

IDE : Index of Dynamic Entrepreneurship

Beyond the Pandemic: Reimagining
Future Entrepreneurship Ecosystems

2020



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ABOUT THE INSTITUTIONS



Prodem is a think tank and a do-tank on innovation and entrepreneurship ecosystems in Latin America. With more than 15 years of experience, Prodem stands out for generating and transferring world-class knowledge in coordination with the actual practice of real-life actors. Prodem conducts research, studies and measurements to get an insight into the status of ecosystems, providing technical assistance and training on entrepreneurship and innovation, both for scholars and professionals. Prodem gives priority to the development of networks and alliances, and works to support governments, international organizations and other institutions of the ecosystem in confronting challenges related to the design and assessment of dynamic entrepreneurship and innovation policies. For its role, Prodem received the 2016 Startup Nations Award for Groundbreaking Policy Thinking granted by the Global Entrepreneurship Network.

For more information about Prodem, please visit:

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ST PRODEM

ST Prodem, the summit of regional ecosystems, is conducted every year with the purpose of fostering experience-based learning and the development of contact networks. Throughout four days, professionals from different Latin American countries share their rights and wrongs considering a variety of ongoing endeavors conducted in the region in areas such as entrepreneurial education, incubation and acceleration, mentorship, ecosystem development, financing and public policies. In that context, they interact and identify collaboration opportunities that are crucial to enhance their actions in favor of entrepreneurship and innovation. At the same time, new connections emerge, which are then translated into the expansion of support networks and the identification of common projects. Specific workshops have taken place in the summit, such as the one devoted for policy makers members of the Latin American network of managers of dynamic and innovative entrepreneurship policies or the Corporate Venturing Latam workshop.

For more information about ST Prodem, please, visit

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The Global Entrepreneurship Network operates programs in 180+ countries aimed at making it easier for anyone, anywhere to start and scale a business.

By fostering deeper cross-border collaboration and initiatives between entrepreneurs, investors, researchers, policymakers and entrepreneurial support organizations, GEN works to fuel healthier start-and-scale ecosystems that create more jobs, educate individuals, accelerate innovation and strengthen economic growth. Its extensive footprint of national operations and global verticals in policy, research and programs ensures GEN members have uncommon access to the most relevant knowledge, networks, communities and programs relative to size of economy, maturity of ecosystem, language, culture, geography and more.

GEN Research is an initiative that drives knowledge creation efforts that translate research into evidenced-based policies and programs to create healthier entrepreneurial ecosystems and more impactful entrepreneurial support organizations. Informed by its knowledge partners, advisors and its Global Entrepreneurship Research Network which was established in 2013 with the Kauffman Foundation, GEN Research collects and shares insights from its communities around the world about efforts to remove barriers to entrepreneurship, welcome communities left behind and increase rates of new firm formation within all economies.

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page 10	EXECUTIVE SUMMARY
page 12	INTRODUCTION & CONCEPTUAL APPROACH
page 20	GLOBAL SCENARIO
page 36	IMAGINING ECOSYSTEMS AFTER THE PANDEMIC
page 57	FINAL REMARKS
page 60	COUNTRY PROFILES
page 125	METHODOLOGICAL ANNEX

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As part of this Report we developed a collective scenario-building exercise to capture the likely characteristics of post-pandemic entrepreneurial ecosystems in the medium-term. To this end, we invited a group of experts formed by thought leaders affiliated with highly-respected entities from across the globe. Entrepreneurs, academics, leaders of support organizations, investors, government officials and senior economists at multilateral organizations accepted our challenge to imagine the ecosystems of the future. To all of them, our sincere thanks for their collaboration and invaluable contributions.

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PROLOGUE

Hugo Kantis
Director of Prodem

This report comes just as we are concluding a year of shock to our lives, caused by the pandemic. Our health and our societies are suffering unprecedented impacts and transformations. Clearly, the world is no longer the same and we need to react. We know from previous experiences that entrepreneurs and young companies are key actors in the processes of creative destruction and can contribute decisively to the economic recovery and job creation necessary to overcome crises.

In this context, countercyclical public policies should focus on generating the necessary conditions to revitalize and enhance the “animal spirits”, which have been hit by the sharp drop in economic activity, and foster the drive to respond to opportunities offered by the emerging world. We saw at Prodem the need to contribute to these tasks by generating new knowledge and useful guidelines for the required action for both reconstruction and transformation.

In this sense, this report presents, on the one hand, the results of an exercise that constitutes a first measurement of the impact of the pandemic on conditions for dynamic entrepreneurship. These results reveal where it is necessary to carry out interventions aimed at reversing the damage. Each country can, based on this, design a reconstruction agenda based on those priorities.

At the same time, it is also necessary to begin to look ahead and envision how the transformative trends that are underway are going to shape the ecosystems of tomorrow. As an old saying goes “in order to use a trend to your advantage, you must be able to anticipate it.” In today’s uncertain world, this is both necessary and challenging. To contribute in this regard, we decided to undertake an exercise of collective imagination together with leading experts from different countries in North America, Europe, Asia, Africa and Latin America, and with the valuable support of the Global Entrepreneurship Network (GEN). This exercise allowed us to identify a set of trends and scenarios that enable ecosystems leaders to think about the entrepreneurial economies of the future.

Thus, this report can be used to assess how the identified impacts and general trends come to life in each ecosystem, taking into account its own starting point. Combining these two perspectives is key to building the right conditions for entrepreneurship and innovation to drive the reconstruction and transformation of the different countries and regions.

We hope that this report will serve as a guiding compass in the midst of so much gloom, and to continue collaborating in deepening this work to assess the particular conditions of each country as needed.



A MESSAGE FROM GEN

Cristina Fernandez
Vice President for Policy & Research, GEN

It is with great pride that the Global Entrepreneurship Network (GEN) partners for the third year in a row with the PRODEM, a think tank at the University of General Sarmiento in Buenos Aires, to present an analysis of national ecosystems around the world. The systemic approach embodied in the conceptual model of the Index of Dynamic Entrepreneurship (IDE) is more important than ever as the COVID-19 pandemic has altered social, economic, education, cultural, and regulatory conditions - all dimensions analyzed in the Index.

However, beyond nations' differences in IDE scores, all countries are still facing persistent uncertainty. Ecosystem builders are faced with the challenge of finding the right support mechanisms that consider not just the immediate impact of the pandemic, but also evolving consumer behaviors, accelerating technological change, reconfigured value chains and other forces rapidly changing the context for entrepreneurs.

This is why we joined forces with PRODEM not just to take stock of the immediate impact of the pandemic on 64 national entrepreneurship ecosystems, but also to explore what is ahead for entrepreneurs and the organizations that support them. To this end, PRODEM proposed an innovative analytical framework, which we put to test with a range of entrepreneurship practitioners and thought leaders. We thank each of them for their invaluable input to the analysis of possible medium-term scenarios for entrepreneurship contained in this report.

As world leaders continue to debate possible responses to a prolonged crisis, this report offers a roadmap for developing policies and programs that carefully consider emerging factors and threats that can shape conditions for dynamic entrepreneurship in the next three years.

We encourage governments and ecosystem builders to reflect on the full IDE 2020 analysis as they decide which barriers to new and young firms to tackle next, and we remain attentive to feedback on how we can continue to guide action plans for rebuilding entrepreneurial economies and societies.

EXECUTIVE SUMMARY

What have been the main impacts of the COVID-19 crisis on the systemic conditions for dynamic entrepreneurship around the globe? How do these effects compare across countries and regions? What can we imagine about how entrepreneurship ecosystems will continue to evolve? The surge of the pandemic and its social and economic consequences are posing a number of critical challenges for entrepreneurs and entrepreneurial ecosystems. Governments and support organizations are also experiencing challenges. In a context characterized by high levels of uncertainty, evidence-based analyses and imagination are ever-more important for decision-making.

This year, developing the Index of Dynamic Entrepreneurship (IDE) report posed a new challenge: measuring the conditions for entrepreneurship as they are being hit by the COVID-19 pandemic. This made the task highly complex for three main reasons. First, because of the highly unpredictable nature of the disease and its possible evolution. Second, because we are still immersed in the crisis with no clearly foreseen end point. And third, because updated information for the full set of dimensions that make up the Index is not yet available.

In the face of these complexities, and in the spirit of providing actionable insights to policymakers and ecosystem stakeholders, we present the results of two exercises designed to meet the challenges of rebuilding entrepreneurial economies.

First, based on available and reliable information, we estimated the most immediate impacts of the pandemic-induced economic downturn in the first half of 2020. For that purpose, we calculated the difference between each country's mid-2020 IDE score and the one obtained at the beginning of year. The main results of this assessment are:

- The conditions for dynamic entrepreneurship have been negatively impacted in the vast majority of the countries (70%).
- The number of affected ecosystems is higher among developed nations (90%), but the magnitude of the impact is more pronounced in developing countries due to their structural weaknesses and economic vulnerabilities.
- The most affected dimensions – demand conditions (opportunities), the availability of finance (resources), and human capital (entrepreneurs) – show that the impact spans the entire entrepreneurial process.
- In addition to estimating these immediate effects, we explored the future evolution of ecosystems in the post-pandemic world. To this end, we reviewed the latest reports by different organizations that monitor the various dimensions of the crisis, and elaborated a preliminary set of rival hypotheses to guide an exercise of collective scenario-building. This exercise, which engaged more than 25 experts from across global regions, showed us that ecosystem builders should recognize the influence of seven general trends:
 - (i) economic recovery will take time;
 - (ii) poverty and social inequality will increase;
 - (iii) the role of government in the economy will be more important than in the last few decades;
 - (iv) financial liquidity will be high, and interest rates low;
 - (v) consumption patterns and consumer habits will change;
 - (vi) technological change will be faster; and
 - (vii) global value chains will be reconfigured.

In this context, future ecosystems will likely be shaped in the medium term as follows:

- New opportunities will emerge as part of a Schumpeterian process of creative destruction led by the acceleration of digital transformation, the reconfiguration of global value chains and large corporations' innovation strategies. However, the net balance of new opportunities and the ones that are destroyed will vary across countries and sectors.
- Whether entrepreneurs in the different ecosystems capitalize on new opportunities will depend on their capabilities, access to resources and networks. However, in general, necessity-based rather than dynamic entrepreneurship will tend to predominate, especially in less developed countries. Furthermore, the deterioration of social conditions, education and social capital could dampen the number of new dynamic entrepreneurs in the medium term. At the same time, lower opportunity costs of becoming an entrepreneur for some segments of highly-qualified people who now work in at-risk large firms could drive the opposite effect. Nevertheless, the strength of this force will vary across countries and regions, and may not be sufficient to yield a positive scenario.
- Resources to launch and grow new firms would be more constrained. The availability of social capital and the chances of leveraging new digital platforms will depend, to a great extent, on each entrepreneur's socio-economic position and existing networks. Entrepreneurial financing will be shaped by the coexistence of contradictory forces. On the one hand, existing funds will need to deploy investments in the short term. On the other hand, difficulties in fundraising during the pandemic could affect the availability of new sources of funding in the medium term, or until a full recovery occurs. In addition, investors' current preference for follow-on investments as a strategy to preserve the value of their portfolios could persist. New investments are likely to focus on particular verticals, on more advanced stages and on larger deals. Most early-stage entrepreneurs would need to bootstrap. The gap in the supply of entrepreneurial finance between developed and developing ecosystems is expected to widen.
- The importance of entrepreneurship policies on the government agenda is expected to decrease initially given the focus on coping with the emergency, coupled by budgetary and fiscal restrictions. However, these policies are likely to then recover prominence due to the key role of new firms and innovation in driving economic recovery and growth. The renewed menu of policy instruments is expected to include tools that target a wider set of entrepreneur profiles and ventures associated with the 'new normal', and to leverage public-private partnerships. In this context, the most effective support institutions – those with accumulated capabilities and a track record of collaboration – will become ecosystem leaders.

Perhaps the most valuable output of this collective scenario-building exercise is the identification of different, contrasting trends which could come into play. The assessment of their net effects will depend on each ecosystem's capabilities for and pro-activeness in seizing opportunities and neutralizing threats. Governments, international aid organizations and other ecosystem stakeholders will benefit from conducting this exercise as a key step in strategic planning, with adjustments to reflect their own regional or local realities. This report provides a roadmap for that endeavor and suggests some examples of different initiatives that could potentiate opportunities and neutralize those identified threats in the future ecosystems.

part 01

INTRODUCTION & CONCEPTUAL APPROACH

INTRODUCTION

The year 2020 will be remembered in contemporary history as the year of the COVID-19 (or SARS-CoV-2) pandemic. At the time of writing this report, an unprecedented global health crisis is still evolving without a clear end point in sight, regardless of the hopes placed on scientific developments in terms of vaccines and treatments. The severity of the crisis is evident in the alarming numbers of infections and deaths. As of November 2020, the World Health Organization reported more than 50 million cases and 1.2 million deaths. A distinguishing characteristic of COVID-19 has been its speed of transmission. It took less than two months after the November 2019 outbreak in Wuhan, China for Europe to begin registering a rising number of cases. Then, just a month later, the virus had already reached the Americas – the current epicenter of the pandemic.

It is a crisis that is exerting a substantial impact beyond the epidemiological realm, reshaping our habits, the ways in which we relate, work and live. As such, it has hit the economy at large hard, and particularly the conditions for entrepreneurship.

The COVID-19 pandemic emerged in a context shaped by a global economy rapidly transforming due to digitalization, the expansion of the so-called “platform capitalism,” and industry 4.0 technologies. At the same time, the start of 2020 was marked by an escalating commercial and technological conflict between the United States and China, which threatened to disintegrate several global value chains, giving way to alternative markets of suppliers (nearshoring) or to operations returning to ‘home’ countries (reshoring). All of this had effects on the global economy and trade flows¹.

In the case of developing countries, the COVID-19 crisis also coincided with the decline in prices for several commodities², which will undoubtedly exacerbate the impact and delay post-pandemic recovery. In addition, several of these countries entered 2020 in an economic recession with high levels of indebtedness, which did not bode well for these economies even before the pandemic emerged³.

Throughout the first half of 2020, numerous published reports documented the impact of COVID-19 on companies, and in particular on younger companies. A study carried out by Facebook, the OECD and the World Bank analyzed 30,000 SME entrepreneurs, managers and employees from over 50 countries. Its results indicated that between January and May 26% of surveyed companies had shut down. The impact on women-led companies was even larger. In addition, 2 out of 3 surviving companies faced lower sales; 57% reported a 50% drop in sales compared to the same month in the previous year. All of this has had a direct correlation with job destruction. Nonetheless, survey participants largely shared a positive outlook for the future. In fact, 74% planned to reopen their companies and reformulate their business models to include a much greater online presence⁴.

On the contrary, an OECD report summarizing more than 40 different studies on the impact of COVID-19 on SMEs in developed countries concludes that, nuances of the respective economies aside, more than 50% of companies reported lower sales, and a third did not expect to survive another month⁵.

In the United States, business closures between February and April 2020 reached 22%, which represents approximately 3.3 million companies⁶, while other reports estimated closure rates of 43%⁷. More recently, in May 2020, a Census Bureau study stated that 90% of small businesses were negatively affected by the crisis, with three out of four reporting declines in sales⁸.



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In terms of new companies, a recent study revealed that 60% of new companies in the United Kingdom had seen sales drop by more than 50%⁹. In addition, 4 out of 10 businesses had halted their investment plans, a decision related to a large extent to increasing difficulties in obtaining financing. The authors argue that investors are concentrating investments in companies in which they had already previously invested to ensure their continuity and to preserve the value of their portfolios. In India, a NASSCOM report published in July 2020 warned that 40% of new companies in that country had shut down operations or were about to do so, while indicating that 70% had less than three months of cash flow¹⁰.

In the United States, business registry information through June showed a continuous and sustained drop in new registration applications, followed by a pronounced rebound that continues to this day (US Census, 2020). In an interesting exercise to estimate the impact of this drop on new companies conducted for the Center for Economic Policy Research (CEPR), Sedláček and Sterk (2020) estimate that even in a scenario of a pronounced rebound and recovered numbers of new companies, the positive effects on employment will take time to be seen¹¹.

In Spain, an April 2020 study by the national Entrepreneurship Observatory indicated that 40% of companies had temporarily closed and almost 80% were pessimistic about the future. In addition, one in three nascent start-up companies had decided to put their plans on hold¹². In Germany, a KfW study carried out in March 2020 indicated that 90% of entrepreneurs suffered a sales drop due to COVID-19; a third of them lost all of their revenues, and half had lost more than 75% of it¹³.

In Latin America, the impact has been even greater. According to an April 2020 study by Prodem and the Inter-American Development Bank (IDB), 83% of startups and young companies suffered losses in sales and 53% stopped selling altogether. Most worryingly, only half foresaw their businesses being able to survive another two months. At the same time, half of those who were just starting their ventures decided to halt their plans¹⁴. The general climate of concern and pessimism was also evident in expectations: 57% thought their activity was going to stop or drop significantly in the following month.

The impact of the crisis was also significant on entrepreneur support organizations. According to the Prodem-IDB study, two out of three institutions suspended or significantly decreased their activities, and only 25% were optimistic about the future¹⁴.

In this context, analyzing the conditions for entrepreneurship becomes a complex task for several reasons. First is the highly uncertain nature of the disease and its possible evolution. Second, we are still immersed in the crisis, which can lead to hasty analysis without the necessary perspective (hindsight) to appreciate and reflect on all the possible consequences of the pandemic, especially the social ones. And third, fully updated information for the different dimensions that make up our indicators is not yet available.

That is why for this 2020 COVID-19 edition of the Index of Dynamic Entrepreneurship (IDE), we have decided to carry out two types of exercises. First, an exercise to estimate the most immediate impact on the conditions for entrepreneurship as a result of the economic downturn and lock-down measures. To this end, we used the information available through July 2020 to adjust the Index values in those dimensions for which there is already quantified evidence of the effects of COVID-19.

This first exercise yields an accurate picture of each entrepreneurship ecosystem compared to the one reflected by the unadjusted figures from early 2020. However, it does not completely describe future conditions for entrepreneurship, particularly those where uncertainty around post-pandemic development is higher, or where opposing effects could clash, without anyone knowing the resulting final balance in advance.



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For this reason, we carried out an innovative scenario-building exercise, in which we interviewed over 25 international experts who shared their perspectives on possible medium-term scenarios for the post-pandemic world. More specifically, we gathered their views on how the different forces shaping the 'new normal' will impact the various conditions for entrepreneurship in the next few years. Gathering these views is a key added value of the IDE 2020 analysis, since as Albert Einstein rightly pointed out, in times of crisis, imagination is more important than knowledge.

The resulting report will have the following structure. The next section describes the conceptual framework of the systemic view of entrepreneurship, which not only supports the construction of the Index of Dynamic Entrepreneurship (IDE), but also provides elements to understand precisely which aspects will be most impacted by the COVID-19 crisis in the short term, and which will be impacted in a longer run. The second section summarizes the main data referring to the global IDE ranking in the context of COVID-19, emphasizing what the conditions were before the crisis began and those immediate impacts we can estimate will result, for the most part, from worsening economic conditions across countries. After this first exercise, the results achieved via the second medium-term scenario-building exercise will be described. Finally, we share some final conclusions and provide some orientations and examples of some actions that could benefit future ecosystems.

CONCEPTUAL FRAMEWORK AND METHODOLOGY

What is dynamic entrepreneurship?

The concept of dynamic entrepreneurship encompasses those entrepreneurial projects with growth potential and young firms that have overcome the early phase of higher mortality to become (at least) a competitive Small and Medium Enterprises (SME) with the potential and drive to continue growing.

Dynamic companies are usually founded by teams that have the enthusiasm, aspirations and competencies to grow, and which can leverage helpful networks as they pursue value propositions based on differentiation, innovation and/or business opportunities to capitalize on dynamic and scalable economic trends¹⁵.

This concept is akin to the idea of productive and transformational entrepreneurship and is certainly broader than other definitions found in the literature in which firms are defined in terms of their growth rates¹⁶. As such, dynamic entrepreneurship refers to gazelles and high impact firms¹⁷ but also to those companies that contribute to increasing the pool of competitive SMEs even when they do not follow linear and continuous high-growth patterns.

More rigid definitions fail to completely reflect the complexity of the business growth process because they limit their view to firms that reach a minimum level of sales or employment over the first year, or specific three-year growth rates (e.g., 20% or 30%). The paths that dynamic companies travel are diverse and heterogeneous. Therefore, even Birch's (1979) ground-breaking metaphor, which included gazelles, elephants and mice, should be expanded to incorporate other animal species that do not reach the speed of gazelles but are valuable nonetheless, like kangaroos, dolphins and certainly human beings. That is to say, different company growth patterns should be also considered.

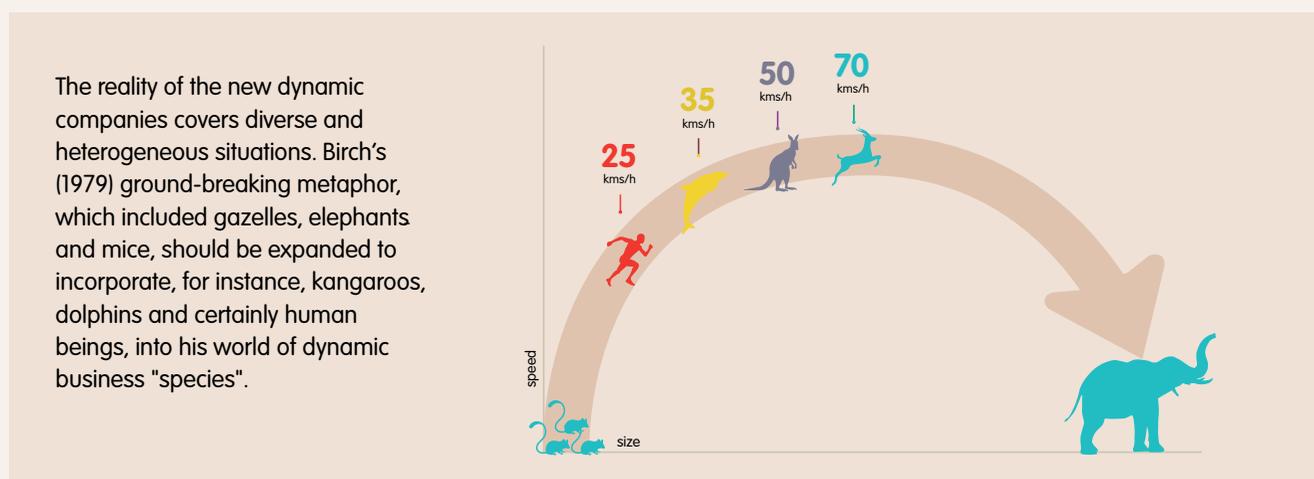
Dynamic entrepreneurship encompasses those entrepreneurial projects with growth potential and young firms that, after surviving the early phase of higher mortality, become (at least) a competitive SME with the potential and drive to continue growing

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In simple terms, dynamic enterprises may fit into one of the following growth patterns:

Type 1: They grow rapidly and continuously.

Type 2: They take their time until they take off.

Type 3: They grow at a moderate pace, but in a sustained manner.

Type 4: They grow fast, but in an unstable manner.

Type 5: They grow thanks to the entrepreneur's portfolio of other businesses.

This is consistent with the documented presence of relatively stable periods during high-growth stages. In some cases, high growth is followed by a period of crisis and contraction, after which a new period of growth begins at a slower pace. In fact, more recently, the debate has shifted from the idea of defining patterns to a more general one: how stable is growth over time, particularly high growth? So far, international evidence tends to show that gazelles are just “one-hit wonders”, and that high firm growth is usually short-lived and episodic¹⁸.

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Grover Goswami, A.; Medvedev, D.; Olafsen, Ellen. (2019). *High-Growth Firms: Facts, Fiction, and Policy Options for Emerging Economies*. Washington, DC: World Bank.

The concept of dynamic entrepreneurship also fits better with the reality in developing countries, where the gazelle phenomenon is quantitatively less marked. Developed countries, especially in the current context of increasing uncertainty associated to the pandemic, also benefit from this approach.

