (39.7%) faced high uncertainty. They agreed or strongly agreed that they had to deal with unpredictable events and uncertainty at work.5 In Figure 4.5, we present the cross-country mean scores of entrepreneurs’ overall unpredictability. Entrepreneurs in Sweden (4.7), Australia (5.5) and France (4.4) experienced the most unpredictability, whereas entrepreneurs in Italy (2.9), Japan (2.9) and Slovakia (2.9) indicated the lowest unpredictability in their business. Entrepreneurs described challenges related to uncertainty, for instance, about customer demand ‘work dropped off drastically at the start of lockdown but for the last two weeks I have too much work and I am trying to do it all in case work drops off again’ (self-employed from the UK) or simply as ‘Uncertainty about demand’ (SME entrepreneur from Australia).

Extended working hours

Long working hours are a stressor that undermines well-being, but often crisis such as the pandemic necessitate increasing working hours. Entrepreneurs reported their average working hours per week during the last month in categories from 1 – less than 20 hours; 2 – 21-25 hours; 3 – 26-30 hours; 4 – 31-35 hours; 5 – 36-40 hours; 6 – 41-45 hours; 7 – 46-50 hours; 8 – 51-60 hours; 9 – 61-70 hours; 10 – 71-80 hours; 11 – more than 80 hours). On average they reported that they worked around 45 hours per week (6.35 on average in response categories). The countries where entrepreneurs were working longest hours were Australia, Brazil and US, while working hours were relatively lowest in Pakistan, Japan and Bangladesh.

The crisis has provided an opportunity and has made us grow.

We have adapted very well and very quickly

Francisto Cerrato, Owner and CEO of Epickids Lab, Spain

Figure 4.5. Uncertainty: unpredictability

Figure 4.6. Weekly hours worked

Average weekly hours worked (over last month) (N = 4261)
Restricted social contact and loneliness at work

Lockdown measures significantly limited the amount of social contact during the pandemic, which can be another source of stress as we are dependent on others for social support and to cope with stressors (see section 4.2). Nearly half of the entrepreneurs in our study (48.8%) either agreed or strongly agreed that they experienced restricted social contact as a stressor during the crisis (on a 5-point scale (from 1 strongly disagree to 5 strongly agree)).

As illustrated in Figure 4.7, entrepreneurs in China (2.9), Spain (2.8) and New Zealand (2.7) experienced least frustration. Entrepreneurs in Bangladesh (3.9), Brazil (3.8) and Japan (3.8) reported relatively more loneliness at work, while entrepreneurs in Chile (3.9), Bosnia and Herzegovina (3.7) and Canada (3.6) were most frustrated by social contact restrictions, while entrepreneurs in Australia (2.6) and Germany (2.6) experienced least frustration in this regard.

As reported in chapter 1, more than 40% of all entrepreneurs in our study solely started to work from home or increased the amount of time they spend in home-office during the pandemic, while a further 20% already worked from home before the pandemic. Although working from home has several advantages, the reduced face-to-face/physical interactions with co-workers may cause entrepreneurs to feel lonely.

In addition to general restrictions on social contact, we specifically enquired about entrepreneurs’ perceived loneliness at work. An average of 15% of entrepreneurs in our study agreed or strongly agreed with all three statements about loneliness at work. Most entrepreneurs in our study did not experience loneliness at work. An average of 15% of entrepreneurs in our study agreed or strongly agreed with all three statements about loneliness at work. An average of 15% of entrepreneurs in our study agreed or strongly agreed with all three statements about loneliness at work.

In Figure 4.8 we present the mean composite scores of entrepreneurs’ perceived loneliness across 23 countries. Entrepreneurs in Bangladesh (2.9), Brazil (2.8) and Japan (2.8) reported relatively more loneliness at work, while entrepreneurs in Chile (2.9), Bosnia and Herzegovina (2.1) and New Zealand (2.2) reported the lowest loneliness in our sample.

We asked entrepreneurs to indicate on a 5-point scale (from 1 strongly disagree to 5 strongly agree) how much they agreed or disagreed with the following statements: ‘At work I feel lonely and alone’, ‘There is not much social support from people I interact with at work’, ‘There is no one at work with whom I can share experiences or new ideas’. We then used entrepreneurs’ answers to these statements, to create a composite score (on the same 5-point scale) for ‘loneliness at work’.

We must say that the pandemic has drastic implications for us – both positive and negative

Mirko Seifert, CEO bei DevBoost GmbH, Germany

‘We must say that the pandemic has drastic implications for us – both positive and negative. It has substantially changed how we work within the company and with our clients. Everyone works from home now and all physical meetings were replaced with virtual calls. While this transition was easy on a technical level, we clearly feel the impact it has on our social interactions. We miss spending time together (e.g., having a chat in the coffee kitchen or going out for lunch) – a lot. Also, everyone must put in additional effort, to stay focused, motivated and to deal with added burdens (e.g., child care or home schooling). This puts a lot of stress on everyone.

However, the demand for software development seems to grow by the day. We cannot even closely match the demands of or clients (old and new) regarding the amount projects they’d like to carry out. We keep hiring people and accelerate the development of the products. At the moment we have about 20 employees and we are growing.

As a company we try to do what we do best, adjust to the circumstances and periodically remind ourselves that we’re in a fortunate position, while other businesses are not that lucky.’

DevBoost GmbH started in 2012 and offers software development and automation teams. Our focus is mainly on software product companies that want to scale and accelerate the development of the products.

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However, the demand for software development seems to grow by the day. We cannot even closely match the demands of or clients (old and new) regarding the amount projects they’d like to carry out. We keep hiring people and scaling up in such a short time is quite hard. So, if you look at the numbers, we’re doing exceptionally well, which is quite in contrast to the somewhat depressing news we see each and every day.

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As a company we try to do what we do best, adjust to the circumstances and periodically remind ourselves that we’re in a fortunate position, while other businesses are not that lucky.’
In this section we chart important well-being resources for entrepreneurs including social support, their use of strategies to recover from stress, and their psychological resilience.