In short, existing knowledge about business growth calls for avoiding rigid definitions when determining the type of businesses that will be supported. The concept of dynamic entrepreneurship allows for a clearer perspective on which companies can contribute to economic and social development. This call for a more flexible definition of dynamism is particularly necessary in the context of the COVID-19 crisis and the post-pandemic, when higher uncertainty will be the norm and economic growth rates will be subject to high volatility, making ex ante predictions harder.

A new type of potentially dynamic firm born during the crisis?



Dynamic entrepreneurship is the main driver of economic growth. But in the current context of the pandemic, resilience became the ‘rule of the game’, and those firms that have excelled in their ability to adopt survival and reinvention strategies are the most likely to resist and grow.



Within the animal species, there is one particularly relevant creature for its ability to survive and strive in hard environmental conditions: camels. These animals have big humps of stored fat that help them survive in the absence of food and water. Once they eat and drink again, their humps are refilled. They can walk for long periods without rest and can run at 40 km/hour.

In the world of startups and young firms, camels are characterized by three distinctive features: (i) they prefer to pursue balanced growth instead of the rapid and exponential growth of gazelles or unicorns; (ii) they are built to last, with a long-term focus, and (iii) they operate a more diversified portfolio of business lines and are forced to internalize many operations due to the limitations of the ecosystems where they operate. All these characteristics endow these firms with higher levels of flexibility and resilience, enabling them to survive and even turn adversity into an advantage.

Source: Lazarow, A. (2020) Startups, It's Time to Think Like Camels — Not Unicorns. *Harvard Business Review*. October 16, 2020.

A systemic approach to understand the emergence of dynamic entrepreneurs and the specificities of developing countries

The creation and development of a new company is the result of a process that, throughout its different stages and milestones, is affected by diverse social, cultural, political and economic factors. Therefore, we have adopted a systemic and eclectic approach supported by the international literature¹⁹.

The IDE is built around 10 key dimensions that have an impact on the quantity and quality of emerging companies. The first one –and main one– is the existence of entrepreneurs capable of conceiving powerful and value propositions: the **entrepreneurial human capital** (the actual entrepreneurs).

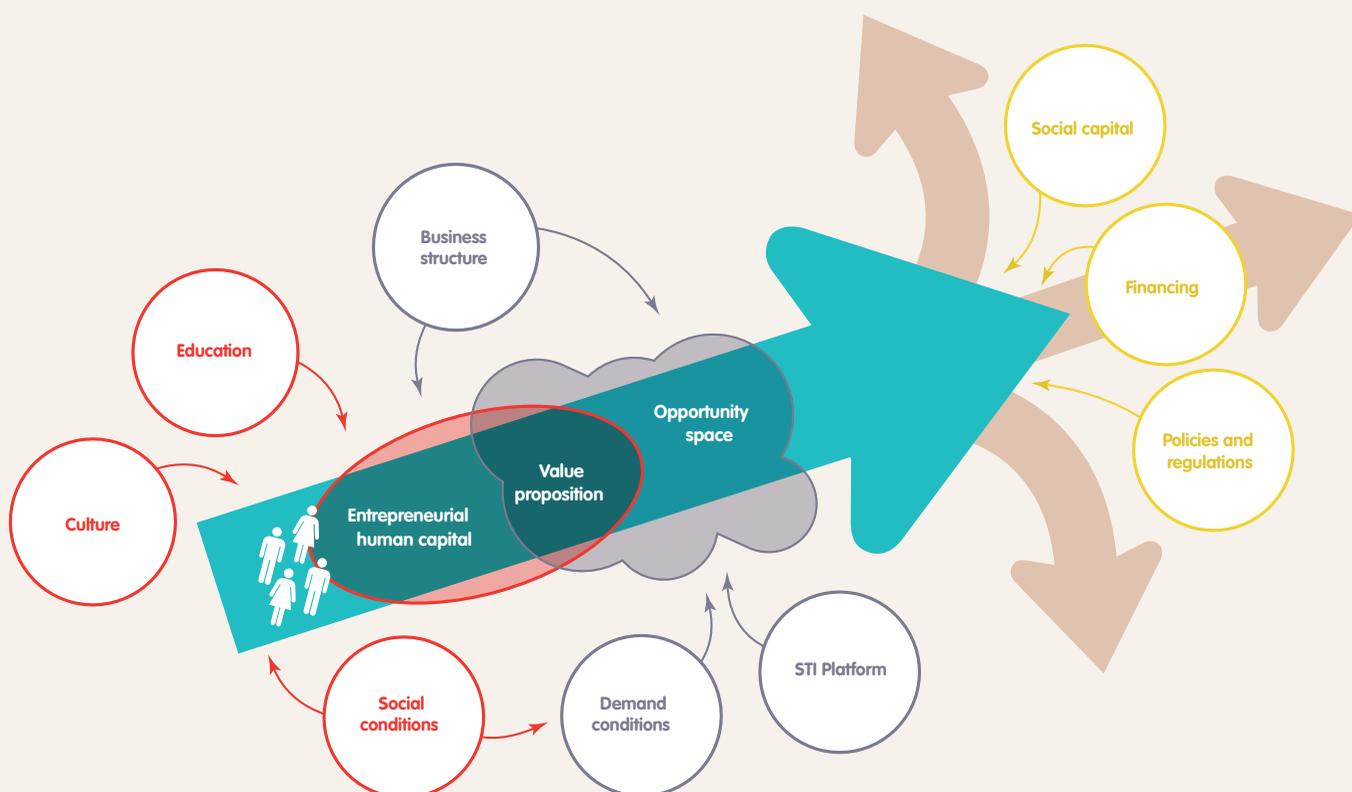
The emergence of entrepreneurs is influenced by the values and beliefs that make up the **culture**, the **social conditions** of the families in which people are born and raised, and the way in which the **educational system** contributes to the development of entrepreneurial competences. Later in life, the companies where people work will complete (or not) the trajectory of development of said entrepreneurial human capital.

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19. See a review of the literature in Kantis, H., Ishida, M., & Komori, M. (2002). Entrepreneurship in Emerging Economies: The Creation and Development of New Firms in Latin America and East Asia. Washington: Inter American Bank and Bank of Development of Japan, and a pioneer presentation of the systemic approach in Kantis, H., Angelelli, P., & Mouri Koenig, V. (2005). Developing Entrepreneurship: Experience in Latin America and Worldwide. Washington: Inter American Development Bank.

For the eclectic perspective see in particular Verheul, I., Wennekers, S., Audretsch, D., & Thurik, R. (2002). An eclectic theory of entrepreneurship: policies, institutions and culture. Entrepreneurship: Determinants and policy in a European-US comparison, 11-81. The systemic approach was some years later proposed in Isenberg (2011) with the ecosystems perspective in his HBR article How to start an entrepreneurial revolution and in Acs, Z. J., Audretsch, D. B., Lehmann, E. E., & Licht, G. (2016). National systems of entrepreneurship. Small Business Economics, 46(4), 527-535.

Systemic approach for dynamic entrepreneurship



- Entrepreneurial human capital and its determinants
- Opportunity space
- Factors influencing the creation and development of new firms

The systemic approach also considers the factors that have an impact on the existence of business opportunities, such as the **demand conditions** (e.g., market size and dynamism), the profile of the firms that comprise the **business structure** and the efforts of companies and institutions in Science, Technology and Innovation, defined as the **STI platform**.

The transformation of projects into companies and their later development depend to a great extent on the entrepreneurs' capabilities. But it is essential for them to have access to a wide range of sources of **financing** that will help start and expand businesses (for early stages, for expansion and working capital).

Another major factor is the existence of **social capital**, i.e., an environment of trust that enables building bridges and contact networks with other key actors (other entrepreneurs, institutions, etc.) and accessing resources that will contribute to the creation and development of a start-up.

Finally, this process is affected by **policies and regulations**. Governments establish rules (e.g., licenses and permits, taxes, foreign trade restrictions), which may be more or less friendly to entrepreneurs, as well as policies that, through action or omission, have an impact on them and their companies. Entrepreneurship policy in particular aims at the creation of more favorable conditions for dynamic entrepreneurs to emerge and the promotion of more and better new companies that manage to take off and attain substantial growth.

Among the set of dimensions included in the systemic approach there are specific structural factors that are particularly important for developing countries (e.g., social conditions, business structure, social capital, culture). Evaluating these helps in identifying the presence of structural barriers and their impact, not only on the creation and development of dynamic new firms but also on the emergence of entrepreneurs and entrepreneurial vocations.

Methodology

We developed the Index of Dynamic Entrepreneurship (IDE) following the recommendations from the Organization for Economic Co-operation and Development (OECD) for constructing indexes. The 10 dimensions that form the IDE are based on the normalization of more than 40 variables obtained from different secondary information databases recognized at the international level (e.g., World Bank Group data, the Global Competitive Index, the Global Entrepreneurship Monitor, the World Value Survey, UNESCO data).

As recommended in specialized literature, the final value of the Index is calculated using the geometric mean. This method is consistent with the systemic approach, since the weaker dimensions have a greater impact on the final IDE value than the stronger ones. As such, the weaker dimensions may be considered as restrictions to the start-up process. Further details on the variables analyzed, the sources of data and the IDE construction process can be found at www.prodem.ungs.edu.ar.

part 02

GLOBAL SCENARIO

ECOSYSTEMS BEFORE THE ONSET OF THE COVID-19 CRISIS

The landscape of conditions for dynamic entrepreneurship at the beginning of 2020 confirmed the leadership of the United States, which leads the ranking of the Index of Dynamic Entrepreneurship (IDE), scoring almost 70 points (out of 100 possible). Trailing behind were the Netherlands and Singapore, both of which, compared to 2019, narrowed the gap that separated them from the U.S. and took second and third place, respectively. Germany, for its part, reaffirmed the advances it achieved in 2019, reaching fourth place and asserting its place among the top five, leaving Finland in fifth place.

IDE 2020 rankings, before the COVID-19 crisis

1	United States	69.1	33	Hungary	41.7	● High
2	The Netherlands	67.5	34	Turkey	39.4	● Upper middle
3	Singapore	65.4	35	Russia	38.5	● Middle
4	Germany	64.4	36	Malaysia	38.2	● Lower middle
5	Finland	64.0	37	Chile	37.9	● Low
6	Switzerland	63.6	38	Italy	35.5	
7	Sweden	62.8	39	Mexico	34.4	
8	Norway	60.2	40	Bulgaria	34.1	
9	Canada	60.1	41	Slovakia	33.7	
10	United Kingdom	58.6	42	Indonesia	32.7	
11	Austria	58.1	43	Egypt	32.0	
12	Ireland	57.6	44	Uruguay	31.8	
13	South Korea	57.6	45	Vietnam	31.7	
14	Belgium	56.4	46	Philippines	31.6	
15	France	56.4	47	Costa Rica	31.5	
16	Australia	55.3	48	Argentina	31.5	
17	Japan	55.2	49	Croatia	31.3	
18	Luxembourg	54.5	50	India	31.3	
19	Estonia	52.8	51	Morocco	30.7	
20	Israel	52.7	52	Colombia	29.6	
21	Denmark	50.8	53	Iran	29.3	
22	Hong Kong	50.0	54	Brazil	28.0	
23	China	48.8	55	Greece	27.5	
24	Slovenia	47.2	56	Peru	26.8	
25	Czech Republic	46.9	57	South Africa	25.9	
26	United Arab Emirates	46.4	58	Panama	25.5	
27	Spain	45.8	59	Bolivia	21.8	
28	Qatar	45.3	60	Ecuador	21.2	
29	Portugal	45.0	61	Dominican Republic	20.8	
30	Poland	44.6	62	El Salvador	19.0	
31	Thailand	42.8	63	Venezuela	11.9	
32	Lithuania	41.9	64	Guatemala	11.0	

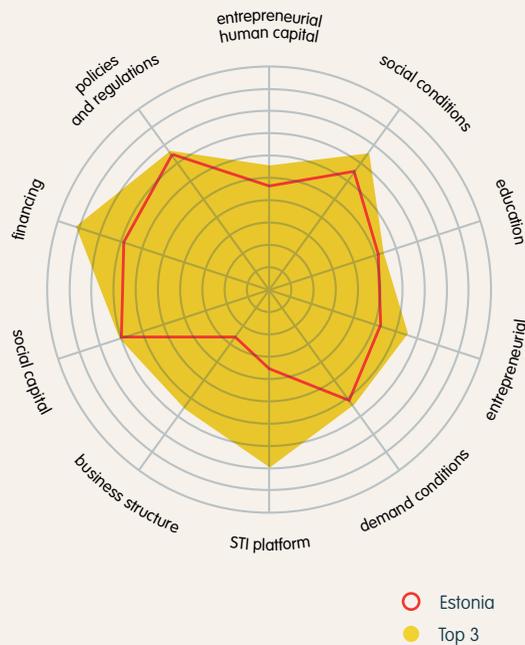
Other developed countries follow immediately, with new developments compared to 2019. For example, after a clear setback in 2019, Norway showed important signs of recovery at the onset of 2020, both in terms of access to financing and in policies specifically designed for entrepreneurs. These improvements drove Norway back to the top ten ranks. France and South Korea also showed improvements, although less noticeable than those in Norway.

On the flipside, the data showed setbacks in Ireland, Luxembourg and Australia. In Ireland, IDE scores for two dimensions decreased considerably - culture and its science and technology (STI) platform. In the cases of Luxembourg and Australia, the change in position was due to improvements in the countries with which they shared positions, rather than a deterioration of their own ecosystems.

Finally, Estonia joined other advanced economies in terms of most favorable conditions for entrepreneurship. This emerging country, building on successive improvements in previous years, had already confirmed its place among the top 20 ecosystems at the beginning of 2020 (see box).

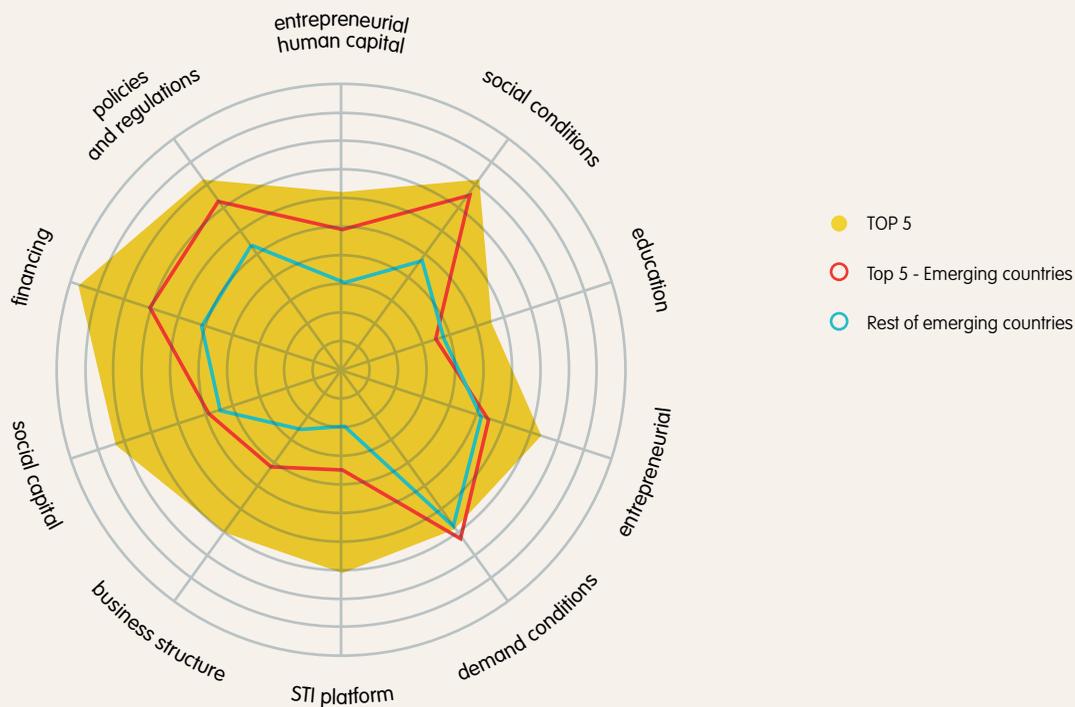
A closer look at Estonia

Estonia's main strengths are its favorable policies and regulations and a set of conditions that promote the creation of new dynamic ventures- namely demand conditions and factors describing the context in which entrepreneurs emerge: social conditions, education and social capital. Those are the dimensions where the gaps are the smallest compared to leading countries in the ranking. On the contrary, STI platform still shows important gaps.



Emerging countries, for their part, appear in the middle of the ranking, with IDE scores ranging between 30 and 40 (out of 100 possible points). Within this segment, along Estonia, a highly varied set of countries led the way: China, Slovenia, the Czech Republic, Qatar and Poland. Compared to other developing nations, these five countries managed to narrow gaps with the more developed countries in aspects that support the conversion of entrepreneurship projects into new companies, such as access to financing, and regulations and policies, as well as in terms of more favorable social conditions.

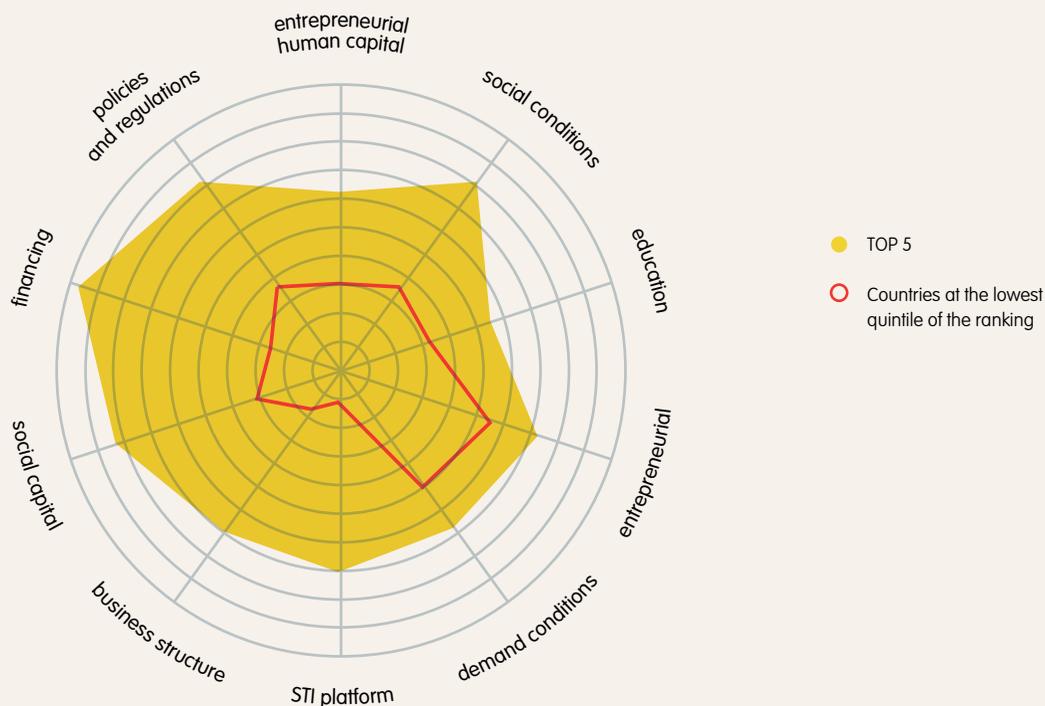
There is considerable heterogeneity among emerging countries



The final positions in the ranking featured countries with limitations in their conditions for entrepreneurship and with structural gaps with respect to leading ecosystems. Standing out in this group is Greece which, compared to 2019, climbed four positions as a result of significant improvements in access to financing and in policies and regulations, within a context of more favorable social conditions which expanded the base for the rise of new entrepreneurs.

Beyond the specific case of Greece, countries at the tail end of the ranking - mostly from Latin America and a few from Asia and Africa - continued with IDE scores below 30 points, which is half the average score for the most advanced countries. Among their main weaknesses were structural factors underlying the availability of business opportunities (the STI platform and the business structure), the stock of entrepreneurial human capital and the key factors for the creation and development of new dynamic ventures: access to social capital and financing.

The conditions for entrepreneurship at the bottom of the ranking highlight deep structural gaps



Without doubt, the global landscape of conditions for dynamic entrepreneurship at the beginning of 2020 showed a consolidated group of leading countries, all of them developed economies, led by the United States, three European countries - the Netherlands (2nd), Germany (4th), Finland (5th) - and Singapore (3rd). These ecosystems have solid structural bases and were able to develop advantages in factors that support the start of new ventures, such as access to financing, social capital and a set of policies and regulations conducive to the development of new businesses.

However, the COVID-19 pandemic triggered a generalized crisis which will impact conditions for entrepreneurship, to an extent we are only beginning to observe. That is why, in the next section, we analyze which effects we can already observe, based on either updated statistics, estimates or adjustments in the variables most directly affected by the decline in economic activity. This is a preliminary measurement of the immediate or short-term impact of COVID-19 on conditions for dynamic entrepreneurship and it will be updated next year. Later in this report, we will include the results of a medium-term analysis that yields a broader assessment of the post-pandemic scenario.

THE COVID-19 IMPACT

As a result of the dynamics catalyzed by COVID-19, most governments implemented a series of sanitary measures aimed at containing the spread of the virus and avoiding the collapse of their health systems. Various lock-down regimes and temporarily closing borders have been the main set of measures taken in face of the pandemic, with a direct and immediate impact on the economy and, as a result, on conditions for dynamic entrepreneurship.

While acknowledging that this severe crisis has also affected entrepreneurs at psychological, emotional and social levels, the following exercise will focus on the most immediate consequences that the economic decline has had on five of the ten conditions for entrepreneurship, based on updated and comparable information for all countries included in the Index.

This exercise is based on information collected for the first half of 2020, which means that each country's results are influenced by their specific COVID-19 timeline (number of cases, stage of lock-down measures and level of economic impact). In other words, it offers a snapshot of conditions for entrepreneurship at a given moment (July 2020) within a continuously evolving reality. While in some countries the strongest impact of the pandemic is just beginning to be felt, in others, the peak of the pandemic has apparently already passed and given way to a "new normal". It is also important to consider that the incidence of the virus has not ended entirely; it is actually producing second waves of contagions in countries that had already overcome early peaks in infection rates.

Conceptually, the economic slowdown induced by COVID-19 led to direct setbacks in the following conditions entrepreneurship:

1. **Entrepreneurial human capital**, particularly the number of people with entrepreneurial intentions motivated by business opportunities. While it is common to hear that "opportunities emerge in times of crisis," the truth is that a contracting economy, combined with growing economic uncertainties, negatively affects the expectations and therefore, the intentions to start a business. Similarly, the increase in business closures recorded in most countries as a result of declining consumption and economic activity has had a negative impact on the perception of risk associated with entrepreneurial activity.
2. **Social conditions**: The decline in economic activity and increase in business closures have also directly impacted unemployment rates. In addition, the suspension of employment contracts and partial reductions in working hours, has lowered personal and family incomes.
3. **Demand conditions** have been directly impacted by lock-down measures and the decline in economic activity. Lower incomes and the closure or reduction of business operations limit opportunities for new ventures seeking to meet needs of individual consumers and businesses to emerge.
4. **Business structure**: Contracted economic activity has also led to lower production across several sectors. We must note, however, that the incidence of the crisis has not been sector-neutral. Some essential activities, such as the production of food and beverages, medical supplies and pharmaceuticals, and ICT continued and even increased their level of activity significantly. Other sectors, primarily retail and services (e.g. tourism, gastronomy and hospitality) have been seriously affected. Therefore, the profile of the business structure should be considered when assessing the impact of the pandemic.

5. **Access to financing:** First, there is growing uncertainty about the future evolution of markets and expected returns, a situation that is more acute in the case of early-stage investments. Second, investors and funds are closing investments rounds that began at the end of 2019 and mostly making follow-on investments within their portfolios in order to preserve the value of the companies they had already backed. Thus, available funding can be expected to be channeled to existing companies rather than to new projects and ventures.