### Social support during the pandemic: emotional, hands-on, and financial

Entrepreneurs are used to making decisions and being in charge. Asking for help and reaching out to others may thus not come naturally and may even be seen as a sign of weakness. However, asking for help is a sign of strength and an effective coping strategy to deal with stress. Social support refers to different forms of getting help from the emotional support of having someone who listens to work-related problems, to ‘hands on’ support in the running of the business from looking after children to introductions to new business contacts. Nearly a third of all entrepreneurs (approx. 32%) indicated that their family, friends and other entrepreneurs they knew provided hands-on support during the pandemic (on the same 5-point scale from 1 none of the time to 5 all of the time). This type of support involves family, friends and other entrepreneurs lending a helping hand from looking after children to introductions to new business contacts. As illustrated in Figure 4.9, entrepreneurs in Bangladesh (3.9), Sweden (3.8) and Spain (3.7) received this type of support most frequently, whereas entrepreneurs in Japan (2.9), India (3.1) and the UK (3.4) received this type of support less frequently.

**Hands-on support** captures how much hands-on support entrepreneurs received from their family, friends and other entrepreneurs and is also scaled from 1 (none of the time) to 5 (all of the time). This type of support involves family, friends and other entrepreneurs lending a helping hand from looking after children to introductions to new business contacts. Nearly a third of all entrepreneurs (approx. 32%) indicated that their family, friends and other entrepreneurs they knew provided hands-on support during the pandemic most or all of the time. As illustrated in Figure 4.10, entrepreneurs in Bangladesh (3.6), China (3.6) and Bosnia and Herzegovina (3.5) received the most hands-on support, while entrepreneurs in the UK (2.3), Poland (2.3) and Denmark (2.4) reported relatively the lowest levels of receiving hands-on support (i.e. only ‘some of the time’).

**Emotional support.** We asked entrepreneurs how much their families, friends and other entrepreneurs were willing to listen to their work-related problems using a 5-point scale (running from 1 none of the time to 5 all of the time). As illustrated in Figure 4.11, entrepreneurs in Bangladesh (3.9), Sweden (3.8) and Spain (3.7) received the most emotional support most or all of the time, whereas entrepreneurs in Japan (2.9), India (3.1) and the UK (3.4) received the least emotional support frequently.

Overall, more than half of all entrepreneurs (approx. 57%) knew were willing to listen to their work-related problems, to ‘hands on’ support in the running of the business from looking after children to introductions to new business contacts.

**Informal financial support.** We asked entrepreneurs to indicate how much financial support their family, friends and other entrepreneurs provided to them during the pandemic (on the same 5-point scale from 1 none of the time to 5 all of the time). Around 28% of entrepreneurs in our study said that their family, friends and other entrepreneurs they knew helped them financially most or all of the time. As shown in Figure 4.11, entrepreneurs in China (3.5), Bangladesh (3.2) and Pakistan (3.0) received the most financial support during the pandemic, while entrepreneurs in Denmark (1.7), the UK (1.7) and France (1.7) received the least financial support from others.

### 4.2. Entrepreneurs’ coping resources and strategies

As illustrated in Figure 4.9, entrepreneurs in Bangladesh (3.9), Sweden (3.8) and Spain (3.7) received the type of support most frequently, whereas entrepreneurs in Japan (2.9), India (3.1) and the UK (3.4) received this type of support less frequently. As shown in Figure 4.10, entrepreneurs in Bangladesh (3.6), China (3.6) and Bosnia and Herzegovina (3.5) received the most hands-on support, while entrepreneurs in the UK (2.3), Poland (2.3) and Denmark (2.4) reported relatively the lowest levels of receiving hands-on support (i.e. only ‘some of the time’).

As illustrated in Figure 4.11, entrepreneurs in Bangladesh (3.9), Sweden (3.8) and Spain (3.7) received the most emotional support most or all of the time, whereas entrepreneurs in Japan (2.9), India (3.1) and the UK (3.4) received the least emotional support frequently.

Overall, more than half of all entrepreneurs (approx. 57%) knew were willing to listen to their work-related problems, to ‘hands on’ support in the running of the business from looking after children to introductions to new business contacts.
Self-care: daily strategies to recover from stress and protect well-being

Stress is our body’s natural response to adversity and demands of work. We ‘feel stressed’ – anxious and overwhelmed – when stressors outstrip our well-being resources. In the short-term, stress is a physiological and evolutionary useful reaction – the body mobilizes energy to respond to a perceived threat. Moderate levels of stress provide stimulation, which is beneficial for performance and prevents boredom. However, if high levels of stress persist over time, the continued mobilization of energy starts to take a toll on the body. Our body quite literally starts to show signs of ‘wear and tear’, which makes it more susceptible for mental and physical illness. Thus, it is essential to make time for self-care also called recovery, i.e., allow time to unwind and recuperate from stress. This way the physiological build-up of stress that damages our body can be avoided.

There are different activities that help to recover from stress. Extant research on recovery shows that to be effective, recovery activities have to take place regularly, and that engaging in recovery can actually benefit your business by making entrepreneurs more creative.28

There are different ways to recover, the most important recovery activities are: physiological recovery through sleep (a good rule of thumb is to get at least 7 hours of high-quality sleep, but individual sleep needs vary), and exercise (ideally engaging in 30 minutes of moderately intensive exercise each day), as well as eating a healthy diet (rich in antioxidants such as certain fruits and vegetables, Omega-3 acids e.g. fish, olive oil, nuts, seeds, legumes, group B vitamins e.g. green vegetables, beans, bananas, beetroot). Mental recovery through making time to psychologically detach from work in the evening (i.e., ‘let go’ of work-related thoughts to give your mind a rest) or finding comfort through spiritual practice and belief.

We asked entrepreneurs whether they regularly engaged in these physiological and mental recovery strategies using a 5-point scale (from 1 strongly disagree to 5 strongly agree).

**Physiological recovery** (sufficient sleep, regular exercise, healthy diet). More than half of all entrepreneurs in our study (95.5%) reported sufficient sleep. Figure 4.12 illustrates that entrepreneurs in Bangladesh (3.9), Denmark (3.6) and Pakistan (3.6) most frequently got sufficient sleep. Entrepreneurs in Italy (3.1), France (3.1) and the UK (3.1) did not report sufficient sleep.

Nearly half of the entrepreneurs in our study (46.9%) regularly exercised for at least 30 minutes in order to maintain their well-being. As shown in Figure 4.13, this specifically applied to entrepreneurs in Bangladesh (3.9), Denmark (3.9) and India (3.6), while entrepreneurs in Brazil (2.4), Chile (2.6) and Japan (2.6) did not agree that regular exercise was a common recovery strategy for them.

More than half of all entrepreneurs in our study (59.7%) said that eating mainly healthy food helped them to recover and deal with stress. As shown in Figure 4.14, this specifically applied to entrepreneurs in Bangladesh (4.1), Spain (3.9) and China (3.8), whereas entrepreneurs in Denmark (2.7), Pakistan (2.9) and India (2.9) did not report this as a common recovery strategy.
Mental recovery (detaching from work, spiritual practice and belief). Around half of all entrepreneurs in our study (49.8%) agreed or strongly agreed that – over the last month – they regularly mentally recovered, for example by psychologically detaching from work in the evening. As shown in Figure 4.15, entrepreneurs in China (3.8), Pakistan (3.8) and India (3.6) engaged the most in mental recovery, while entrepreneurs in Australia (2.8), France (2.8) and Chile (2.9) did not regularly mentally recover.

Nearly a third of all entrepreneurs (31.9%) agreed or strongly agreed that they found comfort in their religion or spiritual beliefs during the pandemic. According to Figure 4.16, especially entrepreneurs in Bangladesh (4.2), Pakistan (3.9) and Denmark (3.5) reported this as a recovery strategy. Entrepreneurs in France (1.7), Spain (1.9) and the UK (1.9) did not turn to their religion and spiritual beliefs as a way to recover.

A helping hand at a critical time: ‘It wasn’t clear if we could maintain our business... but we are fortunate to have received so much support’

David Cowell, Founder and Managing Director, Promo2u Limited, UK

‘Coronavirus cancelled all events overnight, it wasn’t clear if we could maintain our business supplying promotional products as customers cancelled orders, and we struggled to get outstanding invoices paid. Both my wife and I rely on our income from the business as well as feeling a massive commitment to our employees so the stress of potentially loosing not only our business/income but that of people who rely on us for work was colossal.

It has been hard, but we are fortunate to have received so much support both financially and emotionally and not just from friends and family but customers, suppliers, the government and this programme too. We are the lucky ones, the survivors, throughout this crisis we have all been in the same storm, but we have definitely not been, in the same boat. I now look forward to the opportunities re-building our business will offer.’

Promo2u supply branded promotional products for marketing professionals and business owners. Specialising in sustainable products they provide a one-stop solution from design to delivery, warehousing and logistics. Knowledge built over 20+ years, and creativity allow them to deliver a range of products to communicate your marketing messages with lasting impact.

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Figure 4.15. Recovery: mentally recovered

It has been hard, but we are fortunate to have received so much support both financially and emotionally

David Cowell, Founder and Managing Director, Promo2u Limited, UK

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Entrepreneurs’ personal resilience

In addition to social support, engaging in daily recovery activities and adapting the business, their psychological resilience can help entrepreneurs to deal with the stresses of the Covid-19 pandemic and protect their well-being.

Entrepreneurs’ personal resilience describes their psychological resources to cope with stress and adversity. More specifically, resilience is the ability to bounce back from adversity. Resilient people learn and thrive in difficult situations. Entrepreneurs frequently face setbacks in managing their business, and resilience helps to cope with these setbacks and the uncertainty and stress that they entail. Resilient entrepreneurs often spot new opportunities in times of adversity.

We measured resilience with a widely used established scale that asked how entrepreneurs currently act, think and feel at work on a 6-point scale (1 strongly disagree to 6 strongly agree). Entrepreneurs responded to six statements about how well they could manage and recover from stressful situations, setbacks, and difficulties at work.

Overall, the majority of entrepreneurs in our study (65.3%) showed psychological resilience, i.e., they agreed or strongly agreed that they could cope well with stress.

Figure 4.17 shows mean scores of entrepreneurs’ personal resilience across 21 countries. Entrepreneurs in the USA (5.0), Australia (4.9), Sweden (4.9) and the UK (4.8) had the highest resilience, while entrepreneurs in Bosnia and Herzegovina (3.8), Japan (3.8) and Pakistan (4.2) indicated lower stress resilience.
5. Societal engagement

The pandemic had numerous negative impacts, yet it also led to great willingness to help other people in need. Entrepreneurs were no different in this regard. Despite 61% of entrepreneurs in our study seeing the survival of their businesses threatened, many actively contributed through volunteering or through directly addressing societal and environmental issues through their business. In this section we explore entrepreneurs’ societal engagement and examine the degree to which this was triggered by the Covid pandemic. We look at societal engagement in terms of volunteering business services and products, personal volunteering and in terms of the social and environmental performance of the business. In further analyses we see that entrepreneurs’ societal engagement related positively to their mental well-being. In addition, case examples suggest that it also supports their business (see the example of Kami in New Zealand, led by Bob Drummond).

5.1. Volunteering business services and/or products

More than half of all entrepreneurs in our study (50.9%) volunteered their business’ services and/or products for good causes during the pandemic, to help other businesses, charities, or public workers. As shown in Figure 5.1, entrepreneurs in Bangladesh (80.3%), India (73.8%) and Bosnia and Herzegovina (61.2%) volunteered the most, whereas significantly less entrepreneurs in France (27.6%), Denmark (31.5%) and Italy (39.7%) volunteered their business’ services and/or products.

Across our sample, volunteering business services and products was newly triggered by the pandemic for nearly half (44%) of the entrepreneurs who volunteered. Especially entrepreneurs in Japan (86.1%), France (71.8%) and Italy (58.8%) said that volunteering their business’ services was triggered by the crisis, while most of the entrepreneurs in Bangladesh (12.3%), New Zealand (20.7%) and the USA (25.6%) were already engaged in volunteering before the pandemic.

5.2. Personal volunteering

Overall, 42.6% of entrepreneurs across our sample engaged in personal volunteering during the pandemic – meaning they worked for free for charities, the NHS, or otherwise supported others who are not family and friends. As shown in Figure 5.2, entrepreneurs in Bangladesh (85%), Pakistan (60.9%) and China (59.7%) volunteered the most, while fewer than 25% of entrepreneurs in Denmark (12.5%), New Zealand (20.7%) and the USA (25.6%) were already volunteering before the pandemic.

Of those entrepreneurs who did engage in personal volunteering during the pandemic, 40.7% said that this was newly triggered by the crisis. Especially entrepreneurs in Bangladesh (79.6%), Japan (77.8%) and France (59%) reported that their personal societal engagement was triggered by the pandemic, whereas entrepreneurs in Slovakia (15.1%), Italy (20.3%) and New Zealand (10.8%) were already volunteering before Covid.
were less successful compared to their competitors. Whereas SMEs in Japan (2.9), France (2.9) and Slovakia (3.0) were less successful than their competitors in addressing social and environmental issues through their business, Brazil (3.4) and China (3.4) were most active in addressing problems of health and/or aging, and fighting economic and social exclusion and poverty. Entrepreneurs rated their business on a 5-point scale (1 much worse than competitors to 5 much better than competitors) – a common approach to assessing performance of entrepreneurial businesses.