Building on this conceptual model, we adjusted IDE scores with evidence and data available by July 2020, or in some cases with an estimate based on the behaviour of the same variables in the previous global crisis. This exercise focused on the impact on the above-mentioned variables, while acknowledging that the real impact is certainly much greater. Details on how we estimated the different impacts on these variables and dimensions as well as the sources we utilized, are available in the Methodological Annex at the end of this report.

COVID-19 impact according to development level

70% of the total of 64 countries in the Index of Dynamic Entrepreneurship show declining conditions for entrepreneurship, evidencing the global scope of the impact of COVID-19. In fact, among the most affected are both developed countries (e.g. the United States and those from Europe) and emerging countries (e.g. China, Hungary, Russia).

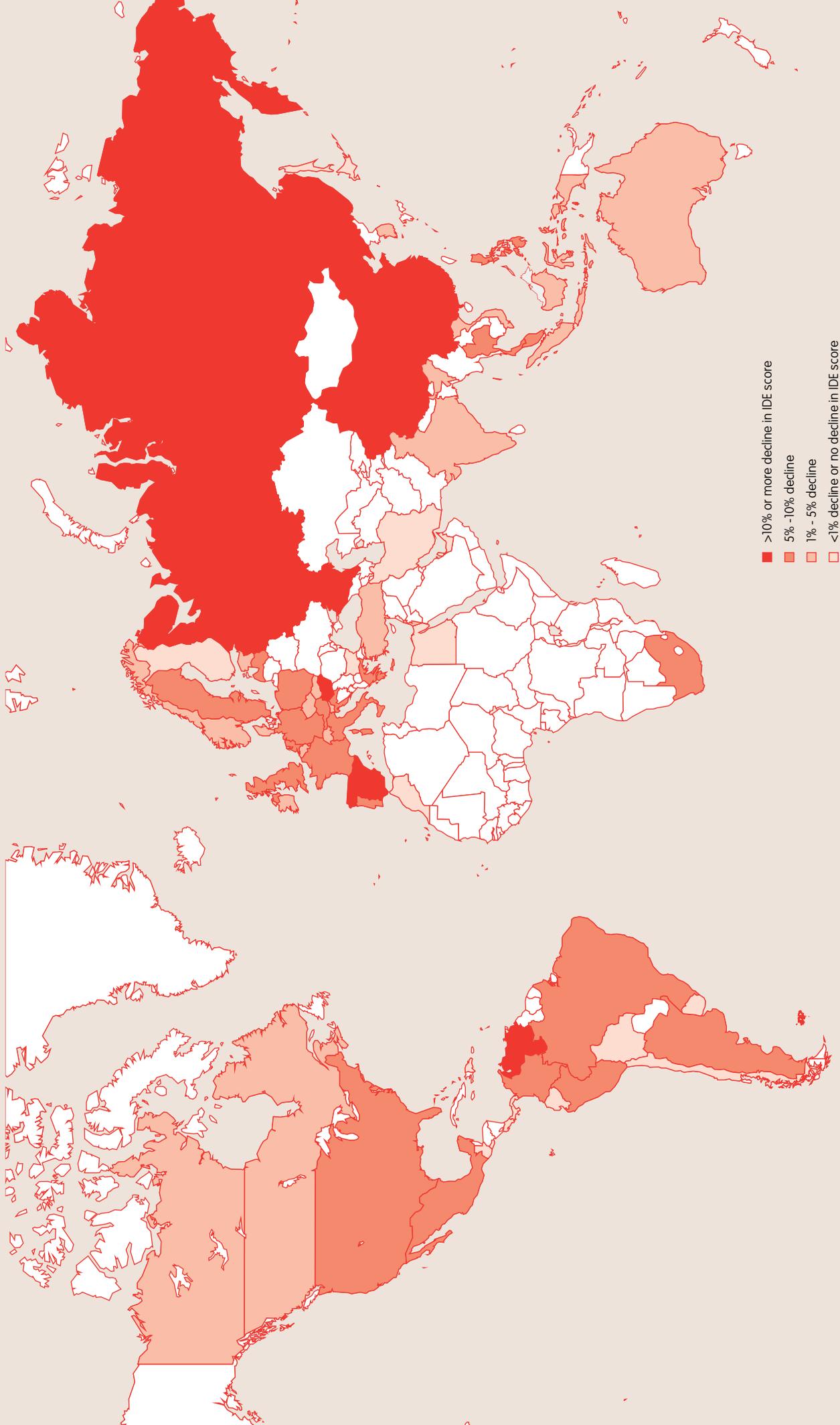
Lower IDE scores affect almost 90% of developed countries and two thirds of developing countries. While the impact of COVID-19 on conditions for entrepreneurship has been widespread among developed countries, it has been more pronounced in those relatively less developed due to their own structural weaknesses and economic vulnerabilities. Average declines in IDE scores are around 6% in more developed countries, and 8% in developing ones.



If we limit this exercise to computing only those dimensions for which it was possible to calculate an adjusted value computing the impact generated by the COVID-19 crisis, the results are much more conclusive: 80% of countries would register IDE declines. More specifically, if we only consider those variables where the information could be updated, we observe the following results:

- Seven countries would move from the group that barely experienced changes in their overall Index value, down to the group of impacted countries.
 - 13 impacted countries would move down to the group of those that were highly affected.
 - The negative impact continues to concentrate in developed countries, among which all but one of 25 countries suffered a decline in their level of conditions for entrepreneurship.
 - Compared to the broader adjustment exercise, the average decline observed in this partial adjustment is greater across all the countries analyzed (11% vs. 7% decline), and again somewhat smaller in developed countries (10% vs. 12%).
-

COVID-19 impact on systemic conditions



Several leading countries of the IDE ranking are among those that experienced the greatest COVID-19 impact on their conditions for entrepreneurship. This produced changes in the composition of both the top five and the top ten positions of the table.

The top five countries all record a decrease in IDE scores, and we observe a narrowed distance between the leading two countries (the United States and the Netherlands) and the three followers (Singapore, Germany and Finland), compared to the pre-pandemic table.

The United States continues to lead despite its five percentage point decline, which is largely due to lower early-stage investor activity during the first half of 2020. Singapore and Finland follow, rising in the ranking over the Netherlands which dropped from second to fourth place. Germany also drops two places, taking the sixth position, allowing Switzerland to rise to the list of top five countries for dynamic entrepreneurship. In the case of Germany and the Netherlands, their IDE setbacks are also primarily driven by the weaker scores in the financing dimension.

Within the rest of the top ten, the greatest setbacks are recorded in the United Kingdom, Austria, and to a lesser extent, France. On the flipside, Japan rises to 10th place, and South Korea and Belgium climb as well. Japan stands out for being one of the few countries where investment activity grew in the first half of 2020, while in the case of South Korea and Belgium, their rank improvement is relative to the declines experienced by competitor countries.

Other affected developed countries are Spain, Italy, Portugal, Hong Kong, Sweden and Australia, although in the last four of these, setbacks did not translate into losing their ranking positions. In Spain and Italy, the decline is due to lower economic activity, which led to a reduced spectrum of opportunities (demand conditions) and opportunity-driven entrepreneurial initiative (entrepreneurial human capital). In addition, Spain recorded lower early-stage investor activity during the first half of 2020.

Among emerging countries, there are several setbacks. In Asia, China, Thailand and the Philippines stand out. In Europe, Russia, Hungary and Croatia show the greatest declines. In Latin America, Brazil, Mexico and Argentina show noticeable impact. For the most part, these setbacks are explained by their significant economic slowdown and the resulting negative impact not only on demand conditions, but also on entrepreneurial intentions driven by opportunity (entrepreneurial human capital) - one of the main pre-existing weaknesses of many of these countries.

At the same time, in these emerging countries investment in early-stage companies declined significantly. The unprecedented nature of the crisis led to high levels of uncertainty and casts doubts on expected recovery timelines, which explains why investors seem to be in stand-by mode or targeting their investments towards more developed countries, their existing portfolios or later-stage (less risky) investment stages.

Conditions for entrepreneurship after accounting for the COVID-19 impact

Adjusted IDE ranking		Adjusted IDE scores	vs. 2020	Adjusted IDE ranking		Adjusted IDE scores	vs. 2020
1	United States	65.2	0	33	Turkey	37.8	1
2	Singapore	64.7	1	34	Chile	37.5	3
3	Finland	63.6	2	35	Hungary	36.5	-2
4	Netherlands	63.4	-2	36	Malaysia	36.1	0
5	Switzerland	61.7	1	37	Bulgaria	34.7	3
6	Germany	60.9	-2	38	Iran	34.7	15
7	Sweden	59.3	0	39	Russia	33.9	-4
8	Norway	58.7	0	40	Egypt	33.5	3
9	Canada	57.8	0	41	Slovak Republic	32.9	0
10	Japan	55.8	7	42	Mexico	32.3	-3
11	South Korea	55.6	2	43	Indonesia	32.2	-1
12	Ireland	55.5	0	44	Italy	32.1	-6
13	Belgium	55.4	1	45	Uruguay	31.8	-1
14	United Kingdom	55.2	-4	46	Costa Rica	31.3	1
15	Austria	54.8	-4	47	Vietnam	30.8	-2
16	Australia	52.8	0	48	Morocco	30.8	3
17	France	52.6	-2	49	India	30.7	1
18	Estonia	51.4	1	50	Argentina	29.9	-2
19	Luxembourg	51.3	-1	51	Philippines	29.5	-5
20	Israel	50.7	0	52	Croatia	28.9	-3
21	Denmark	49.7	0	53	Colombia	28.2	-1
22	Hong Kong	47.0	0	54	Brazil	26.2	0
23	United Arab Emirates	46.1	3	55	Panama	25.4	3
24	Slovenia	45.6	0	56	Greece	25.2	-1
25	Qatar	45.2	3	57	Peru	24.9	-1
26	Czech Republic	44.7	-1	58	South Africa	24.0	-1
27	China	43.2	-4	59	Bolivia	21.7	0
28	Poland	42.3	2	60	Dominican Republic	21.4	1
29	Portugal	41.1	0	61	Ecuador	21.0	-1
30	Spain	41.0	-3	62	El Salvador	18.8	0
31	Thailand	40.6	0	63	Guatemala	11.1	1
32	Latvia	39.4	0	64	Venezuela	6.8	-1

Impacts by dimension

Demand conditions is the dimension first hit by the pandemic since the different government measures for lock-down and shut-down of non-essential economic activities, as well as the interruption in international trade, generated an immediate contractionary effect on economies. Thus, the spectrum of opportunities for entrepreneurs narrowed. This observation does not ignore the fact that some windows of opportunity widened in certain niches or segments, such as technology, as a result of new needs that emerged or of increased activities related to the health sector and medical equipment.

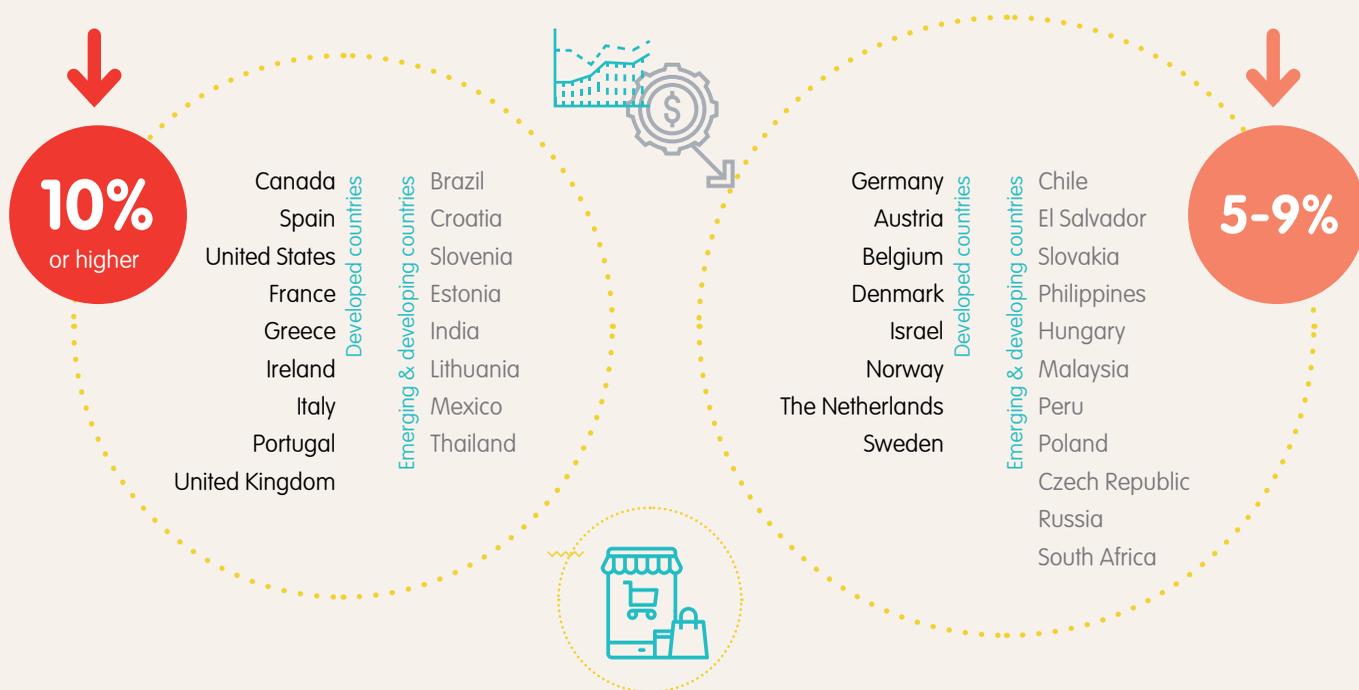
Three out of four countries experienced a setback in this dimension, with half of the countries in the Index showing scores for demand conditions reduced by more than five percentage points. Developed countries experienced this negative effect more often than developing countries (92% vs. 69%) and, at least until now, also experienced it in a more pronounced way (10% vs. 7% average decline). The greatest impacts can be observed in North America (United States, Canada), Mediterranean Europe (Italy, Spain, Portugal, and Greece), France, Ireland, and the United Kingdom. Not surprisingly, some of these countries are also the ones that recorded the most impact of the pandemic towards the end of the first half of 2020, both on their economies and their health systems.

Emerging and developing countries with weaker demand conditions include Mexico, Brazil, Croatia, Slovenia, Estonia, Thailand and India. In the last three cases, the decline was more pronounced since they started 2020 with encouraging data and economic growth rates close to 3% or even higher, as in the case of India. As such, their estimates dropped significantly after the appearance of COVID-19.

In the case of China, the economy already showed indications of growth by July 2020, which balanced its situation and made its IDE value for demand conditions resemble the one reported for the beginning of 2020.

Other emerging countries such as Argentina had already reached 2020 with setbacks in this dimension, so the influence of COVID-19 further complicated an already unfavorable scenario.

The impact on demand conditions has so far been more pronounced in the more developed countries



The worsening economic situation viewed from the demand side correlates with the supply side. In fact, the consequences of the pandemic affected countries' **business structure**, narrowing the space for entrepreneurial opportunities. However, setbacks in this dimension were less widespread than in the case of the demand conditions. Just over 6 out of 10 countries experienced reduced scores in this dimension (vs. 75% in the case of demand conditions). On the one hand, this lower impact incidence may be due to the crisis' strong sectoral biases, such that the final balance depends on the relative weight of the most affected sectors vis-à-vis the least affected (or even benefited) sectors in a given economy. Furthermore, the impact was not uniform even within the industrial sector. For example, while the food and beverages sector remained relatively unchanged, the apparel, automotive, or machinery and equipment sectors were seriously affected.

Unlike the previous dimension, the impact on the business structure variable was similar in developed and developing countries. Among the most developed countries, Italy, Canada, Spain, and to a lesser extent France and Portugal, appear to be the most affected. Among the emerging economies, India and some Eastern European countries, such as Slovakia and the Czech Republic, stand out. The case of China, where the pandemic originated, is paradoxical since it is one of the few countries which shows a slight recovery in production levels by the end of the first half of 2020.

The COVID-19 crisis also caused business structure setbacks, reducing the spectrum of opportunities in most of the countries



Developed countries

Italy	-9%
Canada	-9%
Spain	-9%
France	-8%
Portugal	-8%
UK	-7%
Germany	-6%
Luxembourg	-6%
Austria	-5%
United States	-5%
Japan	-5%
Belgium	-4%
Sweden	-4%
Netherlands	-3%
South Korea	-2%

Emerging & developing countries

India	-19%	Egypt	-4%
Philippines	-17%	Thailand	-4%
Peru	-13%	Vietnam	-4%
Slovakia	-12%	Costa Rica	-3%
Hungary	-11%	Estonia	-3%
South Africa	-11%	Russia	-3%
Mexico	-10%	Uruguay	-3%
Czech Republic	-8%	Chile	-2%
Turkey	-8%	Croatia	-2%
Brazil	-7%	Latvia	-2%
Slovenia	-7%		
Malaysia	-7%		
Poland	-7%		
Argentina	-6%		
Bulgaria	-5%		



Along with the direct consequences from lower economic activity and less space for opportunities, the COVID-19 crisis also impacted **entrepreneurial human capital** and its determinants, such as **social conditions**.

The entrepreneurial intention of those entrepreneurs motivated by perceived opportunities decreased along the spectrum of opportunities itself, causing setbacks in entrepreneurial human capital. Out estimates show that seven out of ten countries suffered a significant impact on this variable, with an average decline of 11 percentage points. Among the countries most affected in terms of entrepreneurial human capital are several of the most developed countries that lead the IDE ranking, such as the United States or the Netherlands, as well as other European economies that have been seriously affected by the pandemic such as Italy, Spain, France and the United Kingdom.

Europe's emerging economies also stand out for their declines in this variable. Scores for Croatia, Slovenia, Estonia and Latvia declined by 10% or more in this dimension, leading to them losing three to five points in the entrepreneurial human capital ranking. Finally, Argentina, Mexico, Thailand and South Africa complete the set of the emerging countries most affected in terms of lower entrepreneurial human capital.

The decline in economic activity negatively affects the motivation to start a business in the most affected countries



The slump in economic activity as a result of the COVID-19 pandemic not only discourages those who were motivated to start a business, but it also affects the social bases for the emergence of new dynamic entrepreneurs given the negative impact on **social conditions**, both due to lower incomes and rising unemployment. Both dynamics led to an increase in necessity-based ventures and lower dynamic, opportunity-based entrepreneurship.

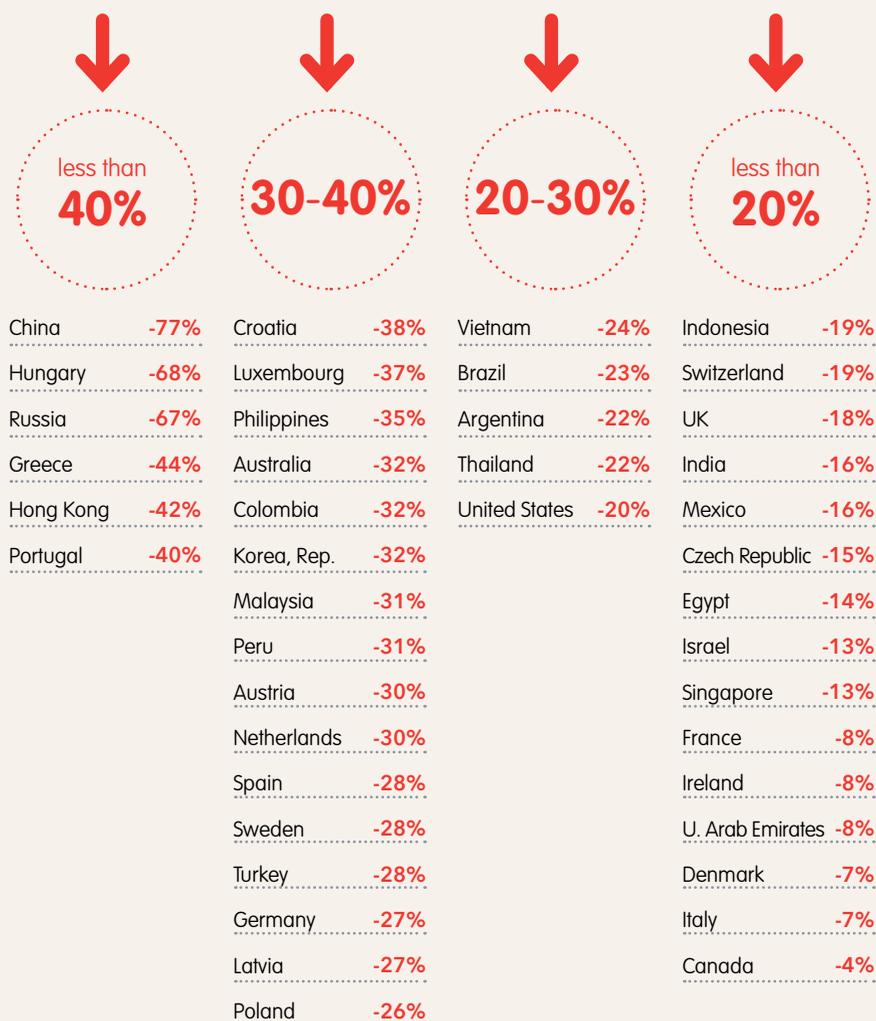
In total, half of the countries saw a deterioration in social conditions during the first half of 2020. However, the magnitude of the deterioration is somewhat greater among the deveoping countries (9% vs. 5%). As mentioned earlier, the greater vulnerability of these countries, together with their structural deficits in terms of social conditions, explain this greater impact from the crisis. Among the most developed countries, the most important setbacks occurred in the United States, Ireland, Portugal and Spain, while Venezuela, South Africa, Turkey and Brazil stand out among the least developed ones.

Finally, in terms of **financing**, the countries included in the Index show a significant slump, with an average decline of 27 percentage points. As in the other variables, this negative effect is more widespread among more developed countries than in developing countries, although the level of decline is somewhat more higher in the latter (31% vs. 24%). The largest declines in financing are particularly concentrated in emerging countries, with China, Russia and Hungary standing out. In these countries, investment activity in the early stages dropped significantly in the first half of 2020²⁰.

Among the most developed countries, the main declines occurred in Hong Kong, the Netherlands, Australia and Portugal, with scores lower by more than 30%. The most important markets such as the United States, Germany or the United Kingdom show declines of 20%, while Israel, India or Singapore with setbacks close to 15%. The only country that registered growth in investment activity in the second half of 2020 was Japan with a growth of 23 percentage points.

20. It should be noted that the impact of lower investment activity has a different effect depending on the size of the formal and informal VC industry in each country. Where the supply was already scarce before the pandemic, the decline affects a smaller number of ventures, than where it is more widely available.

Early stage investment dynamics continued during the pandemic, although at lower levels than at the beginning of 2020



In general, investments continued amid the pandemic, although at lower levels than it had been in 2019 - a record year in terms of investment volumes in new companies. It is worth mentioning that the last few years were very positive for investment funds, which attracted new resources, had liquidity and were geared for allocation. Despite the pandemic, investors continued to support companies in their portfolios to help them survive the crisis, avoiding further losses in the value of their portfolios.

At the same time, since the onset of the pandemic the due diligence and the closing of deals are being conducted remotely. This brought a greater concentration on companies that were already known in the market or where there are players who provide references or signals of valuable opportunities for investors. Similarly, given the strong uncertainty, there has been more activity in later stages of the financing cycle with fewer but larger investments in more mature companies and where due diligence is easier. Will this continue to be the case in the future? How will the fundraising, which is affected today, continue to evolve? What will this mean for new ventures looking for their first rounds of investment? These are interesting questions to which we will return in the section on future scenarios.

In summary, this analytical exercise to assess the impacts of COVID-19 on conditions for entrepreneurship yields an unfavorable outlook where 7 out of 10 countries are moving backwards in their conditions for entrepreneurship. Although setbacks have been more frequent among developed nations in the first half of 2020, developing countries absorbed a greater impact due to their greater vulnerability to external shocks.