Overall, across 20 countries, more than a third of entrepreneurs in our study (39.1%) said that their business was doing better or much better than competitors in terms of its social and environmental performance, while just over half (52.7%) of all entrepreneurs said their business was equally as successful or much better than competitors in terms of its social and environmental performance, while just over half (52.7%) of all entrepreneurs said their business was equally as successful to 5 much better than competitors) – a common approach to assessing performance of entrepreneurial businesses. Overall, across 20 countries, more than a third of entrepreneurs in our study (39.1%) said that their business was doing better or much better than competitors in terms of its social and environmental performance, while just over half (52.7%) of all entrepreneurs said their business was equally as successful or much better than competitors in terms of its social and environmental performance, while just over half (52.7%) of all entrepreneurs said their business was equally as successful to 5 much better than competitors.)

In Figure 5.3 we present the mean scores from these four aspects for SMEs across 20 countries: SMEs in Australia (2.5), Brazil (3.4) and China (3.4) were most active in addressing social and environmental issues through their business, whereas SMEs in Japan (2.9), France (2.9) and Slovakia (3.0) were less successful compared to their competitors.

6. Future trends and policy recommendations

Given the size of the world’s SME population, there are millions of jobs potentially at risk if entrepreneurs cannot sustain their businesses. The findings of our survey paint a picture of opportunities but also vulnerabilities of these SME entrepreneurs in the Covid-19 pandemic. While entrepreneurs in general were optimistic and could see an upside to the pandemic, including long-term positive impacts on their businesses and job creation, it was also clear that many face real challenges to sustain their businesses going forward and that the pandemic is taking a toll on their mental health.

Building on the insights from our survey, we discuss five trends for the post-Covid economy that are relevant to SMEs and entrepreneurs. We highlight policy actions to support SMEs and entrepreneurs in leveraging these five trends for a thriving post-Covid economy. During the pandemic, most governments were focussed on relief measures by providing financial support. This was taken up by SMEs and entrepreneurs when available (see chapter 2.2). With vaccine programmes being rolled out, policy focus now shifts to how the economic recovery can be aided. The five trends described below suggest that instead of ‘going back to normal’, there is scope to ambitiously re-imagine how a thriving post-Covid economy might look like. There is much demand and potential for a more inclusive and greener post-Covid economy marked by resilient businesses that offer greater well-being to both the entrepreneurs who lead them and their employees.

The first two are cross-cutting trends related to personal and business resilience. These are important to weather any crises but are particularly significant for the post-Covid recovery, because of the wide-ranging economic, social, and personal impacts of the Covid-pandemic that challenge individual entrepreneurs and their businesses in new ways. We then discuss three specific trends related to digitalisation, a renewed focus on ‘local’, and inclusive and sustainable business models.

6.1. Cross-cutting trends

Trend 1: Personal resilience: help entrepreneurs to look after their own and their staff’s well-being and mental health

Change stereotypes of entrepreneurship to make space for well-being and self-care

The pandemic has led to a greater awareness about mental health in general. Our data show the need for this greater awareness and support measure to also reach entrepreneurs and SMEs. The pandemic has clearly diminished entrepreneurs’ mental well-being (chapter 4). While entrepreneurs are often depicted as ‘lone heroes’ who work relentlessly long hours and who are expected to make sacrifices for their business, we advocate that entrepreneurs are given ‘licence’ to look after their own well-being. After all, if they suffer from mental health problems, this has downstream effects on their own productivity but also on that of their employees, and in the worst case the business stops to exist altogether.

Our conversations with entrepreneurs revealed demand for greater attention to well-being. The pandemic seems to have triggered some for a re-evaluation of their entrepreneurial mindset (‘not going back to being busy’, ‘not going back to pre-Covid levels of crazy busy’ (SME entrepreneur from the UK), ‘I was forced to reinvent myself and that is a positive thing’ (SME entrepreneur from Brazil), ‘I will try to specialize myself and do what I think is right’ (self-employed from Germany). Consequently, many entrepreneurs suggested they would do business differently going forward: more mindful of their well-being and more focused on value-adding activities that make a difference (including activities that generate value for others and society). This may ultimately mean fewer hours and income but a more meaningful and ‘happier’ work experience for entrepreneurs and their staff.

These changes in mindset fit with broader discussions to assess the performance of our economies in terms of both economic output as well as facilitating personal and social well-being. In chapter 7 we provide tips for entrepreneurs. These are about what they can do to look after their well-being.

Create awareness of the joys and perils of remote working

The pandemic has made remote working more socially acceptable and highlighted its benefits: convenience, cost-saving (saving time commuting and money for estate and running costs), sustainability (helps to reduce the carbon footprint), and most entrepreneurs and their employees enjoy it. As one entrepreneur put it ‘remote working is now more socially acceptable, and so we may ditch our office altogether’ (SME entrepreneur from the UK).

Yet entrepreneurs in our survey also recognized the challenges of home working for themselves and their staff. These include reduced efficiency working from home, difficulties to segment work and life when working from home, working longer hours,
Design mechanisms to learn from entrepreneurs about the future of work
Small businesses often lead the way in innovating work practices. Thus, there is space to document and tap into their knowledge to develop solutions to manage human resources in the post-Covid economy. Innovation prizes for innovative Human Resource Management (HRM) practices that safeguard staff well-being and productivity during remote working would draw attention to such practices and help to disseminate them. Make remote working more productive by making childcare affordable
To make working from home more productive and less stressful for both men and women entrepreneurs, the availability of affordable childcare is critical. Childcare costs are different across the countries in our sample; ranging from countries as Germany, where, in 2020, net childcare cost was at 1% of household income after accounting for different childcare benefits, as opposed to countries like the UK, where net childcare cost was at 22% of household income under the same conditions. Expanding and lowering the cost of childcare, including offering all day early years and after-school care that supports kids’ schoolwork and homework, will not only make home working more productive, but it would also help reduce inequalities. It would make sure the world is using the full range of its entrepreneurial talent by enabling those who cannot normally afford childcare to focus productive time on their business.

Trend 2: Enable greater business resilience: help SMEs to help themselves to thrive
The focus of government support during the pandemic was on providing financial relief. Many SMEs took out loans (government guaranteed or not) to sustain their business during lockdown. They may need further support such as pay holidays and means-tested pay thresholds (similar to student loans who are only paid back once a certain income threshold is achieved). Moreover, tailored and potentially subsidized financial advice and planning support could be critical in building businesses’ resilience. For the next phase of economic recovery, financial measures should be complemented by instruments that allow entrepreneurs to build resilience. We discuss one option here that aligns with our findings.