Anticipating the future evolution of ecosystems raises important questions given that the full effects of the pandemic on the economy have not yet been recorded. Several countries are still experiencing their national peak of the pandemic at the time of writing this report, and the incidence of new outbreaks in several developed countries is still unknown. A more precise impact assessment will be possible next year, as data becomes available.

Nonetheless, based on the existing information, different scenarios for the future evolution of each of the IDE dimensions can be imagined. In the next section, we present an exercise of collective imagination between prominent international thought-leaders in entrepreneurship, where trends and possible medium-term scenarios for ecosystems are identified.

part 03

IMAGINING ECOSYSTEMS AFTER THE PANDEMIC

“In times of crisis, only imagination
is more important than knowledge”
A. Einstein

The emergence of COVID-19 and its economic and social consequences are generating important changes both globally and in our individual lives. The pandemic swept practically all countries, and by now we can be almost certain that “things won’t go back to the way they were before.”

Predicting how the most affected variables of an ecosystem will evolve is a complex intellectual exercise, not only because we must take into account a number of interrelated factors, but fundamentally because the pandemic is still underway. In other words, the full effects of this crisis have yet to be seen. Moreover, recent second waves of outbreaks add additional uncertainty about when the pandemic will be really over.

However astonished we may be to see the current effects of the pandemic, we cannot afford to paralyze. Beyond finding ways to alleviate the immediate impact, we also need to think about the future. This is even more urgent in the case of the entrepreneurial economy since action is very much the essence of starting up. As observed in recent months, governments, institutions and entrepreneurs have been trying to provide various solutions to problems as they emerged from a deepening crisis. These reactive actions were primarily motivated by a survival instinct. The next step is to bet on longer-term solutions that will help us exit the pandemic and build a new normal.

This section therefore seeks to provide insights into trends and possible scenarios that can shape tomorrow’s entrepreneurship ecosystems. Our goal is to contribute to action-oriented thinking aimed at leveraging opportunities and mitigating risks.

Inspired by Einstein’s phrase at the opening of this section, we proposed a collective scenario-building exercise to capture the likely characteristics of post-pandemic entrepreneurial ecosystems. In other words, how do we imagine entrepreneurial ecosystems in the medium term, three years from now? The objective is to trigger strategic thinking processes with results that can serve as starting points for each country to adjust to their specific context.

The first step was to review and discuss several documents elaborated during these months in order to capture the most distinguished trends and features of the new scenarios envisaged in the post pandemic world (academic papers, reports from consultancy firms and multilateral organizations, and newspaper articles)²¹. Based on these trends we elaborated several rival hypotheses about the way in which these transformations would affect the different systemic dimensions that influence dynamic entrepreneurship. These hypotheses were then shared with a group of experts to capture their thoughts on the trends that will mold the future ecosystems.

This group of experts include thought leaders affiliated with highly-respected entities from across the globe. Entrepreneurs, academics, leaders of support organizations, investors, government officials and senior economists at multilateral organizations accepted our challenge to identify the trends and engaged in this collective exercise about the ecosystems of the future. To all of them, our sincere thanks for their collaboration and invaluable contributions.

21. Some of these documents include, for instance, World Economic Forum (2020): “COVID-19 Risks Outlook A Preliminary Mapping and Its Implications”. World Economic Forum in partnership with Marsh & McLennan and Zurich Insurance Group; Global Entrepreneurship Monitor (2020) “Diagnosing Covid-19 impacts on entrepreneurship. Exploring policy remedies for recovery”. Babson Global Sponsor & Shopify; Human Development Perspective (2020): Covid-19 and Human Development: Assessing The crisis, envisioning the Recovery. United Nations Development Program; UNTACD (2020): The Covid Shock to developing Countries: Towards a “whatever it takes” programme for the two-thirds of the world’s population being left behind. United Nations/GDS/INF; KPMG Private Enterprise (2020) Venture Pulse Q12020. KPMG International; ECLAC (2020) Informe sobre el impacto económico en América Latina y el Caribe de la enfermedad por Coronavirus (COVID-19); Lund, S.; Manyika, J.; Woetzel, J.; Barriball, E.; Krishnan, M.; Alicko, K.; Birshman, M.; George, K.; Smit, S.; Swan, D. & Hutzeler, K (2020): “Risk, resilience, and rebalancing in global value chains”, McKinsey Global Institute. McKinsey & Company. Isenberg, D., & Di Fiore, A. (2020). Entrepreneurs: how to change your business model in the pandemic. LSE Business Review. KPMG (2020) Government and institution measures in response to COVID-19. OECD (2020) OECD Economic Outlook, June 2020.

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Below we introduce a set of overarching socio-economic trends that are likely to shape the ecosystems of the future. Then, we describe the possible scenarios that emerged from the group interviews where experts discussed how these forces will impact conditions for entrepreneurship. Finally, we conclude with a set of policy implications arising from this exercise.

Megatrends shaping the post-pandemic world

What are the major trends that will shape the general context in which entrepreneurial ecosystems will be situated in the medium term? A few of these trends were slowly underway in recent years, but then gained momentum in 2020. Other trends clearly emerged as a direct result of the COVID-19 pandemic.

Economic recovery and social inequality

First, regarding the global economy, the different experts largely expected a recovery scenario, even when they expressed doubts about its pace and scope. At the same time, government relief policies, along with surpluses generated globally in the years prior to the pandemic, will likely lead to a financial scenario in which high liquidity and low interest rates prevail, and coexist with significant levels of indebtedness and bankruptcies²².

Another 'sign of the times' is associated with growing levels of **inequality, unemployment, poverty** and **polarized societies**. Without doubt, these negative results will be stronger in those countries where pre-pandemic structures were already weak²³.

A greater role of government

In this context, it is expected that the role of government in economic activity will be greater than recently observed, either because of its enlarged role in assisting those most affected by the crisis or in promoting the restructuring and revitalization of the economy. In fact, since the onset of the pandemic, even those governments considered to be more orthodox launched significant support schemes for affected individuals and companies, while committing significant funds for research and the search for a vaccine²⁴.

However, the continuity of these efforts in the medium term and their impact will be determined, to a large extent, by each country's ability to deploy fiscal policies in a context of higher public debt. Therefore, the general trend towards a greater role of government should be interpreted in the context of each country's intervention capabilities. Moreover, higher government intervention does not always imply a closely articulated recovery strategy building on private sector muscle. This is why the scenarios and general trends discussed below must be interpreted in accordance to these nuances in each particular ecosystem.

Demand affected by changes in consumption patterns and their spatial distribution

Changed consumption patterns are expected, beyond those altered by the negative effects of the pandemic on the social scenario. These changes in consumption preferences will impact the levels of household spending, and ultimately, demand conditions and business opportunities²⁵. In addition, as mentioned by some of the participating experts, social isolation has led consumers to rearrange their preferences, prioritizing the most necessary goods and services (must have) over superfluous ones (nice to have). At the same time, e-commerce channels continue to grow rapidly. Social interaction has lost ground and the home has regained importance, as have family life and working from home. The new consumer will seek to combine physical distance with social connectedness.

In addition, the spatial distribution of consumption is changing due to the increased value placed on smaller cities over large metropolitan areas. During the pandemic, urban agglomerations were seen as riskier and that led an important part of society to appreciate smaller communities. Some even decided to move to smaller cities, where entrepreneurial ecosystems are now stronger due to the incorporation of people with high levels of training, experience and networks.

•••

22. World Economic Forum (2020): "COVID-19 Risks Outlook A Preliminary Mapping and Its Implications". World Economic Forum In partnership with Marsh & McLennan and Zurich Insurance Group.

23. Human Development Perspective (2020): Covid-19 and Human Development: Assessing The crisis, envisioning the Recovery. United Nations Development Program; UNTACD (2020): The Covid Shock to developing Countries: Towards a "whatever it takes" programme for the two-thirds of the world's population being left behind. United Nations/GDS/INF.

24. KPMG (2020) Government and institution measures in response to COVID-19.

•••

24. KPMG (2020) Government and institution measures in response to COVID-19.

25. Isenberg, D., & Di Fiore, A. (2020). Entrepreneurs: how to change your business model in the pandemic. LSE Business Review; Isenberg D. & Schultz, E. (2020) Opportunities for entrepreneurs in the pandemic and beyond.

5 enduring drivers for opportunities in the pandemic world

extracted from Isenberg D. & Schultz, E. Opportunities for entrepreneurs in the pandemic and beyond, April 2020. Medium.com

Safe separation: because of the pandemic, we realize that physical proximity is not as essential as we assumed for long time. That would generate new opportunities from manufacturing to medicine.

Physically apart, yet socially together (PAST): new needs from all kinds would emerge from these situations where social interaction is as important as physical separation.

Flexible resilience: the need for an agile response to accelerating pandemics would drive changes in the planning and operation of organizations and new opportunities will arise for new forms of coordination and supply management.

Home centrality: Homes are being rapidly reimagined as office and homeschool spaces. They also will become a sanctuary where to feel safe and support physically apart but socially together activities.

Distributed knowledge: More than ever distributed knowledge is getting an even bigger boost and will impact the way we get information, how we get educated how governments govern and how civic organizations operate.

The speed of technological change and the reconfiguration of global value chains

The accelerating pace of technological change will have an impact on the spectrum of business opportunities. The massification of the digital economy driven by platforms and fintech, will be complemented by the growing footprint of biotechnology, advanced manufacturing and automatization²⁶. The production and lifecycle of goods and services which are sensitive to the speed of technological change will be dramatically affected, with a compounded effect arising from changes in job functions and working arrangements (e.g. teleworking).

The pandemic also deepened doubts about corporate strategies that seek to leverage the microeconomic advantages of globalization. As a result, a reconfiguration of global value chains is expected. Matters of containing risk in obtaining supplies and building resilience against potential future shocks (e.g. pandemics, climate disasters and geopolitical crises, etc.) will very likely spur a process of value chain reconfiguration, in which companies will seek new suppliers, either closer to the parent companies (near-shoring) or by internalizing activities altogether (re-shoring)²⁷.

With this general framework of megatrends in mind, and under conditions of high levels of uncertainty, we arrived at the following future scenarios for entrepreneurial ecosystems.

Medium-term scenarios for entrepreneurship ecosystems

Next, we present stylized results of the **scenario-building exercise for entrepreneurship ecosystems** (three years from now). As noted in the introduction, the objective was to identify the forces that can shape the systemic conditions measured by the IDE and how these can affect ecosystems in the medium term. The intention is not to define the probabilities of certain scenarios occurring, but rather to offer a guiding roadmap so that each country can carry out more specific exercises to arrive at the most likely, specific scenarios for their ecosystems.

To allow readers to more easily navigate the results, we present on the one hand the optimistic opinions, and on the other, the more skeptical and negative ones. This does not mean that particular experts were consistently optimistic or pessimistic about the



26. World Economic Forum (2020): "COVID-19 Risks Outlook A Preliminary Mapping and Its Implications". World Economic Forum In partnership with Marsh & McLennan and Zurich Insurance Group

27. Lund, S.; Manyika, J; Woetzel, J; Barriball, E Krishman, M; Aliche K, Birshman, M, George, K; Smit, S., Swan, D & Hutzeler, K (2020): "Risk, resilience, and rebalancing in global value chains", McKinsey Global Institute. McKinsey & Company

different variables addressed. Moreover, it should not be inferred from this analysis that these are dichotomous scenarios, combining either totally favorable conditions or totally unfavorable ones. On the contrary, the value of this exercise was that it allowed for the identification of different trends that can be combined in different ways, giving rise to complex scenarios in which contradictory forces can coexist. Finally, it is important to note that the incidence and intensity of each of the forces may vary depending on the starting point of each ecosystem and its trajectory prior to the pandemic. In other words, it is a “compass” that each ecosystem can use to replicate this scenario-building exercise as they design strategies aimed at building the future.

First, we present how different forces will influence the business opportunity space; then those that will affect entrepreneurial human capital and its determining factors, followed by an analysis of the expected trends in terms of support and resources for entrepreneurs. Finally, we offer a 360-degree overview.

Business opportunities

Several experts shared a positive expectation regarding the future expansion of opportunities for new and young companies. These would arise from the combination of several forces:

- a. the economic reconstruction, with its associated demands for goods and services;
- b. altered consumption patterns;
- c. a Schumpeterian process of creative destruction linked to digitalization and rapid technological change;
- d. the reconfiguration of global value chains;
- e. expansion of open innovation strategies; and
- f. systemic collaboration around science and technology.

Regarding the opportunities associated with **changes in consumption patterns**, the optimistic outlook emphasizes the highly-dynamic role of new technologies and Internet marketing channels. In this sense, we can expect consumption habits and the new needs of the post-pandemic world to expand businesses opportunities for those entrepreneurs capable of interpreting the drivers of change (e.g. telework, telemedicine, virtual education, interactive leisure, etc.) and the context of accelerating technological change (e.g. the 5G world, Industry 4.0, fintech, digitalization).

At the same time, the **reconfiguration of global value chains** could also have a positive effect on the availability of business opportunities. The persistent uncertainty related to the pandemic-induced crisis and the ongoing U.S.-China conflict is expected to lead large companies to relocate their supplies to regions closer to their headquarters (near-shoring) and even in-house (re-shoring). These companies would be more willing to accept greater redundancies (more suppliers for the same input, higher stocks) in exchange for greater resilience, even at the cost of losing efficiency. This shift from global chains to regional value chains will stimulate new demands, opening opportunities for new and young companies, especially in the developing countries that stand to benefit from this relocation. As import substitution is generally favored, the market for new and young companies could expand.

In addition, large companies’ **open innovation strategies** would multiply new opportunities for entrepreneurs. After the first shock of the pandemic is over, it is expected that such open innovation strategies will regain vitality, especially in the sectors most aligned with the “new normal” (ICT, health, biotechnology). At the same time, growing pressures to keep pace with an accelerating technological race would lead corporations to adopt open innovation models more decisively.

The acceleration of major industries due to technological change will definitely create more opportunities.

Jeff Hoffman, GEN Global

Analytical models for global value chains must consider not just efficiency, but also resilience.

Nicholas Vonortas, GW University

A final source of expanded opportunities, especially for the most innovative ventures, such as those with a scientific and technological base, is the recent boost in both public and private R&D activities. The pandemic is elevating the value placed on the role of science, resulting in increased collaboration between academia, companies, entrepreneurs and the government. This could give way to the adoption of long-term research agendas that are more closely aligned with social and business challenges.

These optimistic views stand in contrast to those expressed by **more skeptic** experts who raised questions about the resulting net balance of opportunities that are born versus those that disappear. Although they agreed that there will be new (and different) opportunities, they did not risk to conclude whether the final balance of the amount and strength of opportunities will be higher or lower than at present. In fact, their views cast certain doubts on whether new business opportunities could drive a new phase of economic growth.

There were also those who believed that the dynamism in consumer demands will decline, in the context of poorer societies that purchase less and tend to limit their expenses on superfluous goods and services.

From this skeptic perspective, the reconfiguration of global value chains will **only impact certain regions**. That is, new opportunities would become available only in those countries where firms are already engaged, or can easily start engaging, in existing supply chains. These firms would in turn have to be able to generate multiplier effects on local new and young companies. In addition, many of these firms and countries will have to overcome business environment barriers, or catch up to meet technical standards. Finally, tapping these opportunities will require a certain level of relational capital and a set of skills and knowledge that not all new and young companies have. In other words, opportunities will be created, but in order to seize them, barriers will need to be addressed. Governments, businesses and ecosystem organizations would need to stay alert to capitalize on this trend and work on these different fronts.

Skepticism around the **role of large companies** in generating opportunities also relate to concerns about a slow recovery, with numerous company closures. Some also held the opinion that many corporations do not trust strategies based on collaboration with new and young companies, especially in a field as sensitive as innovation. In addition, they expressed fears that large companies could absorb the benefits of innovation, to the detriment of entrepreneurs, or even implement aggressive acquisition strategies aimed at limiting market competition – an issue currently under debate in Europe and in the United States Congress.

An intermediate position emerged among those who imagined a future of continuing **hybrid strategies**, such that traditional innovation and open innovation will coexist within any given sector and, even within any given company. Advancing in this direction will not only depend on large corporations, but also on how proactive entrepreneurs are in connecting with large companies, their innovative capacity, as well as the role of public policies and ecosystem organizations.

Finally, with respect to the **future evolution of R&D activities** and its impact on the emergence of new opportunities for innovative ventures, the pessimistic view maintains that growing uncertainty will generate shorter-term behaviors and discourage private investments in R&D. For their part, fiscal restrictions and the persistence of other priorities related to rebuilding economies and addressing social emergencies will have a negative impact on the allocation of public resources to R&D. For others, there will be **significant regional contrasts**. In this view, R&D activities will likely increase in developed countries, with the opposite occurring across most developing countries.

As some opportunities are opening up, others are disappearing. So, the net balance is uncertain... Opportunities will be different. There going to be different opportunities for different companies.

Daniel Isenberg, Babson College

I think it is especially important to consider the reprioritization of consumers' needs taking place right now. During the pandemic we have asked ourselves: what do we really need? As consumers, we are re-valuing goods and services we used to buy and de-prioritizing others.

Elizabeth Hoeffcker, MIT

Nearshoring strategies will benefit those countries which have suppliers for lead firms located in the same region. But supplier firms for lead firms elsewhere may face the risk of being crowded-out. There is a regional dimension that is important and modifies the opportunities for startups and local firms.

Carlo Pietrobelli, University Roma Tre and UNU-MERIT

We can look beyond the dichotomy between open and close innovation because there are many intermediate ways. There are new forms of alliances and collaborations between large firms and startups.

Keoun Lee, Seoul National University

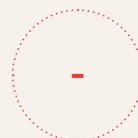
The increase in uncertainty will have long-term effects because uncertainty tends to reduce the incentives to focus on the longer term, and rewards short-term investments. This is dangerous because it will reduce investments in innovation, research, and development.

Carlo Pietrobelli, University of Roma Tre and UNU-MERIT

If we consider how frequent each these different opinions were expressed, optimistic scenarios for business opportunities prevail. This outlook would be challenged by the questions about the net balance of new opportunities and those that disappear or decline. In this sense, the dynamic sources of opportunities would impact different countries in different ways. Special attention should be placed on the proactive actions required from governments and other ecosystem actors in order for their economies to benefit from the opportunities generated by the various driving forces described above.

Business opportunities

Possible scenarios



Sources of expanded business opportunities:

- economic reconstruction
- altered consumption patterns
- reconfiguration of global value chains
- widespread Schumpeterian disruption; accelerating technological change

New opportunities arise due to changes in supply strategies (near-shoring and re-shoring), and the search for greater supply chain resilience. There is a growing trend towards self-sufficiency in critical inputs and goods.



Large companies recover, especially in ICTs and biotechnology, generating greater opportunities via their open innovation strategies.

The commitment to R&D (public and private) grows within the framework of greater collaboration, mission-oriented policies, and research agendas more closely aligned with demands from companies and society.



Uncertainty around the economic recovery persists.

The general level of consumption by important segments of the population declines, prioritizing essential (non-superfluous) consumption.

There is a question mark about the net balance of new opportunities and those that disappear.



Near-shoring and re-shoring are limited to regions and countries that have managerial and entrepreneurial capacities.

The recovery of corporations is slow and some close altogether. The impact of open innovation is low due to:

- limited commitment of corporations to collaborative innovation
- risk of behavior is contrary to innovation and entrepreneurship
- lack of innovative and relational capacities of entrepreneurs



In the face of uncertainty, short-term behaviors predominate among large companies.

R&D investments decline due to budget constraints and competing priorities.



Only a few developed countries manage to implement mission-oriented policies; there are significant contrasts between regions and countries.

Entrepreneurial human capital and its underlying factors

Along with the availability of opportunities, it is key to determine whether there will be entrepreneurs capable of capitalizing on them. Here, we must consider individuals' ability to identify and build on opportunities with a vocation and ambition to transform them into companies that can grow. We heard a variety of views from the experts we consulted, but **pessimistic views tended to predominate**, with an impression that necessity-based entrepreneurship will become dominant. In a context of post-crisis higher unemployment and poverty, people would favor job stability and avoid risk-taking. Those with the skills and resources would be less likely to leave their jobs to create dynamic enterprises. In addition, the lower strength of middle-class segments, from which these types of entrepreneurs often emerge, will weaken the social foundations for dynamic entrepreneurship.

In this scenario, several interviewees emphasized that **only a small segment of the population will have the necessary capacities, contacts and resources** to be able to identify and seize new business opportunities. These individuals will be the ones most likely to tap technology-enabled distance learning and training opportunities, further widening the gap for those who lack such advantages.

This scenario is compounded by doubts about whether **the education system** can level the playing field in terms of entrepreneurial skills and abilities. Growing inequality would make it difficult for a large part of the population to access education and new technologies. In addition, there will be wider quality gaps between educational institutions, to the detriment of public institutions and those with fewer resources. There were also doubts about educators' ability to adapt content and methodologies to the virtual format. All this would yield an unfavorable scenario.

These trends must be analyzed along **cultural dimensions** because the desire to start a business is often influenced by the opinions, beliefs and values of society. In this sense, skeptical experts argued that company layoffs could shed a negative light on business leaders, and that entrepreneurs could end up being viewed in that bad light as well, narrowing people's perspective to just their perceived individualistic behaviors. Similarly, in a context of uncertainty, people's heightened security needs would increase the value placed on employment relationships and the propensity of people to passively wait for the public sector to arrive at solutions to address the crisis, rather than to actively participate in generating and managing responses.

On the other hand, those who presented a **more optimistic vision** regarding the number of entrepreneurs capable of capitalizing on opportunities highlighted the **reduced opportunity cost of starting a business**. This would result from the effect of companies in critical situations, particularly the largest ones, on unemployment and wages. By not finding a path for career-development inside existing companies, skilled talent would be released, increasing the pool of potential founders of dynamic and innovative ventures. At the same time, as a result of the crisis, there would be an **abundance of idle resources** accessible to entrepreneurs at lower costs.

At the same time, new technologies would **democratize access to training and tools** for those who wish to start a business, and even make resources outside national borders reachable. Furthermore, in their opinion, the types of training spaces would also expand to include formal education institutions but also companies and organizations in the ecosystem that fulfill this mission.

In contrast to the views presented above, there were also experts who held a favorable opinion about the evolution of cultural aspects. For example, they expect the **social value of entrepreneurs to grow** because they would be increasingly perceived as contributing to the economic recovery, making more people be inclined to choose the path of entrepreneurship. Others think that the levels of cultural capital will be segmented, meaning

Opportunity-based entrepreneurs will likely diminish in relative terms because people are seeing an uncertain horizon.

Rodrigo Varela, ICESI

Opportunities will likely concentrate among those people who have the privilege of not having to worry about next month's paycheck. The entrepreneurs that emerge will be those from the most privileged backgrounds and universities.

José Pacheco, MIT

Now is not the time for company exits to be the main indicator of success because that is too alien to reality. To the extent that the social impact of a business can become more tangible, there is a great opportunity to expand the value placed on entrepreneurship.

Juana Ramirez, Sohin

that it will not apply equally to all entrepreneurs, but rather favor purpose-driven entrepreneurs who seek to exert an impact beyond economic results. Finally, entrepreneurial attitudes could increase, because the fragility of companies and institutions evidenced during the crisis would tend to unleash greater trust on individual forces.

A matter of interest, which arose in some of the interviews, is that regardless of whether it will be a world with more or fewer entrepreneurs, **it will be enriched with new business models and venture profiles**, which will seek to creatively solve new social challenges (e.g. food security, environmental, etc.) by leveraging new technologies. In this scenario, the perspective on high-growth entrepreneurs will broaden to capture those that are able to provide valuable solutions as a key variable in their entrepreneurial dynamism.

In summary, returning to the question that started this section, the possibility of taking advantage of new business opportunities will depend on which of the previously described trends - several of which could coexist - end up prevailing in each society. Which will prevail depends on structural, social, cultural and economic conditions, which means that public policies should leverage positive forces and neutralize unfavorable ones in order for entrepreneurial vocations and capacities to emerge. These public policies can range from the most general (e.g. those aimed at the educational system and expanding access to new technologies), to the more specific programs to support potential entrepreneurs. Otherwise, the opportunities would be seized by mature companies and by a limited segment of entrepreneurs with the skills, resources, and networks to do so.