Covid-opportunity vouchers
Entrepreneurs and SMEs are seen as having an advantage when it comes to noticing emerging trends and rapidly reacting to them. Our statistical analyses of the data underlying this report indicate that entrepreneurs and SMEs who acted in this way fared better: Their business seemed to navigate the pandemic more successfully, had more positive long-term outlooks including for job creation, and the entrepreneurs had higher mental well-being. Specifically, our findings highlight the role of searching out new business opportunities. Hence, we advocate the creation of ‘Covid-Opportunity Vouchers’, similar to Innovation and Growth vouchers schemes available in the past. Entrepreneurs can find it difficult to search out new opportunities when they are immersed in the day-to-day running of their businesses, working long hours, and trying to cope with reduced cash flow due to reduced demand or needing to chase customers for outstanding payments, as many entrepreneurs in our study did. In fact, the most common reaction to stress and uncertainty is to ‘do more of the same’, rather than to look outward to search out new markets and customers or to experiment with new products/services or new processes. Covid-Opportunity Vouchers would provide a signal and the means to encourage entrepreneurs and SMEs to explore new opportunities and thereby build agility and resilience. This must not be a resource-intensive process. Ideas for new products or services can come from customers, employees, or from collaborations with other businesses. Opportunity Vouchers in the form of small cash grants might either help to incentivize entrepreneurs directly to engage in such experimentation. Or they could aid access to business advice to conduct smart experiments to test possibilities for new markets and offerings. As part of this process, entrepreneurs may also welcome support to map their existing competencies systematically against societal trends and emerging customer demand. As is the nature of innovation, many such experiments may fail. It is therefore critical that these entrepreneurs are equipped to design smart experiments and learn from their failure for the design of future services/products or launch in new customer segments or markets.

6.2. Specific trends

Trend 3: Digitalisation and the digital economy
Business premises closure, remote working and the need for social distancing led to an acceleration of digitalisation during the pandemic. Moreover, our analyses of the opportunities that entrepreneurs newly recognized in the pandemic revealed digitalisation – in all its facets – as a key trend (see Chapter 2.1). This ranged from the upswing in online sales and e-commerce, to a greater use of technology to increase their business productivity, deliver their products/services, or to create new technology-based products and services including those that support further digitalisation of the economy. Entrepreneurs also noticed the increased readiness in society to accept technology.
For the economy, accelerated digitalisation has important benefits. Aside from reducing cost and increasing efficiency and productivity, it has the potential to make businesses and the economy more inclusive. For instance, remote working can help address the regional imbalance by enabling more people to work and live in less expensive areas, which may help bolster their well-being. Accelerated digitalisation can also support the development toward a greener economy by, for instance, reducing transport and pollution. All of this suggests that measures to support digitalisation are timely to leverage this trend.

Design digital-aware campaigns
Many businesses have yet to exploit technology; thus schemes that help connect businesses to relevant digital capabilities (from e-commerce to setting up effective remote working) would be particularly beneficial. For instance, a ‘digital aware’ campaign could bring onboard those that are hesitant to engage. It could also be by showcasing productivity gains to be made but also by offering easy ‘how to guides’ for how to get started. Chapter 2.1 documented substantial country differences in how much entrepreneurs engage with online business. Thus, campaigns should be tailored to the country context. ‘Digital aware’ campaigns should also raise awareness of potential negative impacts of increased digitalisation on mental well-being, e.g., due to expanding work (such as enabling being available 24/7) and diminishing work-life boundaries. As explained in Trend 1, a greater awareness and safeguarding of personal well-being can help manage this downside while supporting entrepreneurs to benefit from accelerated digitalisation.

Enable frugal digitalisation
One downside of an accelerated digitalisation are the additional layers of complexity necessary to conduct business. For instance, concerns about digital security and the legal requirements for safeguarding how people’s data are stored. Many entrepreneurs and the self-employed would thus particularly benefit from robust ‘good enough’ technological solutions that are focused on core functions and reliability. This is even more so the case for areas where broadband coverage is patchy or unstable. Indeed, there is an important role for government to ensure the availability of widespread access to the internet including in more remote areas and for all strata of society to ensure all entrepreneurs benefit and to avoid new inequalities stemming from digital exclusion to emerge.

Trend 4: Renewed focus on ‘local’
The reviewed focus on ‘local’ concerns including the local community was viewed by many entrepreneurs as an opportunity in the pandemic (see chapter 2.1). Two aspects stood out of how this trend of a renewed focus on ‘local’ can lead to long-term advantages for the post-Covid economy.

Support businesses to strengthen local supply chains
The pandemic led to the disruption of global supply chains, raising awareness about the precariousness of global trade. As some of the entrepreneurs in our study noted this increased support for local manufacturing and local procurement (‘Made in UK’, for example). This trend would help to create more local and thus more reliable supply chains, to create local employment, to reduce the carbon footprint related to transporting goods, and it would offer greater control over labour conditions in supply chains. During the pandemic, some entrepreneurs already shifted production back to their local countries; others who already produced ‘locally’ in their countries were able to flexibly change their manufacturing towards medical and healthcare supplies. This suggests great potential to further develop production capabilities of SMEs domestically.

Incentivize adoption of circular economy models
The renewed focus on ‘local’ also holds opportunities to develop integrated circular economy models whereby the use of resource is maximized while waste is minimized and recycled. Thus, encouraging adoption of new circular economy models is aligned with policies aiming at reducing carbon emissions and at transforming the world’s economy into a greener and more inclusive one. This trend could be supported and encouraged through ad-hoc training and educational schemes as well as by providing financial incentives to firms for partnering with local suppliers and strengthening their networks among businesses within the same supply chain. There might also be a place for awareness campaigns to sensitize consumers such as promoting ‘Made in the local country’ or ‘Buy local’ as aspirational and quality labels.

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The focus of government support during the pandemic was on providing financial relief. Many SMEs took out loans (government guaranteed or not) to sustain their business during lockdown. They may need further support such as pay holidays and means-tested pay thresholds (similar to student loans who are only paid back once a certain income threshold is achieved). Moreover, tailored and potentially subsidized
Entrepreneurs in our sample increased their volunteering and giving activities during the pandemic, which shows that they care about contributing to society. Although this may not fit with the popular stereotype of the economically minded entrepreneur, research shows that charitable giving is common among small businesses. Moreover, it can create positive synergies for the business and its bottom line. For instance, businesses with a social purpose not only innovate more often and more successfully, they also tend to be more resilient.

Educate about ‘how to’ create inclusive and sustainable business models

There is an opportunity for the post-Covid economy to leverage this already high engagement in giving back to society by entrepreneurs through integrating this practice directly into their businesses through inclusive and sustainable business models. When giving is separate from the business, it is easy to discontinue. When giving and social and environmental impact are part of the business and align with revenue generation, they are more easily sustained over the long-term. Moreover, research indicates that entrepreneurs find their work more meaningful and satisfying if their business is highly demanding in general and more so than employees’ work. Yet, being one’s own boss is also intensely rewarding and satisfying, which means that the stresses of entrepreneurs’ work sometimes go unnoticed. For instance, as an entrepreneur, you push on, just one more hour, just one more client email to respond to, just a little less sleep (again), and may feel just a bit more exhausted the next day.

7. Practical takeaways for entrepreneurs: Five steps to support your well-being

Drawing from the science of well-being and latest research on entrepreneurs’ stress, well-being, and resilience, we summarize five easy steps that entrepreneurs can take to deal with stress productively and to support their mental well-being and build resilience.

7.1. Acknowledge stress

We all feel stressed – exhausted, overwhelmed, anxious even hopeless – at times. Feeling stressed is a normal human response to crisis situations like the pandemic. Stress is not a pleasant state of mind, but it is functional, it allows our body to mobilize resources to face adversity. The first step in coping productively with stress and building resilience is to ‘face reality’ and to notice and acknowledge stress. This builds a basis for enduring it.

Crises aside, research documents that entrepreneurs’ work is highly demanding in general and more so than employees’ work. Yet, being one’s own boss is also intensely rewarding and satisfying, which means that the stresses of entrepreneurs’ work sometimes go unnoticed. For instance, as an entrepreneur, you push on, just one more hour, just one more client email to respond to, just a little less sleep (again), and may feel just a bit more exhausted the next day.

Noticing and acknowledging stress and what specifically stresses you is the first important step that sets the scene for step 2.

7.2. Make time for recovery from stress

Stress not only exhausts us. Over time, it damages our mental and physical health if we don’t allow ourselves time for recovery. Our body can mobilize extra energy to deal with stressful situations only for short amounts of time without causing damage to it. Therefore, it is essential to look after yourself, engage in self-care, be compassionate towards yourself and allow yourself time to unwind and recuperate from stress. Yet we know that we are least likely to make time for recovery when we most need it, when life is most stressful – the so-called recovery paradox. You may think you cannot ‘afford’ to take a break or go for a walk, yet the opposite is true.

Recovery activities make you more productive and creative because they allow your body to re-set the physiological changes created by stress.

So, what can you do? Build time for recovery into your daily routine, grant yourself mini-breaks throughout the day (although recommendations vary, about five minutes every hour is effective and there are various apps to help with that), take your mind off work and detach in the evening (e.g., don’t look at your emails after a set time, say 8 p.m.), exercise regularly (aim for 30 minutes of moderately intensive exercise each day), spend time in nature (at least two hours per week, your garden or a nearby park will do during lockdown), and get enough sleep (aim for at least seven hours of good sleep, but do find out whether you need more, many people do).

It is a valuable to invest in yourself. Research finds that entrepreneurs who are able to psychologically detach from work and who sleep well, not only feel better and have more energy, they are also more creative, more innovative and are better at identifying business ideas.

7.3. Seek support: don’t be afraid to ask for help and support

As an entrepreneur you are used to making decisions and being in charge. Often asking for help and reaching out to others is seen as a sign of weakness, when in fact it should be seen as a sign of strength.

Don’t forget your significant others and friends, they are an important source of social support – key for dealing with stress and detaching from work – especially for entrepreneurs who often have fewer high-quality relationships that they can rely on.

Yet support can also come from professional relationships from business partners, fellow entrepreneurs, and even from key employees with whom you have trusted relationships. In times of crisis, it also becomes easier to initiate conversations with suppliers, customers or funders about payments, delays in delivery or the like. Once you start reaching out to others, talk about the current situation as a wider problem that you both share, rather than focusing solely on a specific issue (e.g., about a particular payment to be made). Framing negotiations that way builds appreciation of the other’s perspective which can lead to more creative solutions.

Perhaps it is also time to see what counselling is about. Again, this is not a sign of weakness. As one entrepreneur recently explained ‘I hire management consultants to improve my business’s productivity and I go to counselling to enhance my personal productivity’.
7.4. Improvise and plan to regain control

Crisis like the Covid-19 pandemic take away control and increase uncertainty. For instance, the lockdowns in place in many countries dictate which businesses have to close, as well as how and where we can work, shop and live our life. An essential part of building resilience is to accept that you cannot change certain things. What are these for you? Knowing them will free up your mental capacity; rather than dwelling on things that you cannot influence you will be able to focus on re-gaining control over the aspects of your business and life that you can influence.

Regaining control can take different forms:

- For your business, exploring new offerings, opportunities, or markets is one way of regaining control in a crisis. Our analyses of the data underlying in this report indicate that entrepreneurs who acted in this agile manner fared better. They had higher mental well-being and their business seemed to navigate the pandemic more successfully. This is in line with research which found that entrepreneurs who experimented with their offerings and business models or looked for new partners weathered crises including the 2008 financial crisis more successfully. They leveraged their personal and business connections and engaged, for instance, their employees to find new ideas, products or services, or markets.

- For you individually, you can re-gain control in the little things in life from establishing new work routines (e.g., for homeworking) to learning a new skill. It also helps to plan for the long-term future so that you have something to look forward to after the pandemic is over. Do not start with a big personal project but rather with a small one: the aim is to see progress and experience success quickly to re-gain a sense of control.

- Moreover, ‘giving’ and prosocial behaviours are important drivers of well-being, as they increase our sense of control and purpose. Thus, volunteering or using your business acumen to support your community can be another way to re-gain control. We saw in chapter 5 that this was a frequently used strategy by entrepreneurs across the different countries in the study.

5. Take the long-term view

It may be difficult to appreciate it right now, but crises often help building resilience for the long-term. This is especially the case if you learn to manage the stress that comes with it and if you can find meaning in the crisis. Consider what this current challenging period might be able to teach you.

This is a very individual process. Some people gain a new perspective on work-life balance by reaffirming the importance of family; others may realize that if they can manage to keep a business afloat in stressful times like this, there is little they cannot achieve in life. And still others find that they gain new insights into how not to run a business and treat others, with a newfound resolve to do business differently going forward. Adversity can help recognize that there is a different way of doing business attending to community and stakeholders needs.