What we mean by dynamic entrepreneurship and high growth firms is going to change. There are going to be new models, new approaches... . We need people that can help think about new solutions.
Karen Wilson, OECD

The definition of dynamic entrepreneurship would likely expand to refer to dealing dynamically to problems of various types.
**Harry Yuklea,
Hebrew University of Jerusalem**

Entrepreneurial human capital, culture & education

Possible scenarios



The pool of potential dynamic entrepreneurs expands due to lower opportunity costs of starting a business. Difficulties in existing companies, especially in the larger ones, release talent that expand the entrepreneurial human capital.

The abundance of idle resources lowers access costs and stimulates the emergence of opportunity-oriented entrepreneurs.



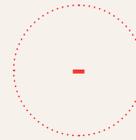
There is a greater diversity of profiles of dynamic entrepreneurs due to the higher numbers of purpose-driven entrepreneurs.

The propensity to start a business increases because society places a higher value on entrepreneurs, who are seen as key actors in the economic reconstruction.



Entrepreneurial attitudes grow in society given the need to trust in one's own forces in face of fragile companies and institutions.

Opportunities to access entrepreneurial training expand thanks to technology and social networks.



The pool of potential dynamic entrepreneurs is smaller. Given labor market instability, there is a greater aversion to risk and preference for stable employment. What grows is necessity-based entrepreneurship, giving rise to subsistence-driven microenterprises.

The lower presence of the middle classes narrows the social foundations from which dynamic entrepreneurs emerge.



Only a limited segment of the population has the skills, contacts and resources necessary to act on new opportunities.

The perception of entrepreneurs worsens as they are associated with individualistic and opportunistic behaviors.



There is a more passive attitude in society, which trusts that solutions will basically come from the government, instead of generating proactive responses.

The technology gap between educational institutions widens, and barriers to access education are higher.

Entrepreneurship resources and support

From a systemic perspective, in addition to opportunities and entrepreneurs, social and financial capital is necessary to launch projects. This social capital allows entrepreneurs to develop networks and find resources of different kinds, including finance.. All of this within a framework of favorable policies and regulations for entrepreneurship. How do we expect these dimensions to evolve in the future?

Social capital and networks

For **the most optimistic**, the context of the pandemic and isolation have helped build greater levels of trust. As people demonstrated greater solidarity and a more collaborative spirit, social capital strengthened. This is an important development since we can expect higher demand for entrepreneur support and a greater need for articulation between the different actors of the ecosystem. In this sense, new technologies would play a key role, facilitating access to high-profile contacts that were previously out of reach for many. Interaction can therefore be expected to be faster and more fluid in the medium term.

However, for **the most pessimistic**, self-isolation measures will likely persist for a long time, and the bases of trust will deteriorate in a context of greater social fragmentation. They were also skeptical about the power of technology to open access to new contacts for those outside certain circles or socioeconomic levels. Some experts also pointed out that face-to-face encounters have a differential trust-building power when people are getting know each other, which virtual encounters cannot offer. Thus, the post-pandemic scenario would consolidate or even widen gaps in access to social capital, and the duality between entrepreneurs with and without networks of contacts would grow.

In terms of collaboration within ecosystems, it would only grow in cases where ecosystem players already had a platform for cooperation prior to the crisis that could easily be put to use for joint initiatives. An opposite effect and unfavorable prospects of collaboration would occur when institutions with weak response capabilities exist. In this new context, the role of the “orchestrators” or “connectors” within networks will become increasingly relevant to strengthen ecosystems.

Financing

Experts with the **most hopeful views** affirmed that, **after an initial decline, levels of financing for new and young firms are likely to recover to pre-pandemic levels.**

The most cautions pointed out, however, that there is great uncertainty about the long-term evolution of markets.

The first issue to consider is whether resources to invest will be available. In this regard, the interviewed experts tended to be positive given that high liquidity and low interest rates are expected to predominate in the coming years. In addition, the favorable pre-crisis investment performance in terms of the number of new funds and the levels of investment capital raised, bodes well for the medium term because it means that well-funded sources exist. A further boost would come from the existing incentives to disburse the already raised capital (i.e.: management fees). In addition, experts expect the pandemic to leave a legacy of streamlined negotiation and due diligence processes, after having had to perform them remotely and having had to rely on referrals. This positive scenario would be further enhanced by the growing role of corporate venture capital and impact investment funds, which are supported by multilateral organizations and some countries.

There is a great paradox in this COVID-19 world. We are isolating ourselves, but at the same time, a great spirit of collaboration has awoken.

Susana García Robles,
Capria Ventures & LAVCA

As social capital wanes, it might become harder to build trust and social capital in a world dominated by virtual networks.

Colin Mason,
University of Glasgow.

Ecosystems that have been collaborative will become even more collaborative, while those less collaborative ecosystems will see a spike in the level of competition.

Marcelo Tedesco, GED

Technology has the potential to connect people, but only through linking actors; it will not happen organically.

Elizabeth Hoeffcker, MIT

There has to be a common thread, or something that brings trust..

A third party or platform that ‘engineers’ collaboration will be necessary.

Adenike Adeyemi,
FATE Foundation

In the very short term, resources will likely be fewer, but in the medium term (three years from now), that trend will change, leading to a new balance.

Oren Gershtein, Ideality Roads

However, the majority of consulted experts also expressed that, **at least initially, investors will continue to seek to protect their existing portfolios** through follow-on investments to help the companies in which they had previously invested survive. In addition, when considering the full investment cycle (i.e. not only disbursements but also raising additional money) there were **concerns that the effects of isolation would negatively affect funds' ability to raise additional money** for investment, given that negotiations depend on personal ties and face-to-face interactions. In this case, the scenario could be very different from the one above.

Another relevant question has to do with the destination of funds. In this sense, some agreed that investors would target broad sectors as long as the projects incorporate new digital technologies to address needs associated with the reconstruction of the economy, the digital transformation and new consumption patterns. At the same time, the growth of impact investment would favor ventures that incorporate digital technologies to improve the environment, and expand inclusion, among other social goals. Nonetheless, some consulted experts expressed skepticism regarding the extent to which investors and fund managers are prepared to understand and evaluate these types of ventures.

Regarding the geographies that are expected to attract investors, the **most optimistic considered that investors will search globally to find businesses**, in a context in which the lure of emerging markets, such as Asia, Eastern Europe and Latin America, has grown in recent years. These markets can serve as "test beds" for new business models, such as those related to solving environmental, health and food challenges, or other problems generally associated with underdevelopment. In this context, we can expect **ecosystems to decentralize over time** and new ecosystems to emerge on the global map, a phenomenon also driven by the trend to place a higher value on the local spaces.

In a **more pessimistic scenario**, investors would privilege only certain verticals associated with ICTs, the digitalization of the economy, biotechnology and health. In addition, lower risk would be preferred, resulting in investments being channeled to later stages of the financing cycle and to megadeals. This would result in a narrower development of the supply of financial resources for entrepreneurs.

In addition, the majority of experts imagined a **more negative scenario** in which **investments will flow towards the most developed ecosystems** since they offer a better balance of attractive opportunities (innovation) and transaction costs. This scenario could imply that high-potential entrepreneurs will seek to relocate to the top ecosystems, even in greater waves than we have so far seen. As a result, existing **imbalances between the more mature ecosystems and the rest would increase**. Experts pointed out that only countries that have been working to improve conditions for innovation and entrepreneurship in a sustained manner will be able to avoid the negative impact of this trend.

Policies and regulations

A final aspect we analyzed was the role of government in post-pandemic ecosystems. **The most optimistic saw growing government attention to entrepreneurship and innovation policies**. However, even in a global context of greater government intervention, we can expect **significant differences across countries and regions**.

The majority of experts expect that **entrepreneurship and innovation policies will first lose priority** on governments' agendas given budgetary restrictions and the existence of other priorities associated with the social emergency and the recovery of the sectors most affected by the crisis.

Fundraising will be very difficult. I can't imagine being able to secure anchor investors without a face-to-face meeting.

Lisandro Bril,
J Venture Latin America

It is time to invest in 'must have' and not 'nice to have' sectors. That is, in those sectors with products and services that provide access to basic services.

Susana García Robles,
Capria Ventures & LAVCA

Latin America can be that lab for expansion, where a startup can scale solutions across other developing countries, before targeting other markets.

Alex Gonzalez, Contxto

The geographic distribution is unlikely to concentrate in just two or three regions, but rather across 20 or 30 regions.

Paulo Andrez, EBAN

Entrepreneurs trying to raise money for the first time will face increasing difficulties, and would have to bootstrap for a longer time.

Colin Mason,
University of Glasgow

After the immediate emergency, entrepreneurship policies will most certainly gain strength.

Gonzalo Rivas, IDB

The entrepreneurship policy agenda is currently losing attention, but as levels of uncertainty lower with time, we will likely see them as a priority.

Anwar Aridi, World Bank

In the medium or long term, entrepreneurship and innovation policies will likely regain importance. But they must first pass the litmus test of demonstrating an effective contribution to their countries' productive transformation and development. Meanwhile, would tend to broaden. **Previous eligibility criteria focusing only on high-growth firms would tend to expand** to include a broader set of firms capable of contributing to the reconstruction and social transformation.

Experts agreed that **developing broader instruments and intervention mechanisms** will become necessary. For instance, public-private partnerships and policies that can boost demand (e.g. public procurement of innovation and incentives for corporate venturing) will likely gain relevance. As institutional decentralization advances, innovation agencies and the most resilient and effective support organizations will carve out a more important role in ecosystems.

While we can expect that **entrepreneur support organizations will be called upon**, experts agreed that these organizations' role will depend on their performance track record and their previously-acquired capabilities. Support from governments for these organizations is expected to be selective and to focus on those that can demonstrate impact via stronger evaluation and audit methods.

Consulted experts also foresee regulatory reforms as governments seek to improve the environment for entrepreneurship and innovation in the medium term. Precisely **with regards to regulations, an optimistic view prevailed**, even when experts acknowledged potentially significant heterogeneities between countries based on different variables, such as institutional capabilities to reach agreements around the required transformations. Among the regulatory aspects experts mentioned were new, specific frameworks for new and young companies, revisions to bankruptcy laws, the implementation of electronic government, and the creation of favorable conditions for digital economy activities (cybersecurity, cryptocurrencies, and tele-medicine, among others).

On the other hand, the **most skeptical** experts raised doubts about whether regulations will truly favor entrepreneurs in practice, since they might, for example, end up as nothing more than good intentions frustrated by implementation difficulties.

To sum up the scenario for entrepreneur support and resources:

- The possibilities offered by the acceleration of technological change will be tempered by persisting limitations in access to social capital and the development of networks. Those possibilities will likely continue to hinge on entrepreneurs' starting conditions and their socio-economic profiles.
- In terms of collaboration within ecosystems, this will largely depend on ecosystem players' historic predisposition and acquired capabilities to cooperate and articulate. This does not mean that the pandemic was not able to create a paradigm shift, but the prevailing opinion is that previous trajectory will carry weight.
- Regarding investments, entrepreneur financing will likely recover in the medium term, after an initial focus mostly on portfolio preservation. But investments could also continue to suffer if difficulties in raising new funds persist after the pandemic. Investors' sector preferences could, in the medium term, cover a wider range of activities, provided that business models prove to have digital technologies at their core. The financial gap in early-stage companies, however, will likely continue to exist. Investors are expected to favor the most innovative ecosystems with lower transaction costs. As a result, gaps between regions will deepen.

Credentials will have to be re-validated from the point of view of entrepreneurship and innovation policy, which in some countries, unfortunately, were seen as antagonistic to SME policies. That logic will have to be broken.

Esteban Campero, SEGIB

The government focus should be broad, promoting entrepreneurs of all kinds and avoiding picking winners.

Colin Mason, University of Glasgow

Unless we change the way entrepreneurship is promoted, it will be seen as elitist.

Jose Pacheco, MIT

For governments that failed in developing skills, capabilities and infrastructure to promote entrepreneurs and innovation until now, developing those skills and capabilities in these days would be almost a miracle.

Oren Gershtein, Ideality Roads

After the crisis, there is going to be more emphasis on impact and impact evaluation.

Anwar Aridi, World Bank

- Finally, entrepreneurship policies will likely lose their priority position on government agendas at first. In the medium term, however, their relevance to the economic recovery will elevate their importance. With this resurgence, experts expect a greater emphasis on regulatory issues and on those instruments that seek to expand demand, such as public procurement of innovation and incentives for open innovation.
- In this context, the role of alliances between public and private institutions and those ecosystem organizations with appropriate capabilities will grow.

Once again, as indicated for the scenarios of other IDE dimensions, in terms of support and resources for the creation and growth of companies, ecosystem leaders will need a strategic agenda aimed at strengthening social capital, facilitating access to resources, and proactively implementing innovative policies and regulations.

Resources and support mechanisms for the creation and growth of businesses

Possible scenarios



Social capital and networks

They are strengthened by the increased trust and higher collaborative spirit evidenced during the pandemic.



New social media and communication platforms make it easier to access high-profile and previously out-of-reach contacts, and enable faster, smoother interaction.

Collaboration within the ecosystem tends to grow due to the collective initiatives that emerged during the pandemic.

Access to financing



The supply of capital grows due to the greater availability of funds and the need for placing investments.

Investments are directed to a wide range of activities relevant to the reconstruction of the economy and that solve post-pandemic needs through new technologies.

Ecosystems in emerging countries manage to attract investors who see them as test beds for new business models.

Policies and regulations



The importance of entrepreneurship and innovation policies to address the transformation of the economy increases. Revamped definitions of entrepreneurial profiles expand the concept of dynamism, along the instruments to encourage them (greater focus on demand) and their implementation modalities (public-private alliances).

Support institutions with adequate capacities play a key role.

New regulatory frameworks favor new companies and entrepreneurs. New regulations open opportunities for activities related to digitalization.



Social capital and networks

Social capital deteriorates due to social polarization. Only a segment of entrepreneurs (those above certain socioeconomic threshold) strengthen their networks via technology.



Collaboration within the ecosystem only improves in those with cultural conditions and collaboration capabilities.

Entrepreneurs lose confidence in institutions which did not assist them during the crisis, when support was needed.

Access to financing

The supply of entrepreneurial capital will be affected by funds limited ability to raise resources during the pandemic.



Investments concentrate on existing portfolios, on more advanced stages, in large operations, and in certain verticals (due to the inertia and expertise of investors; and their focus on technological change).

Investments concentrate in the most innovative ecosystems with the lowest transaction costs, and gaps with other ecosystems grow.

Policies and regulations



Policies and regulations for entrepreneurship lose importance due to budgetary restrictions and the need to address the post-pandemic social situation. Governments' main objective will be the protection and generation of employment in existing companies.

The activities of support institutions are limited due to governments' greater selectivity and focus on those that demonstrate capacities and impact.

Intentions to improve regulations fail to translate into effective support due to implementation difficulties.

AN OVERVIEW OF FUTURE ECOSYSTEMS

Based on the main trends discussed in the previous pages, the section below seeks to offer an overview that synthesizes the consulted experts' predominant opinions and our own view of the scenarios for ecosystems in a post-pandemic world. We also reflect on these scenarios' possible policy implications and present some areas of possible intervention.

What will happen to entrepreneurial opportunities?

After the pandemic, **new business opportunities** will emerge as a strong process of Schumpeterian creative destruction takes place driven by the acceleration of technological change, economic reconstruction efforts, changes in consumption patterns, the reconfiguration of global value chains, and large companies' hybrid innovation strategies which will increasingly include working with new and young companies.

However, we can expect **strong contrasts** in terms of the intensity of these trends and their ability to expand opportunities for entrepreneurs in **developing versus developed regions**, and also across sectors. This gap would be augmented depending on the strength of ecosystems' science and technology platforms.

Public policies should encourage the capitalization of these opportunities, while also considering each ecosystem's starting point, strengths and limitations. From a strategic perspective, meeting the demands associated with the reconstruction of the economy is an unavoidable option. Entrepreneurs that move in that direction should be supported. Governments should also consider developing smart strategies to insert their entrepreneurs into global value chains as these undergo reconfiguration, as well as promote corporate innovation strategies that engage entrepreneurs.

In terms of the promotion of the knowledge economy and digitalization, these were often already part of governments' pre-pandemic agendas. The task ahead is to deepen and generalize this economic path.

Finally, in this scenario, the articulation between entrepreneurship, science and technology will depend on each country's capabilities in these fields and on the size of the investment the country can make in their future development.

Will the level of entrepreneurship capabilities enable seizing new business opportunities?

The outlook for the immediate years may not be very encouraging with growing inequality, unemployment and poverty driving necessity-based entrepreneurship over dynamic potential particularly in developing countries. From a structural perspective, the social bases from which entrepreneurial teams with dynamic potential emerge will be limited in the longer term by the diminished size of the middle classes. At the same time, barriers to access to education, technology and social capital will restrict the skill-development path for significant portions of the population. This scenario will be aggravated in countries that were weak in forming entrepreneurial human capital before the pandemic, or had difficulties with retaining it. This means that the development gap among ecosystems is likely to widen in favor of those that were already more developed unless special efforts are made to avoid that.

Cultural conditions, for its part, will be shaped by various co-existing and potentially counteractive trends, which may have opposing effects. The balance of these forces is

Will these new opportunities be enough to tilt the balance and have an overall positive economic and social outcome? or they will be confined to areas of excellence and a lot of the world would stay behind?

Carlo Pietrobelli, University of Roma Tre and UNU-MERIT

What we are about to see is that the inequality between leading ecosystems and the rest of the world is going to dramatically increase.

Oren Gershtein, Ideality Roads

likely to vary across different countries. For example, anti-business sentiment related to massive pandemic-related layoffs could coexist with a greater appreciation for entrepreneurs as job creators during the recovery. Similarly, after an initial paralyzing shock and increased aversion to risk, entrepreneurial attitudes could re-emerge in many countries among segments of skilled people who, having lost confidence in existing companies as places for career advancement, now consider building their own businesses. Low opportunity costs to start a business and low costs for idle resources in the economy are likely to stimulate the development of these enterprises.

In this complex scenario, policymakers will confront significant challenges given the combination of diverse and intricate forces. On the one hand, governments should focus on implementing an agenda aimed at leveling the playing field, improving access to quality education and developing entrepreneurial attitudes and capabilities. Mass access to technology, for its part, constitutes a full chapter in itself, which must be approached in its different dimensions to leverage its potential for skill development. Policymakers should also pay attention to nurturing the emerging propensity to start a business of specific segments of professionals with technical skills and without a clear and immediate future in large companies.

Will there be resources and support for entrepreneurs?

Technology will make it possible to enhance social capital platforms for people who already had a set of contacts. Unfortunately, because building trust is highly dependent on face-to-face interactions, expectations for expanded access to quality networks are unlikely to be realized. In addition, the socioeconomic profile of entrepreneurs matters when it comes to developing networks in most of the societies. Thus, in this sense, greater openness may not occur, and there's a chance the opposite will occur.

The level and intensity of collaboration among ecosystem institutions will in turn depend, to a large extent, on predominant pre-pandemic behaviors.

In other words, hopes for greater social and institutional capital in ecosystems raised by the possibilities associated with the accelerated adoption of remote connection platforms will run up against the limitations and conditions imposed by different social and relational factors. Moreover, in a more unequal world, disparities in access to social capital are likely to widen between segments of the population with different starting conditions, and between ecosystems with different cooperation experiences.

In terms of financing, the difficulties in accessing investors and external capital that new and young companies have experienced in most ecosystems due to the pandemic, will likely persist. In the short term, investors will remain more concerned with safeguarding the value of their portfolios via follow-on investments. After that, we expect that, for a long time, new investments will favor certain verticals and the most advanced stages of the financing cycle. In the medium term, the scope of allocated investments could expand to the extent that ventures are related to new technologies. However, these investment trends will not affect all regions in the same way, and will likely favor those ecosystems that offer the most attractive balance between potential returns on investment and lower requirements to operate (transaction costs). As a result, gaps in access to financing for entrepreneurs will likely widen between more developed and less developed ecosystems. This in turn could intensify "entrepreneurial drain" processes.

Finally, we can expect to see, after initial retractions, a prioritization of entrepreneurship policies. Budgetary constraints resulting from the need to attend to other emergencies produced by the crisis will influence the evolution of this scenario. This will inevitably impact the development of ecosystem institutions that depend on public support. The eventual resurgence of entrepreneurship policies will likely bring renewed energy for

Job opportunities in large corporations will be diminished and hence there would be an increased flux of people thinking and willing to start a new firm.

Juan Ramirez, Sohin Mexico

For entrepreneurs who already had certain networks, it will be much easier to establish contacts with executives or people to whom they previously did not have access.

Elizabeth Hoffecker, MIT

Previously, it was more about rhetoric, but now we are seeing much more investment, much more action from governments and a lot of the key stakeholders.

**Adenike Adeyemi,
FATE Foundation**

public-private partnerships, an expanded scope of target beneficiaries to include those offering solutions to new realities, and a renewed menu of instruments that seek to boost demand conditions.

Against this background, entrepreneurship policymakers will face multiple challenges. The most immediate one is surviving a period where their policy instruments will be threatened. A key to success in this will be a greater articulation of entrepreneurship's contribution to other, broader policies and economic recovery. Designing evidence-based policies will be more important than it is today.

Policymakers will also have to attend to the needs of the overall entrepreneurship ecosystem, and seek to strengthen – together with the private sector – the capabilities of support institutions that empower entrepreneurs in the coming years. In each case, governments and support organizations must account for the status of systemic gaps, and implement packages of novel and powerful actions that leverage favorable trends and neutralize threats. Only in this way will ecosystems be able to offer the resources and support required to capitalize on emerging opportunities in a post-pandemic world.

Actions that could help build positive future scenarios for ecosystems

Scenarios

Sources of new business opportunities:

- Declining demand and greater consumer austerity
- Change in consumption patterns
- Acceleration of technological change
- Growth of corporations' open innovation strategies
- Relocation of global value chains that tend to become regional chains

Strategic Responses

- Boost trends that generate new opportunities for entrepreneurs and young companies, promoting their generalization (e.g.: digital transformation programs for SMEs and e-government with a set-aside for new and young companies; marketplaces specialized in the sales of entrepreneurs and young companies)
- Expand demand for technological goods and services through the development of technological infrastructure and democratizing access to it (i.e. closing the digital gap).
- Policies to promote mission-based innovation linked to economic and social development (e.g. green deal, health, food security). Implement innovative public procurement programs with set-asides for startups and young companies.
- Promote the emergence and development of startups and scale ups linked to new technological trends through special programs that combine different instruments (e.g. innovation hubs; business development services; tax incentives).
- Encourage linking startups and young companies with: a) large companies (especially those that are part of value chains that are relocating regionally), and b) R&D institutions.

Entrepreneurial human capital and its formative factors:

- Risk of setback in opportunity-based and innovation-based new business creation.
- Rise of new segments of professionals with technical skills who are not finding space to develop their careers inside existing companies.
- Contradictory trends in the social valuation of entrepreneurship.
- Wider gaps between institutions in the sector (e.g.: in terms of access to technology)

- Encourage the development of technological platforms to strengthen capabilities, knowledge and access to valuable connections with current and potential entrepreneurs.
- Raise awareness and provide support to new pools of potential start-up founders who have the potential but also face higher opportunity costs.
- Promote the dissemination of positive role models (e.g.: purpose-driven entrepreneurs)
- Promote the establishment of regional youth clubs around technology and entrepreneurship.
- Promote access to quality education that imparts technological and entrepreneurial skills widely (e.g. incorporate entrepreneurial skills and technology in education curricula).

Support mechanisms:

- Gaps in access to social capital.
- Limited access to financing.
- Initial retracted attention to entrepreneurship policies.
- Risks of setback in regulations for new technologies.
- Greater scrutiny on entrepreneur support institutions which receive public sector support.

- Promote the creation of sustainable institutional spaces that provide support to entrepreneurs and facilitate their access to valuable networks in order to reduce social capital gaps (e.g.: to stimulate strategic sponsorship programs with tax incentives for investments in long-term institutional projects).
- Encourage the supply of local entrepreneurial capital through investor training, tax incentives for investment, and the attraction of international investors who can leverage the local supply of entrepreneurial capital (increase attractiveness and lower transaction costs while promoting the development of local capabilities).
- Seek to insert entrepreneurship components into other government programs (education, health, science and technology, modernization, etc.).
- Establish accreditation and institutional upgrading systems for entrepreneur support organizations.
- Promote innovative methodologies for the development of regulations that are friendly to new technologies and to society (e.g.: sandboxes and test beds).

An overview of future ecosystems and key questions

Accelerated technological change

Economic recovery and social inequality

A greater role of government

Changes in consumption patterns

Reconfiguration of value chains

Culture

Greater segmentation of the social value placed on entrepreneurs with social and environmental impact.

Greater proactivity and an entrepreneurial attitude in the face of the fragility of institutions and companies.

Opportunities

More and new opportunities (creative destruction, relocated global value chains, new consumption patterns, accelerated digital transformation).

Important contrasts between regions and ecosystems (between the most and the least developed)

Contribution of the STI platform mostly concentrated in more developed countries

Financing

In the short-term, difficulties in access to financing will persist due to the retraction and redirected preferences of investors.

In the medium term, financing will resurge, but it will likely **deepen gaps between ecosystems**. Investments will flow to countries that offer a better balance between attractiveness of opportunities (innovation) and requirements to operate (transaction costs).

Entrepreneurial human capital

Predominance of necessity-based entrepreneurship as a result of growing inequality, unemployment and poverty.

More limited social bases for the emergence of new dynamic entrepreneurs.

Expanded definitions of entrepreneurs, with a greater focus on those who seek to solve social and environmental problems, and purpose-driven entrepreneurs.

Lower opportunity costs of the entrepreneurial career given the release of idle talents and resources.

¿Where is your ecosystem heading towards?

¿What to do in face of new scenarios?

Social capital

Persistent gaps in terms of access to networks, determined in part by the socio-economic profile of entrepreneurs and the collaborative trajectory of ecosystems.

Education

Growing social gap will limit the emergence of entrepreneurial human capital.

Technology will enhance access to training for those entrepreneurs of certain socio-economic level.

Policies & regulations

Retracted relevance in the short term, but resurging in the medium term.

Larger role for **public-private alliances**.

Strong **differences across regions** according to trajectory, budget, and place on the technological race.

Favorable regulatory framework, although with doubts about its effective implementation and impact.

Institutions

Called to play a more relevant role but their response capability **will depend on their previous trajectory**, their resilience and the role of public policy and the private sector.

The gap between more advanced ecosystems and nascent ones will be wider.

part 04

FINAL REMARKS

As we look back on 2020, lockdowns will undoubtedly come to mind. The COVID-19 outbreak almost immediately changed the way we live, interact, learn, and work. For the first time, the world's nations suffered the same affliction at almost the same time. The effects of the crisis have been, and continue to be, considerably widespread both in epidemiological and socio-economic terms. There is a strong consensus that "things won't return to the way they were before."

In this context, there is a considerable uncertainty with regards to the future evolution of conditions for entrepreneurship around the world. Developing the 2020 Index of Dynamic Entrepreneurship report posed significant challenges. Therefore, we conducted two new analyses. First, we estimated an adjusted IDE score for each country, by updating information on a subset of the 10 dimensions that form the Index. This exercise allowed us to identify and assess the immediate impact of the pandemic on systemic conditions for entrepreneurship. It revealed that the vast majority (70%) of countries studied in the Index experienced weakened conditions for entrepreneurship. Interestingly, while the number of impacted countries is higher among the most advanced economies, the magnitude and depth of the impact is greater among emerging and developing countries, underscoring their structural weaknesses. Demand conditions, financing, and the existence of a critical mass of dynamic entrepreneurs are the most affected dimensions.

Against this backdrop, governments and other ecosystem stakeholders are actively trying to alleviate the impact and develop solutions to new problems emerging from the crisis. This reaction was primarily motivated by an economic survival instinct. However, the task ahead is to start thinking about the medium term in order to develop the necessary policies that will stimulate the recovery and growth of post-pandemic entrepreneurial ecosystems.

The second exercise we conducted for this report attempts to contribute to the need to look and plan ahead, offering key insights for ecosystem leaders involved in assessing how different trends might shape ecosystems in the next few years.

Our exercise for thinking about tomorrow's entrepreneurial context mimics strategy-building efforts of innovative businesses. Together with a group of experts from different backgrounds and countries, we took on the challenge of imagining what entrepreneurial ecosystems would be like in the medium term.

The consensus of our experts, in general, is that future scenarios are likely to be marked by the emergence of new opportunities as a consequence of altered consumption patterns, accelerated technological change and digitalization, the reconfiguration of global value chains, and the reconstruction of the economies.

At the same time, however, our experts see a critical question of whether entrepreneurial capabilities will exist in each ecosystem to allow for potential entrepreneurs to identify these new opportunities, act on them by building new ventures, and lead a wave of economic prosperity. Our experts warned of barriers that policymakers and other ecosystem stakeholders should address in advance. Ignoring these barriers is likely to result in a lack of a critical mass of entrepreneurs able to seize these opportunities, especially in light of the impact of the pandemic on education systems and the middle classes from where most of dynamic entrepreneurs tend to emerge.

Technological advances are likely to increase opportunities for building capabilities and enhancing access to social capital, but again, this potential positive force is limited by ex-ante social conditions and current technology's own limitations. We can therefore expect a global scenario where more developed ecosystems stand to increase their advantages, given their stronger structural strengths and advanced positions in the technological race.

The financing dimension will likely exhibit certain weaknesses during the medium term. Overcoming this will take time, meaning that we expect entrepreneurs to have to bootstrap intensively. We also expect policymakers to address this situation by implementing a set of policies to enhance the availability of capital, by creatively identifying and nurturing alternative policies to develop new sources of financing to support the entrepreneurial process.

Unfortunately, entrepreneurship policies are expected to recover their prominence only after uncertainty clears up, when new business creation and innovation become essential for economic reconstruction. This regained importance of entrepreneurship policies is likely to widen the scope of target beneficiaries, with programs moving from a narrow focus on gazelles and unicorns toward a more inclusive “fauna of entrepreneurial species” with the potential to deliver solutions and contribute to economic and societal recovery. This policy characteristic will be accompanied by the implementation of more creative instruments and a higher relevance for public-private partnerships.

These general trends will ultimately shape different realities based on the specificities of each ecosystem, particularly their initial conditions and the pro-activeness of their key players in building the future.

We recommend that following a first stage of focusing on entrepreneurial resilience, ecosystem builders redirect their energies toward strategically building ecosystems. This will require that ecosystems’ leaders stay ahead of the changes in order to leverage opportunities and mitigate risks.

This report offers remarkably interesting insights that serve as a guide for strategic thinking about ecosystem development. Governments and other ecosystem stakeholders are invited to adopt this approach to conduct their own exercise of collective scenario-building and to consider the suggested examples of interventions to inspire their own strategic agenda.

A CLOSER LOOK AT THE COUNTRY LEVEL

Argentina

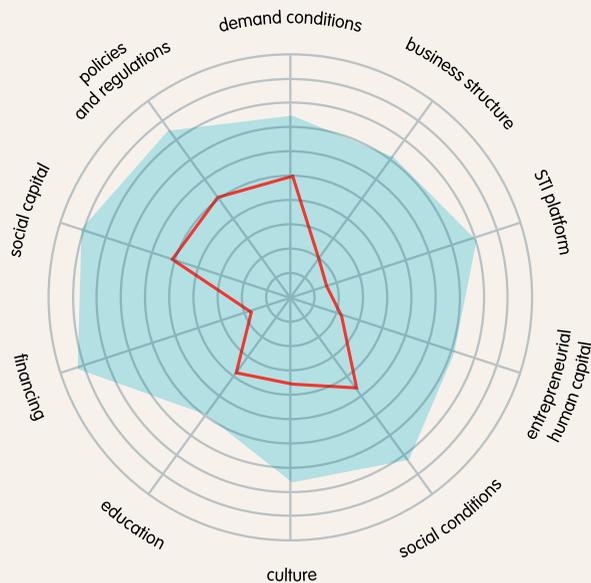
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
48	31.5		20,170		45.6 M

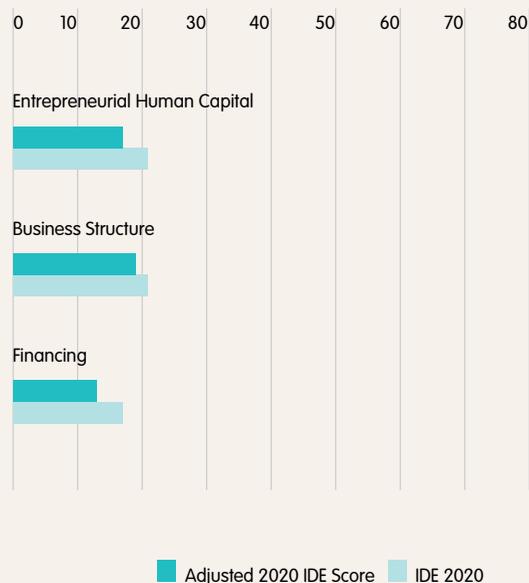
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
50	29.9	15,738	348	10.9%	-9.9%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Argentina
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Australia

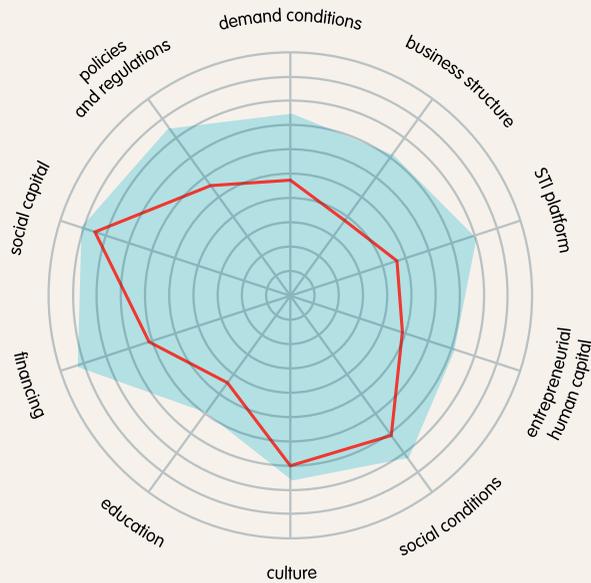
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
16	55.3		55,347		26 M

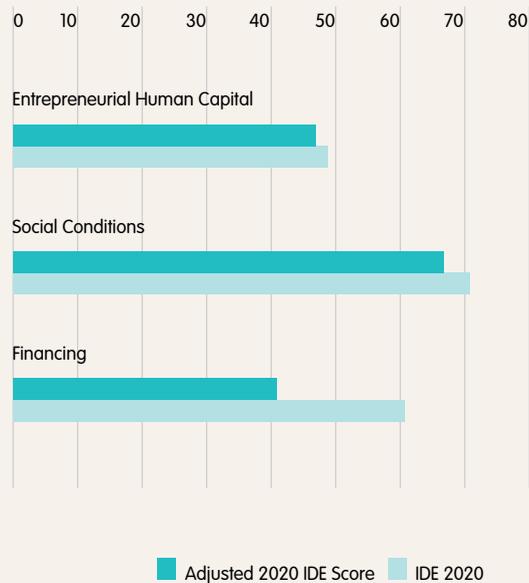
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
16	52.8	1,060	34	7.6%	-4.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Australia
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Austria

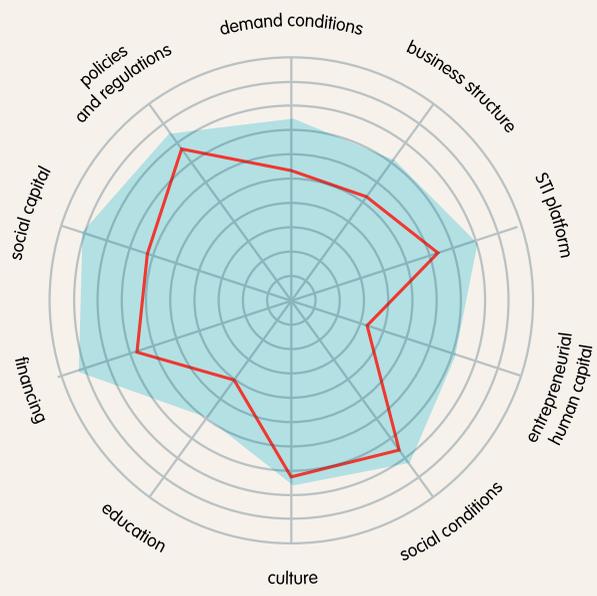
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
11	58.1		55,724		9 M

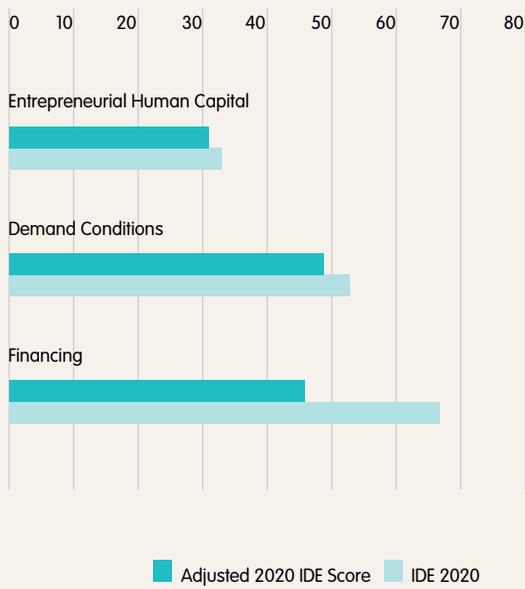
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
15	54.8	4,826	87	5.5%	-7%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Austria
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Belgium

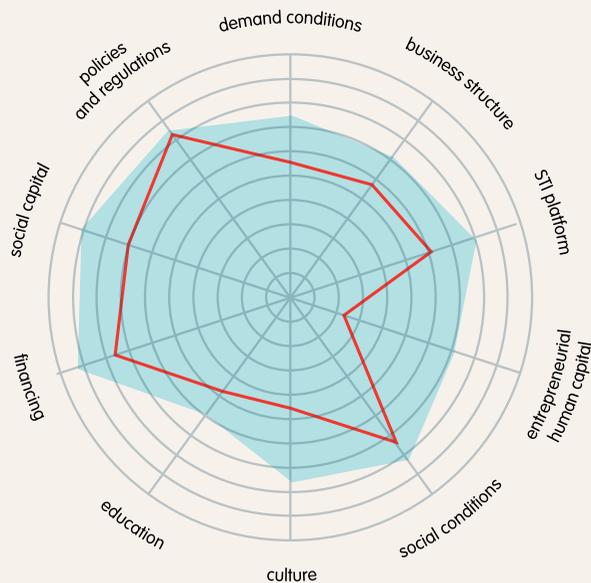
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
14	56.4		51,414		11.5 M

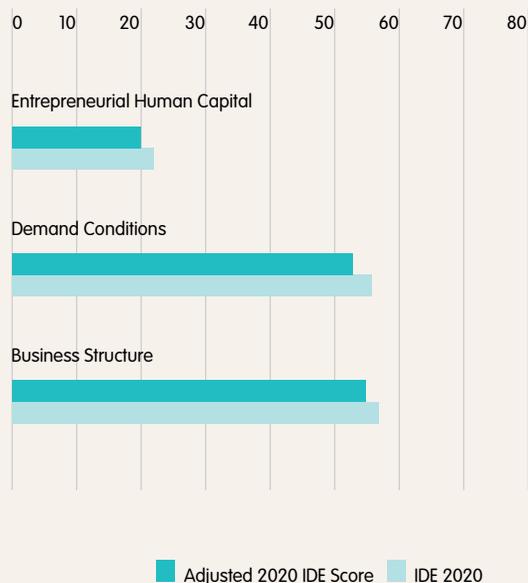
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
13	55.4	9,844	861	7.3%	-6.9%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Belgium
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Bolivia

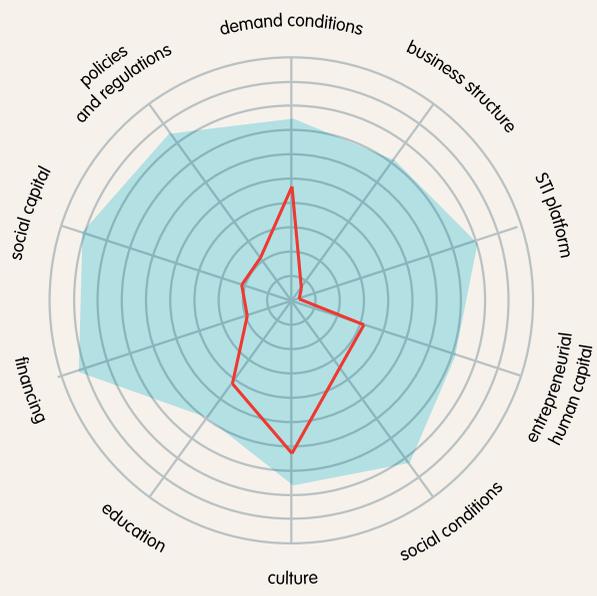
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
59	21.8		8,610		11.7 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
59	21.7	11,471	673	8%	-2.9%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Bolivia
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Brazil

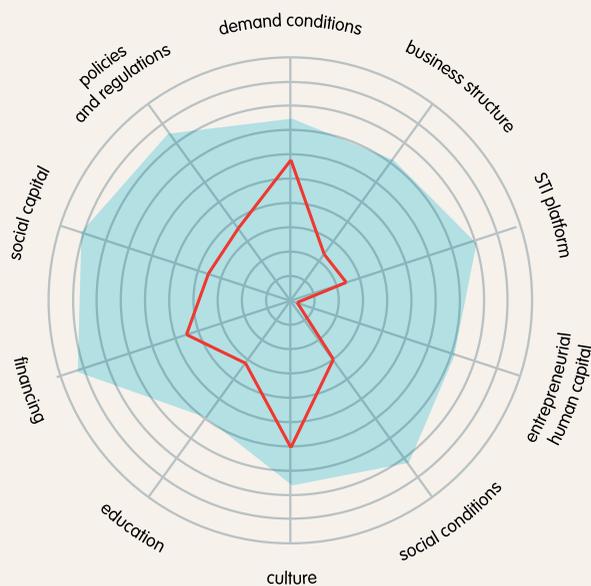
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
54	28.0		17,186		211.4 M

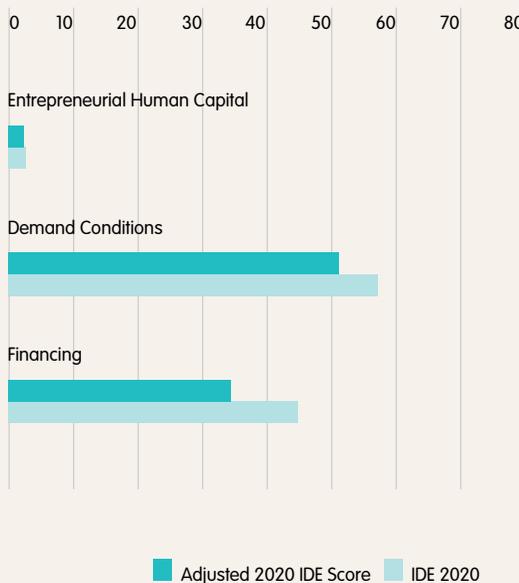
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
54	26.2	22,263	667	14.7%	-9.1%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Brazil
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Bulgaria

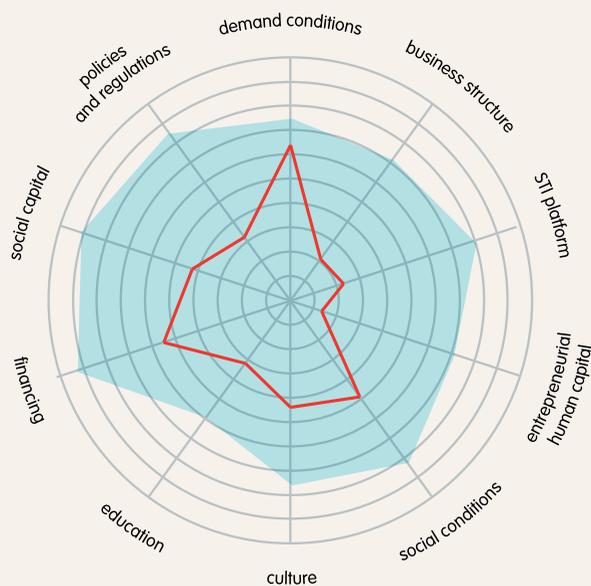
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
40	34.1		26,295		6.9 M

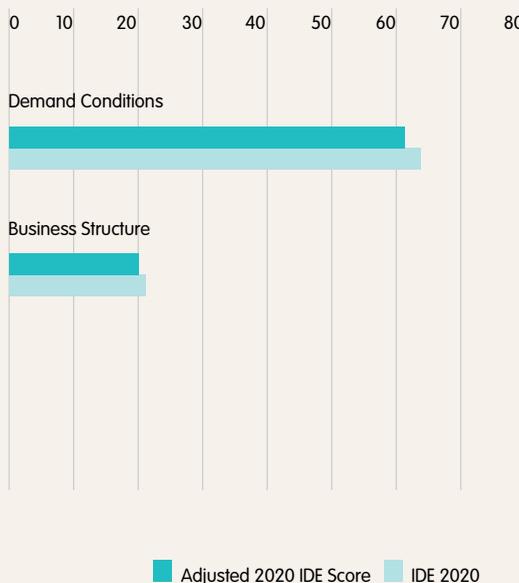
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
37	34.7	2,886	115	8%	-4%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Bulgaria
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Canada

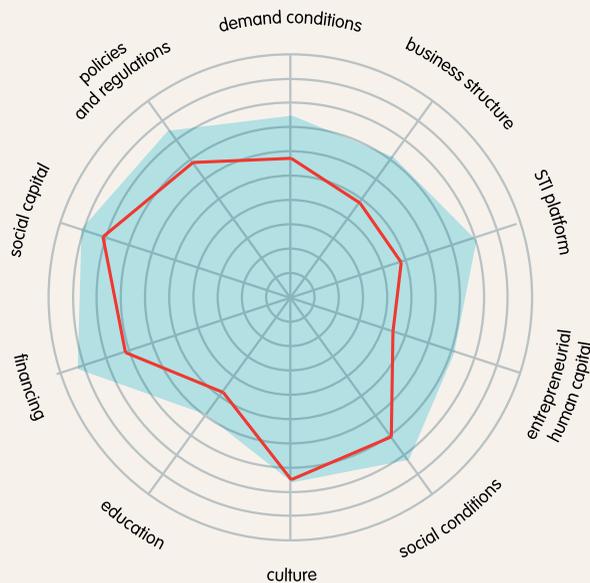
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
9	60.1		52,666		37.8 M

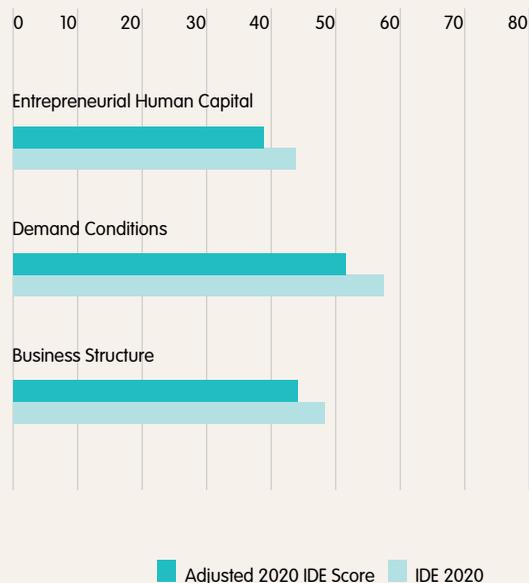
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
9	57.8	4,057	246	7.5%	-8.4%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Canada
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Chile