Self-care is essential. By acknowledging what stresses you, making time for recovery, seeking support, improving and taking the long-term view, you will not only be taking care of yourself but also of your business.

Please stay healthy, stay well, stay resilient.

4. Regain control

3. Seek support

2. Make time for recovery from stress

1. Acknowledge stress

5 steps to support your well-being

Appendix: Sample description and representativeness

We surveyed 5,206 entrepreneurs from 23 countries, who manage their businesses on a daily basis or are the CEOs and who own all or part of their business. Table 1 provides an overview of the sample size per country. In Table 2 below, we present the composition of our sample in terms of industry sector, size of the business (number of employees), age of the business, and the age, gender and education of the entrepreneur. We also compare our data with data from the Global Entrepreneurship Monitor (GEM). GEM is the largest global research project on entrepreneurship and surveys representative household samples to determine how many people in each country are entrepreneurially active and their profile. Comparing our data to GEM allows us to understand to what extent our sample fits the typical profile of individual entrepreneurs across countries. Details are shown further below.

Sample description

Businesses. In terms of industry sector, more than half of all entrepreneurs in our sample run B2B businesses (53.3%), while 35.5% run businesses in consumer-oriented industries. 16.2% of entrepreneurs in our sample lead businesses in the manufacturing (13.6%) or extractive (2.6%) industry sectors. Our sample covers businesses of different ages and have up to 250 employees. On average, businesses in our sample existed for 11.22 years and have 13.10 employees, both part-time and full-time (not counting the owners).

Entrepreneurs. Entrepreneurs in our sample are on average 45.65 years old. The majority are aged between 45-54 years (27.3%), a further 26.2% are 35-44 years old. Entrepreneurs aged 55-64 years make up 19.7% of our overall sample. There are few younger 18-24 years (2.3%) and older 65-99 years (5.6%) entrepreneurs. None of the entrepreneurs in our sample are below 18 years old.

In terms of education, assessed as highest level of education completed, most entrepreneurs in our sample obtained tertiary (university) education (75.6%), followed by secondary (11.2%) and post-secondary education (13.2%). Few entrepreneurs indicated primary or lower secondary education (2.9%) as the highest level of education.

Our sample consisted of over two thirds male entrepreneurs (68.2%) and just under one third are women (31.8%).

Table 1. Sample breakdown by country

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Sample comparisons and representativeness

To assess the representativeness of our sample, we compare it to data from GEM for the above-listed 23 countries (Table 1). GEM obtains minimum sample sizes of 2,000 randomly chosen households per country. Although GEM conducts annual surveys, not all 23 countries covered in our sample are included every year. Depending on data availability, we use GEM data from 2005 and 2011-2018. The overall sample used for comparison drawn from GEM are 83,292 entrepreneurs who own and run a business, excluding nascent entrepreneurs, but including owners of new and established businesses with up to 250 employees.
To compare our samples (labelled Covid in Table 2 below) to GEM, we use chi-square tests to compare the distribution of samples across categories for all measures. In addition, we use t-tests for continuous measures (size of the business, age of the business, age of the entrepreneur, which we report in the text below).

Table 2. Characteristics of our sample compared to GEM

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extractive</td>
<td>125***</td>
<td>2.6</td>
<td>5563</td>
<td>6.9</td>
<td>In the Covid sample, most businesses operate in the Business Service sector (53.3%) and Consumer Oriented industries (50.8%). In the GEM sample, most businesses are concentrated in Consumer Oriented (48%) and Manufacturing (27%) industries.</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>652***</td>
<td>13.6</td>
<td>21974</td>
<td>27.2</td>
<td></td>
</tr>
<tr>
<td>Business Services</td>
<td>2586***</td>
<td>53.3</td>
<td>17651</td>
<td>21.9</td>
<td></td>
</tr>
<tr>
<td>Consumer Oriented</td>
<td>1481***</td>
<td>30.5</td>
<td>35502</td>
<td>44.0</td>
<td></td>
</tr>
<tr>
<td>Total N</td>
<td>4856</td>
<td>100.0</td>
<td>80740</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Significance test Chi-square = 2555.98, df = 3, p < .001

<table>
<thead>
<tr>
<th>Business size (no. of employees)</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>966***</td>
<td>18.8</td>
<td>30971</td>
<td>38.7</td>
<td></td>
</tr>
<tr>
<td>1–5</td>
<td>1994***</td>
<td>38.9</td>
<td>37233</td>
<td>46.6</td>
<td></td>
</tr>
<tr>
<td>6–10</td>
<td>796***</td>
<td>15.8</td>
<td>3917</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>11–50</td>
<td>1000***</td>
<td>21.3</td>
<td>4998</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>50–250</td>
<td>287***</td>
<td>5.5</td>
<td>891</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Total N</td>
<td>5129</td>
<td>100.0</td>
<td>80221</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Significance test Chi-square = 3203.29, df = 4, p < .001

<table>
<thead>
<tr>
<th>Business age (in years)</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>203***</td>
<td>4.0</td>
<td>6788</td>
<td>8.9</td>
<td>Firms in the Covid sample are on average 11.27 years old, while firms in the GEM sample are on average 11.06 years old. Compared to the GEM sample, the Covid sample includes 4.9% less firms aged below 1 year, 4.2% more firms aged between 6-10 years, and 2.4% more firms aged between 11-20 years.</td>
</tr>
<tr>
<td>1–5</td>
<td>1845</td>
<td>35.9</td>
<td>28950</td>
<td>36.8</td>
<td></td>
</tr>
<tr>
<td>6–10</td>
<td>838***</td>
<td>21.1</td>
<td>12961</td>
<td>16.9</td>
<td></td>
</tr>
<tr>
<td>11–20</td>
<td>1101***</td>
<td>22.8</td>
<td>15680</td>
<td>20.4</td>
<td></td>
</tr>
<tr>
<td>More than 20</td>
<td>836</td>
<td>16.3</td>
<td>13044</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>Total N</td>
<td>5157</td>
<td>100.0</td>
<td>76733</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Significance test Chi-square = 200.29, df = 4, p < .001

To summarize the sample comparison tests shown in Table 2:

- Businesses in our sample trade more often in the business service sector (53.3%) compared to GEM (21.9%), are less frequently active in extractive (2.6% compared to 6.9%), manufacturing (13.6% compared to 27.2%) and consumer-oriented services (30.5% compared to 44%) in GEM industries. The businesses in our sample are larger (13.1 employees) than those covered by GEM (4.25 employees) but of a similar age (11.2 years old vs. GEM 11.1 years old).

- Entrepreneurs in our study are slightly older (45.6 years old in our sample, 44.2 years old in GEM sample), more educated (75.6% in our sample hold any university degree compared to 29.9% in GEM), and more likely to be men compared to GEM samples of entrepreneurs (68.2% compared to 61.4%).

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the Covid sample, most businesses operate in the Business Service sector (53.3%) and Consumer Oriented industries (50.8%). In the GEM sample, most businesses are concentrated in Consumer Oriented (48%) and Manufacturing (27%) industries.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age of entrepreneur (in years)</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 18</td>
<td>0</td>
<td>0.0</td>
<td>6</td>
<td>0.01</td>
<td>Entrepreneurs in the Covid sample are on average 45.60 years old while entrepreneurs in the GEM sample are on average 44.18 years old. Overall, the Covid sample includes more entrepreneurs in the older age categories and less entrepreneurs in the younger age categories.</td>
</tr>
<tr>
<td>18–24</td>
<td>117***</td>
<td>2.3</td>
<td>5014</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>25–34</td>
<td>960</td>
<td>18.9</td>
<td>10366</td>
<td>13.1</td>
<td></td>
</tr>
<tr>
<td>35–44</td>
<td>1330</td>
<td>26.2</td>
<td>22264</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>45–54</td>
<td>1385</td>
<td>27.3</td>
<td>27182</td>
<td>26.6</td>
<td></td>
</tr>
<tr>
<td>55–64</td>
<td>1001**</td>
<td>19.7</td>
<td>15036</td>
<td>18.1</td>
<td></td>
</tr>
<tr>
<td>65–99</td>
<td>287***</td>
<td>5.6</td>
<td>3407</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Total N</td>
<td>5081</td>
<td>100.0</td>
<td>81275</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Significance test Chi-square = 151.30, df = 6, p < .001

<table>
<thead>
<tr>
<th>Education of entrepreneur</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary, lower secondary</td>
<td>147***</td>
<td>2.8</td>
<td>20955</td>
<td>26.2</td>
<td>Overall, entrepreneurs in the Covid sample are significantly better educated than those in the GEM sample. In the Covid sample, there are 45.7% more entrepreneurs with tertiary education compared to the GEM sample.</td>
</tr>
<tr>
<td>Secondary</td>
<td>572***</td>
<td>11.2</td>
<td>23907</td>
<td>29.9</td>
<td></td>
</tr>
<tr>
<td>Post-secondary</td>
<td>530***</td>
<td>10.4</td>
<td>11166</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>3861***</td>
<td>75.6</td>
<td>23929</td>
<td>29.9</td>
<td></td>
</tr>
<tr>
<td>Total N</td>
<td>5119</td>
<td>100.0</td>
<td>83293</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Significance test Chi-square = 4744.35, df = 3, p < .001

<table>
<thead>
<tr>
<th>Gender of entrepreneur</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Sample differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>3490***</td>
<td>68.2</td>
<td>51123</td>
<td>61.4</td>
<td>Both the GEM and the Covid sample are male dominated. However, the overall gender gap is significantly larger in the Covid sample (6.8% less females in Covid compared to GEM).</td>
</tr>
<tr>
<td>Female</td>
<td>1629***</td>
<td>31.8</td>
<td>32170</td>
<td>38.6</td>
<td></td>
</tr>
<tr>
<td>Total N</td>
<td>5119</td>
<td>100.0</td>
<td>83293</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Significance test Chi-square = 84.43, df = 1, p < .001

Note: *p < .05, Standardized residual ≥ 2.0, **p < .01, Standardized residual ≥ 2.6, ***p < .001, Standardized residual ≥ 3.3


10 The comparison data comes from population representative sample collected as part of the World Values survey programme Waves 5 and 6, www.worldvaluessurvey.org

11 The comparison data comes from population representative sample collected as part of the World Values survey programme Waves 5 and 6, www.worldvaluessurvey.org


16 We asked questions such as ‘I have to deal with unforeseen problems at work’, ‘I face uncertainty about the future of my business’, ‘I have to make decision(s) where I am unsure about their effects on my business’ (adapted from Grant, S. & Ferris, K. (2012). Identifying sources of occupational stress in entrepreneurs for measurement. International Journal of Entrepreneurial Venturing, 4(4), 351-373) and ‘I’m not sure what to do’, ‘My entrepreneurial work seems uncertain and risky’, ‘I do not know where my business is headed’, the questions we designed to be more ‘Covid-specific’. Values below 2.5 fall in the ‘strongly disagree – disagree’ category and values from 3.5 to 5 fall in the ‘agree – strongly agree’ category.

17 Values below 2.5 fall in the ‘strongly disagree – disagree’ category and values from 3.5 to 5 fall in the ‘agree – strongly agree’ category.


19 Values below 2.5 fall in the ‘strongly disagree – disagree’ category and values from 3.5 to 5 fall in the ‘agree – strongly agree’ category.


21 Values below 2.5 fall in the ‘none of the time – sometimes’ category and values from 3.5 to 5 fall in the ‘most of the time – all of the time’ category.

22 Values below 2.5 fall in the ‘none of the time – sometimes’ category and values from 3.5 to 5 fall in the ‘the most of the time – all of the time’ category.

23 Values below 2.5 fall in the ‘none of the time – sometimes’ category and values from 3.5 to 5 fall in the ‘the most of the time – all of the time’ category.


25 Our measure of resilience is taken with permission from the well-validated psychological scale by Luthans, F., Youssef, C.M., & Avolio, B.J. (2007). Psychological Capital: Developing the human competitive edge. Oxford: Oxford University Press. Copyright © 2007 Psychological Capital (PsyCap) Questionnaire (PCQ) Fred L. Luthans, Bruce J. Avolio & James B. Avey. All rights reserved in all medium. Permission has been granted to use the PCQ scale.

26 This includes values of 4.5 and higher. Values of 4 represent ‘somewhat agree’, 5 ‘agree’ and 6 ‘strongly agree’. The underlying scale is a composite of several questions which is why we chose 4.5 as a cut of value. If we only include those entrepreneurs who agree and strongly agree, then 41.9% report resilience.


28 Values below 2.5 fall in the ‘worse than competitors’ – much worse than competitors’ category and values from 3.5 to 5 fall in the ‘better than competitors – much better than competitors’ category.


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