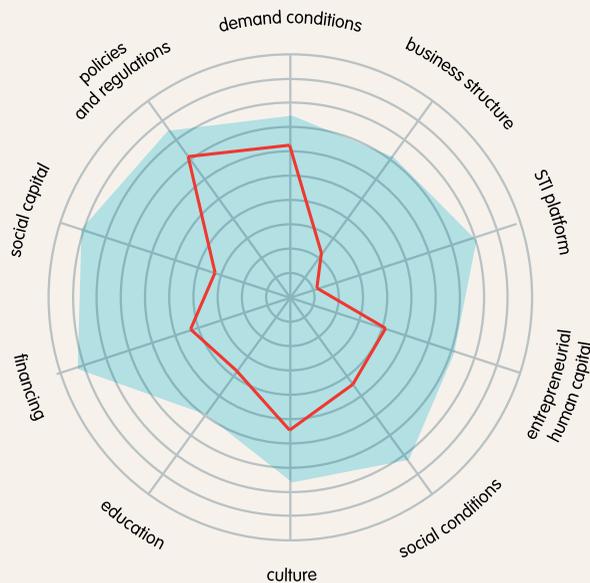
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
37	37.9		27,422		19.5 M

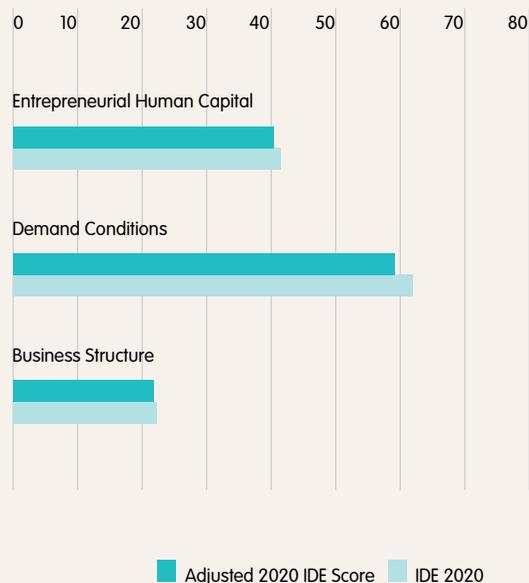
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
34	37.5	23,954	661	9.7%	-4.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Chile
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

China

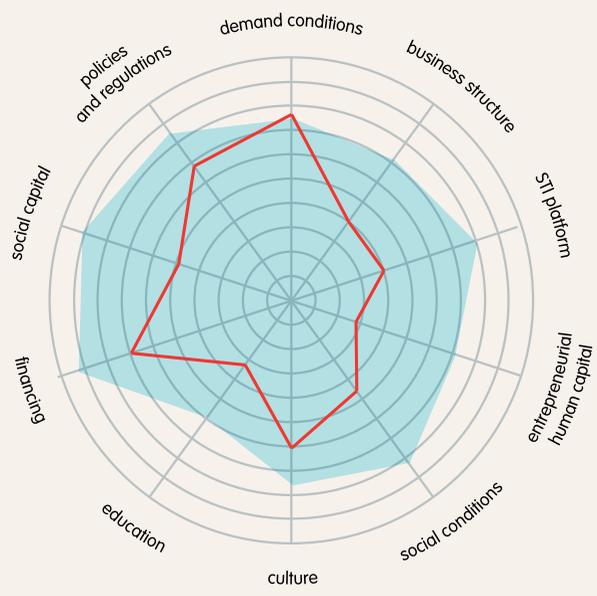
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
23	48.8		21,194		1,404.5 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
27	43.2	63	3	4.3%	1%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



China
International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Colombia

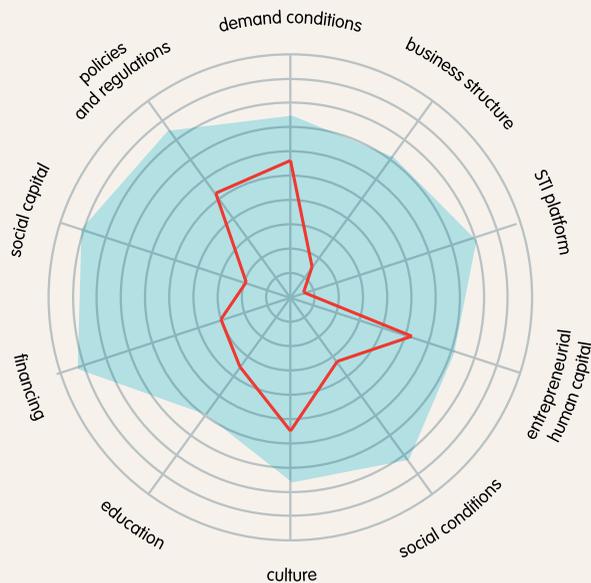
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
52	29.6		16,428		50.9 M

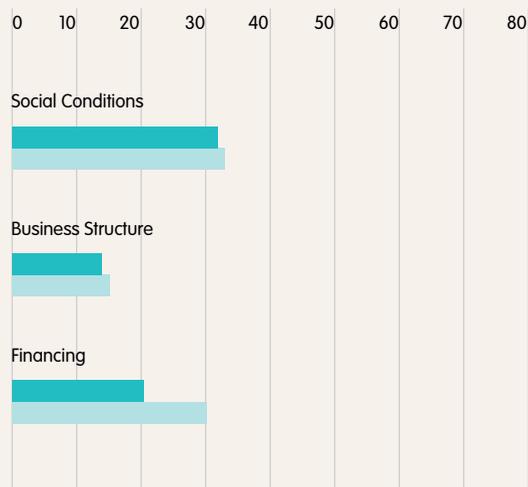
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
53	28.2	15,979	501	12.2%	-2.4%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Adjusted 2020 IDE Score IDE 2020

Colombia
International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Costa Rica

2020

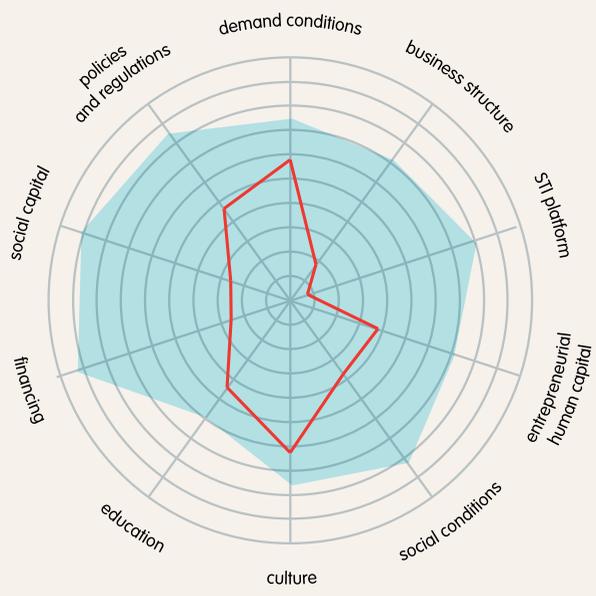


IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
47	31.5		18,837		5.1 M

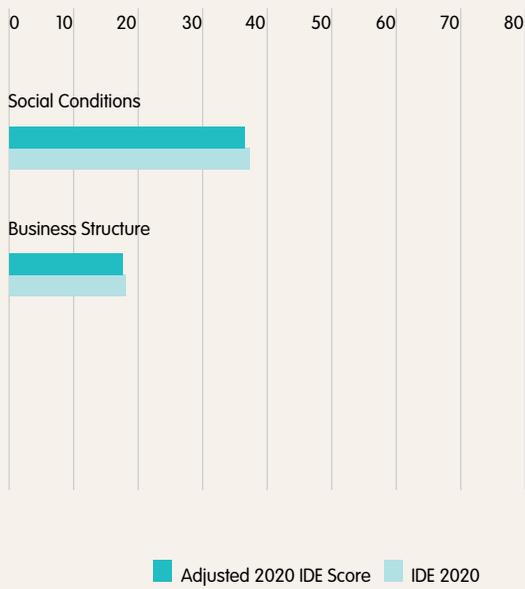
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
46	31.3	14,144	163	12.5%	-3.3%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Costa Rica
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Croatia

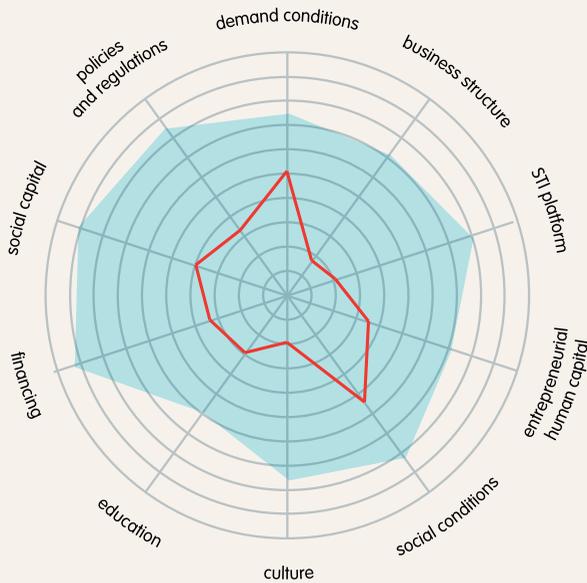
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
49	31.3		29,499		4 M

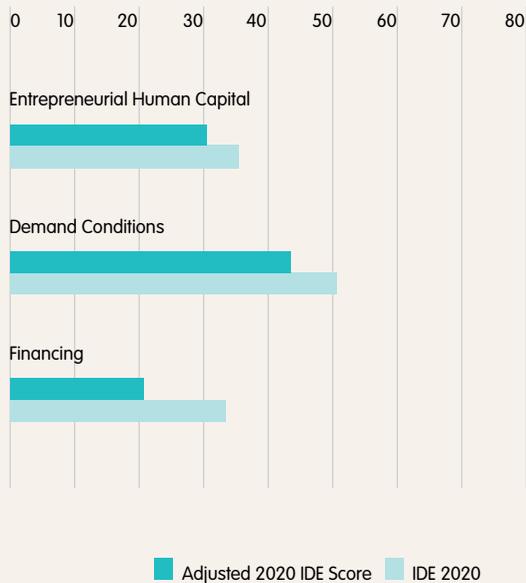
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
52	28.9	3,945	66	11.5%	-9%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Croatia
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Czech Republic

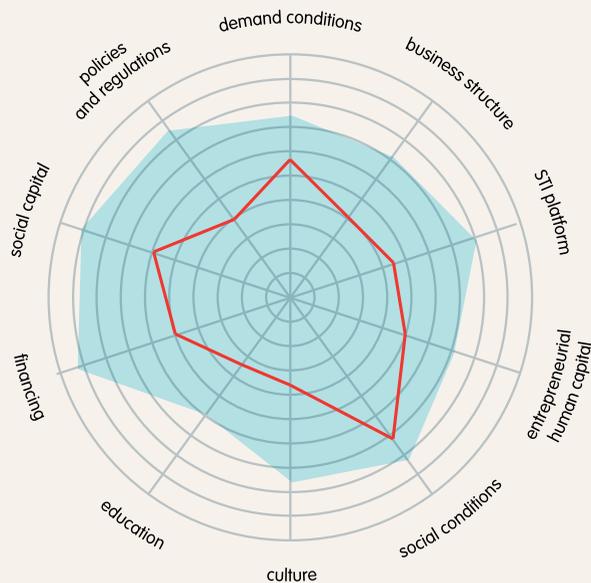
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
25	46.9		40,991		10.7 M

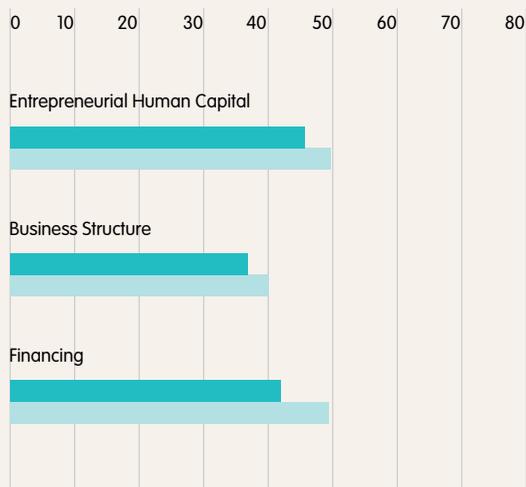
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
26	44.7	6,032	57	7.5%	-6.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Czech Republic
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Denmark

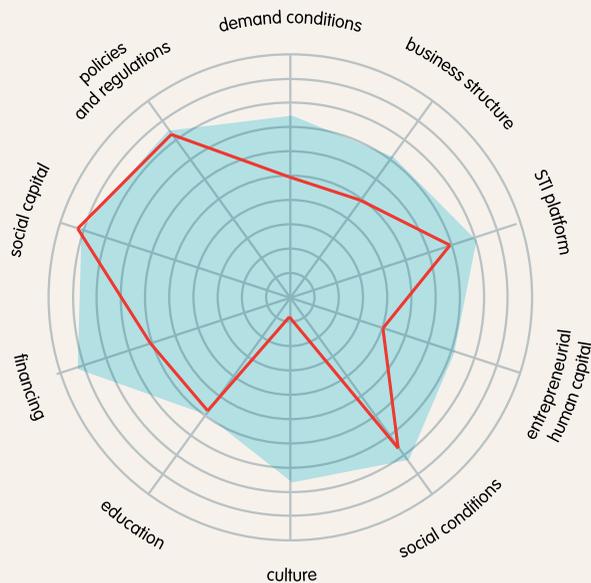
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
21	50.8		56,231		5.8 M

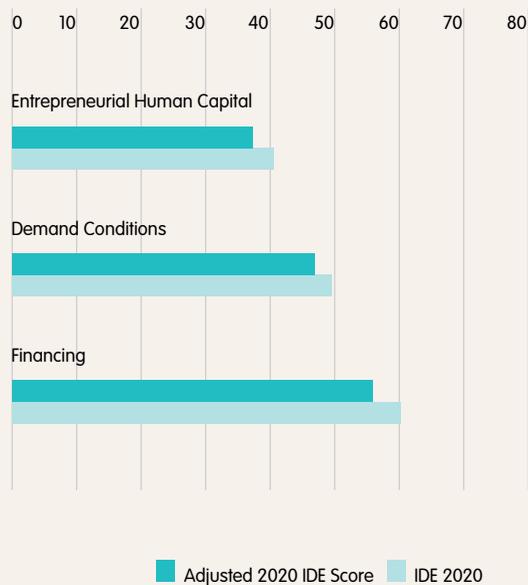
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
21	49.7	4,599	112	6.5%	-6.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Denmark
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Dominican Republic

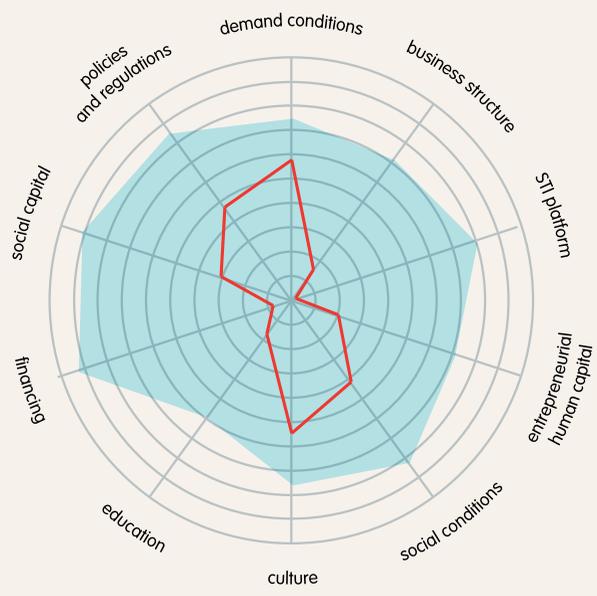
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
61	20.8		20,832		10.5 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
60	21.4	10,268	193	9%	-1%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Dominican Republic ■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Ecuador

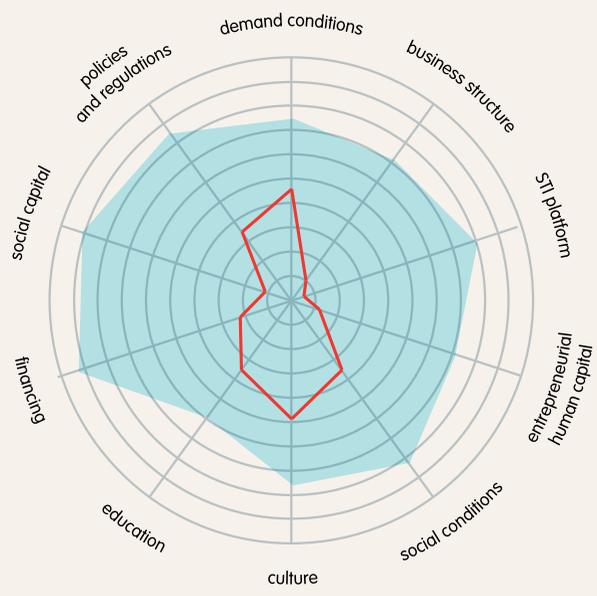
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
60	21.2		11,985		17.5 M

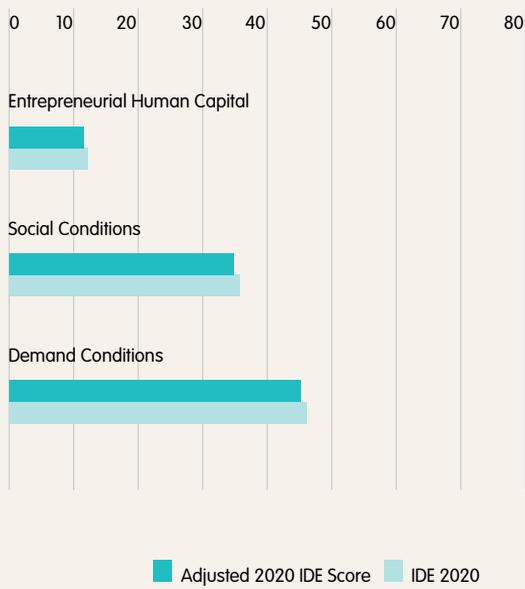
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
61	21.0	7,637	639	6.5%	-6.3%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Ecuador
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Egypt

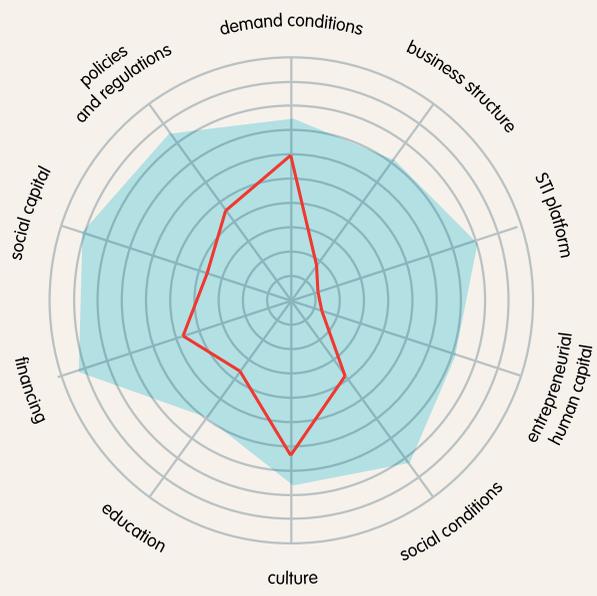
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
43	32.0		14,948		101.5 M

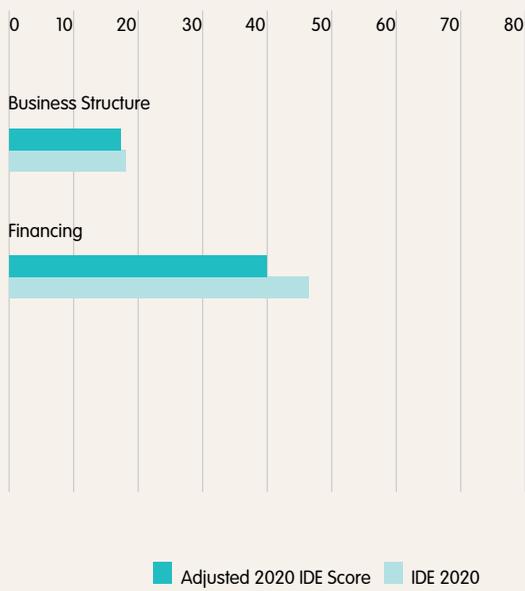
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
40	33.5	1,005	57	10.3%	2%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Egypt
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

El Salvador

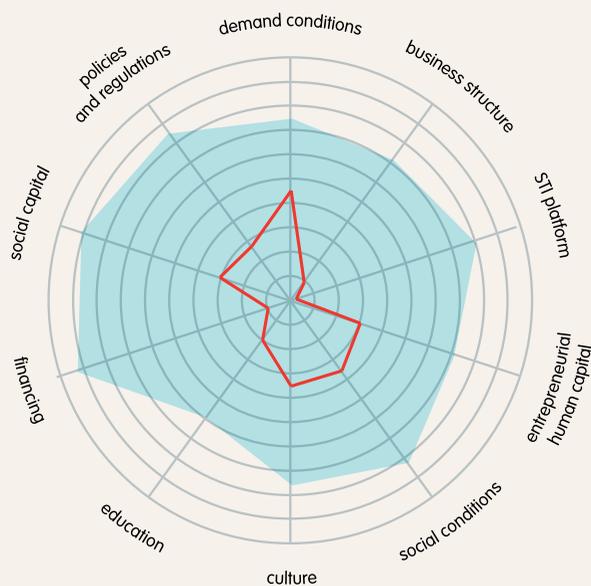
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
62	19.0		8,679		6.8 M

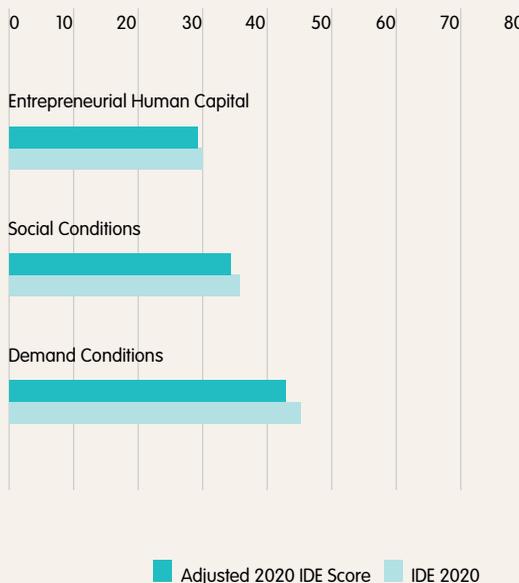
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
62	18.8	4,414	127	7.9%	-5.4%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ El Salvador
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Estonia

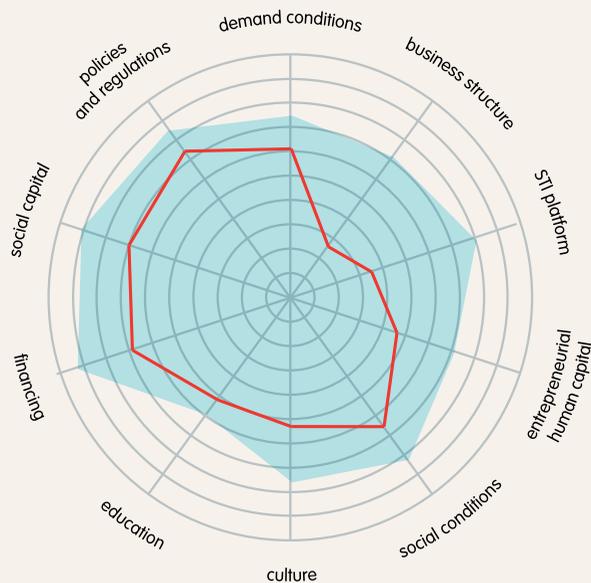
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
19	52.8		37,982		1.3 M

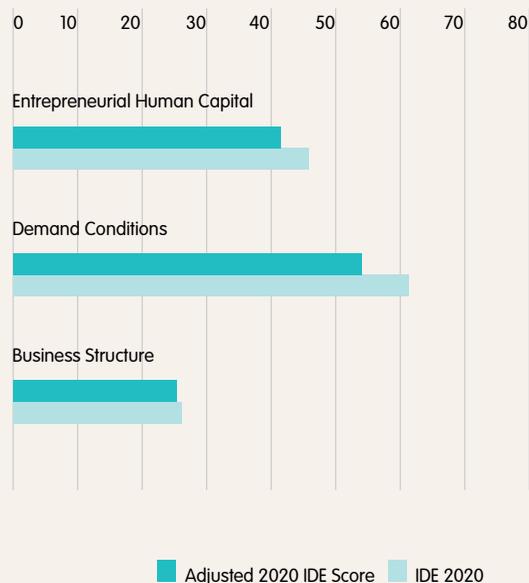
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
18	51.4	2,412	48	6%	-7.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Estonia
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Finland

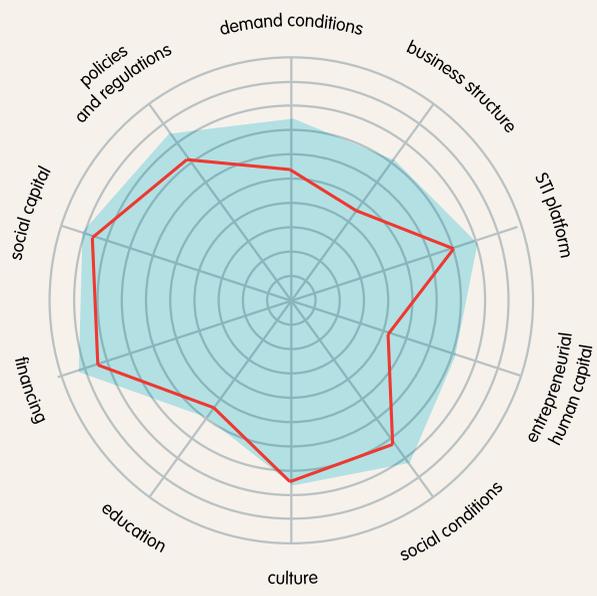
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
5	64		50,043		5.5 M

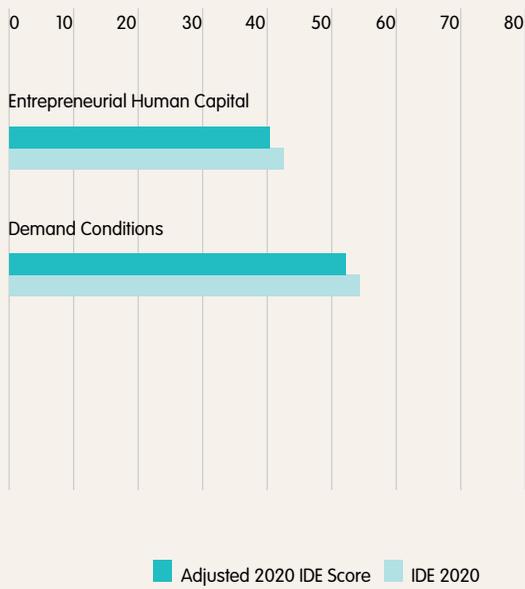
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
3	63.6	1,747	62	8.3%	-6%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Finland
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

France

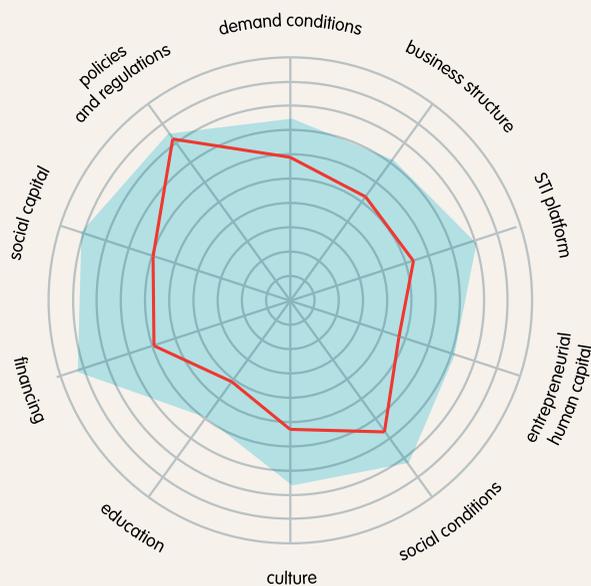
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
15	56.4		49,126		65 M

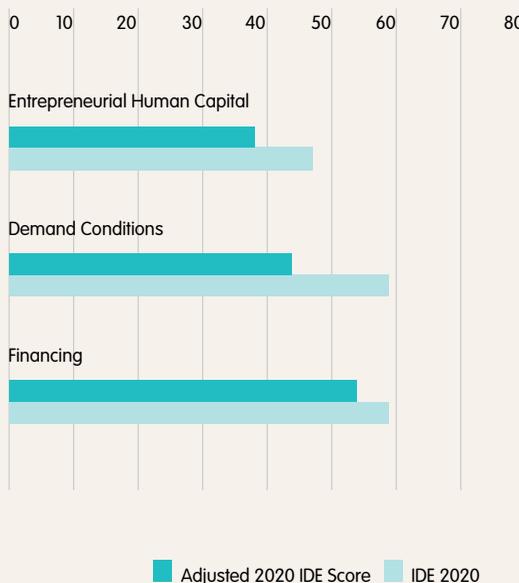
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
17	52.6	8,251	486	10.4%	-12.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ France
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Germany

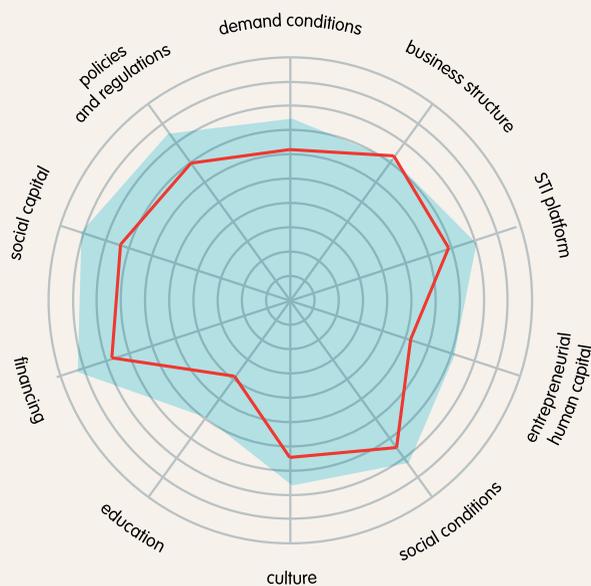
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
4	64.4		55,859		83 M

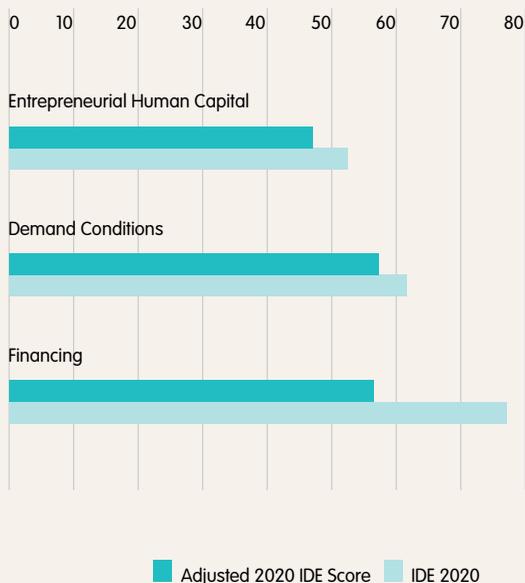
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
6	60.9	3,406	113	3.9%	-7.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Germany
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Greece

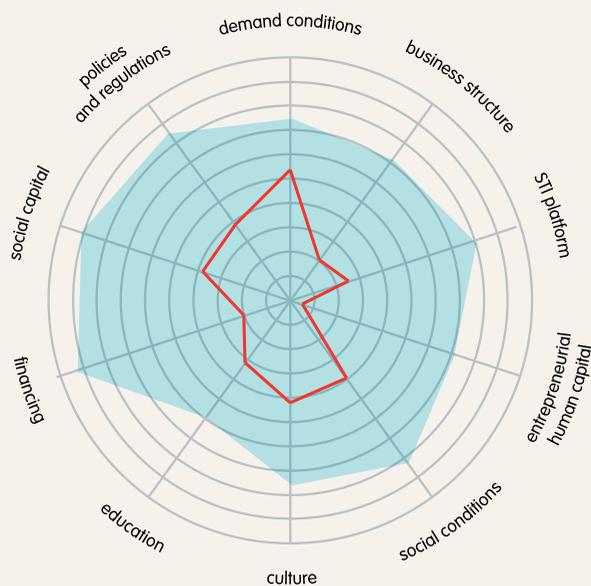
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
55	27.5		31,932		10.7 M

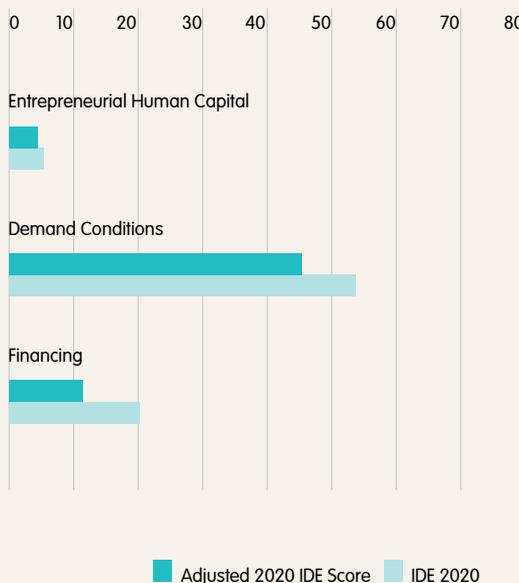
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
56	25.2	1,674	36	22.3%	-10%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Greece
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Guatemala

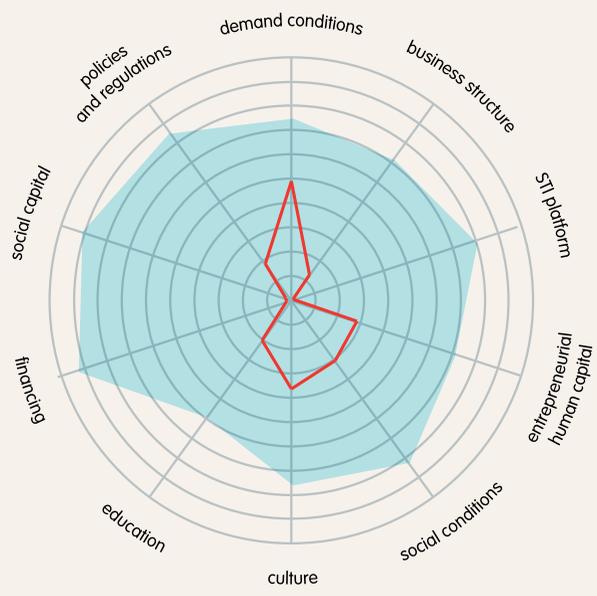
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
64	11.0		9,099		18 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
63	11.1	5,029	180	2.6%	-2%

Systemic Conditions for Entrepreneurship (before COVID)



Note: this country does not report significant differences between the situation before COVID and the adjusted values.

□ Guatemala
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Hong Kong

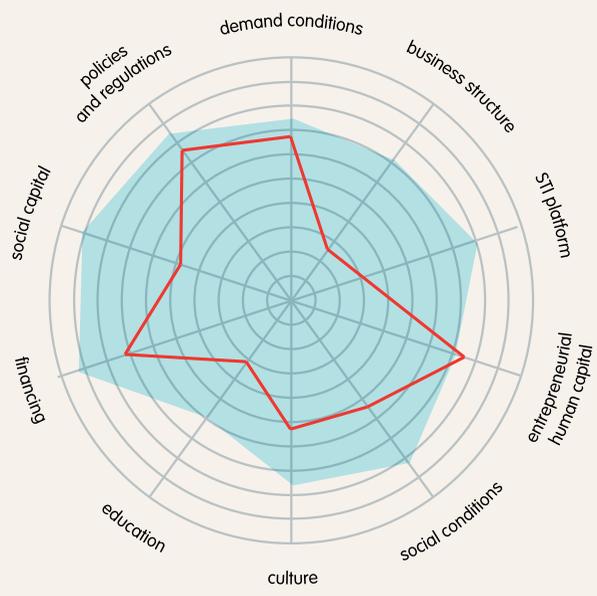
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
22	50.0		67,193		7.6 M

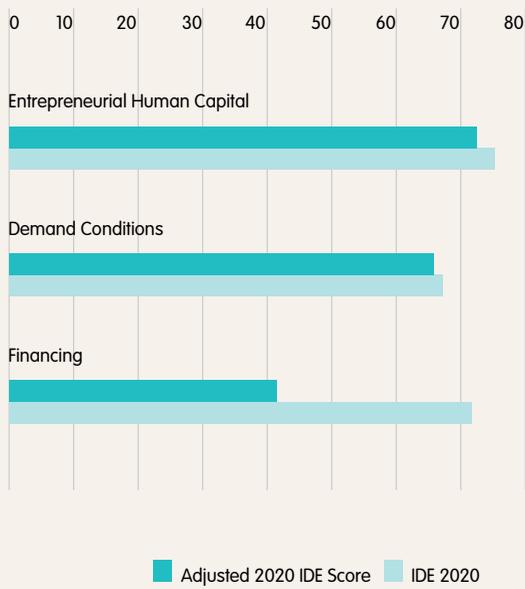
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
22	47.0	213	1	4.5%	-4.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Hong Kong
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Hungary

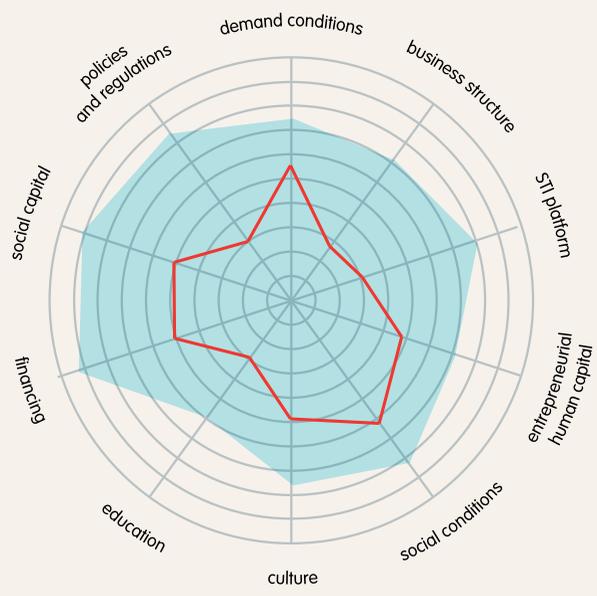
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
33	41.7		36,301		9.7 M

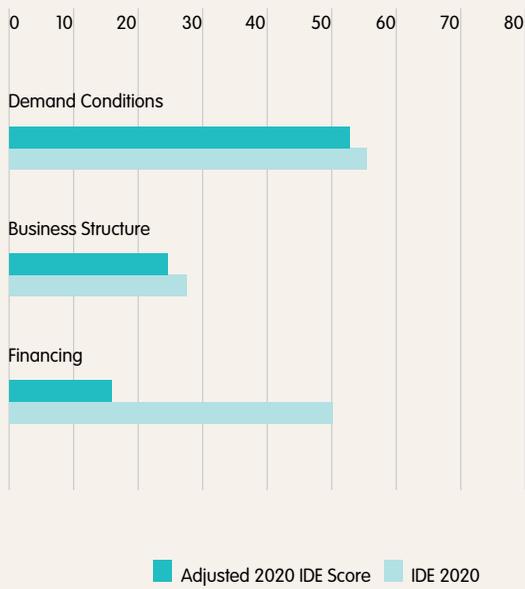
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
35	36.5	2,558	78	5.4%	-3.1%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Hungary
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

India

2020

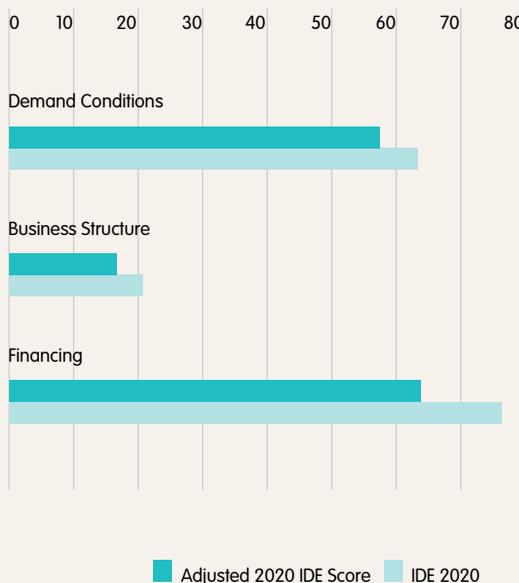
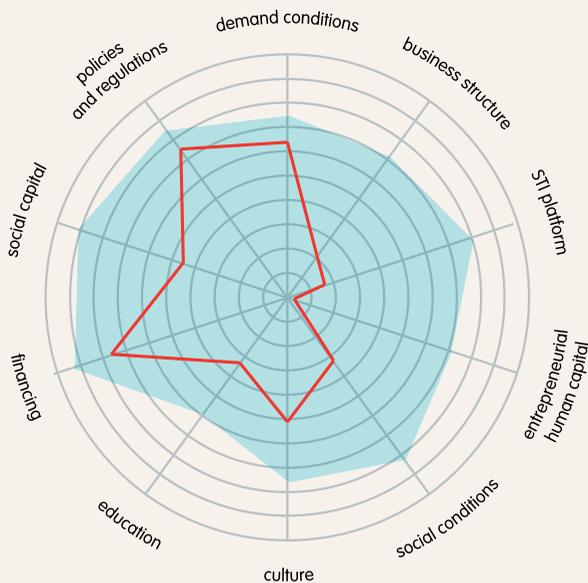
IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
50	31.3		9,117		1,369.6 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
49	30.7	4,402	69	5.5%	-4.5%

Systemic Conditions for Entrepreneurship (before COVID)

Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ India
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Indonesia

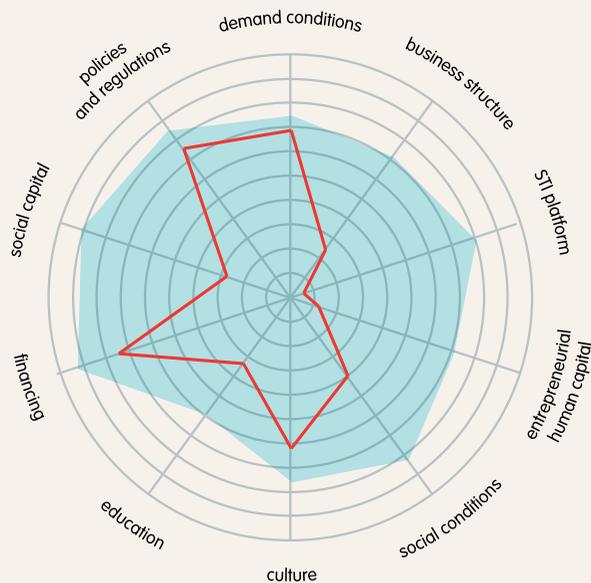
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
42	32.7		14,989		269.9 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
43	32.2	1,044	38	7.5%	-0.3%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Indonesia
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Iran

2020

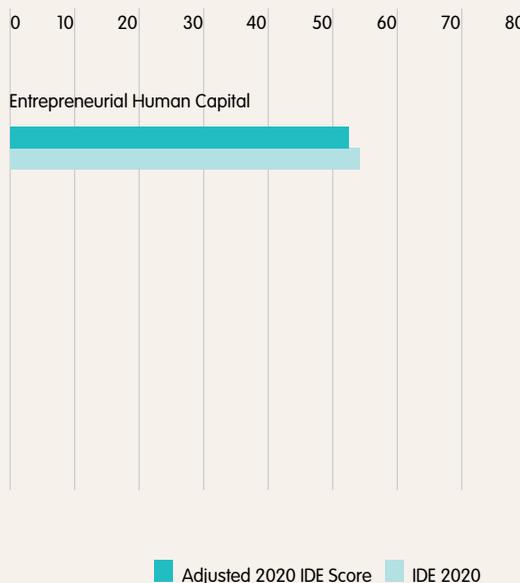
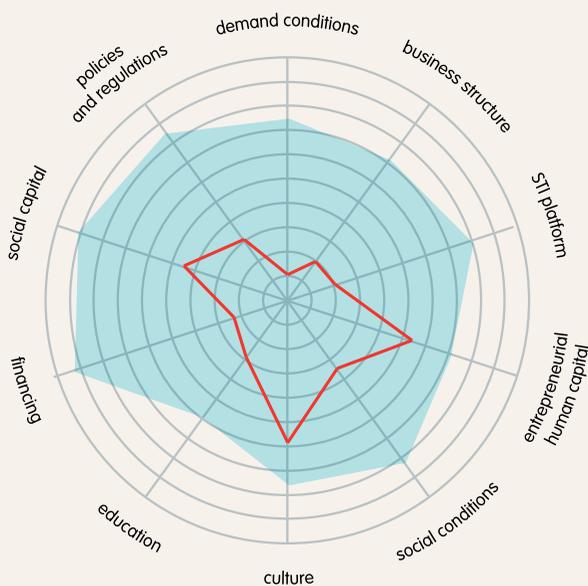
IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
53	29.3		18,010		84.1 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
38	34.7	5,315	305	16.3%	-6%

Systemic Conditions for Entrepreneurship (before COVID)

Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Iran
International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Ireland

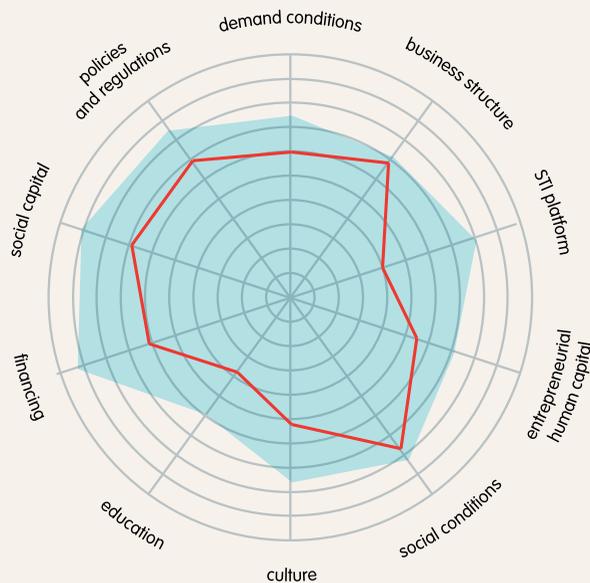
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
12	57.6		87,858		5 M

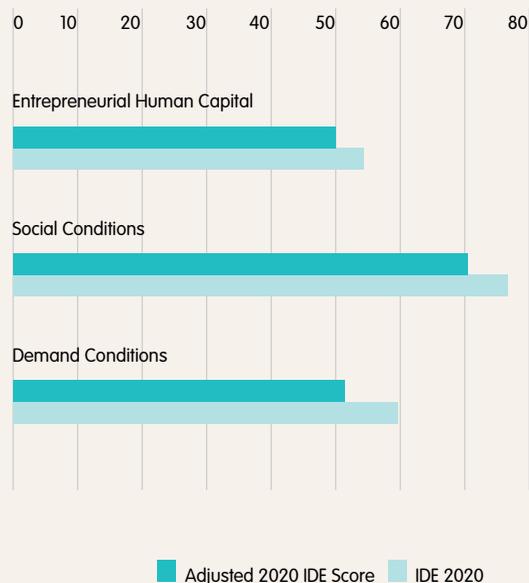
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
12	55.5	7,086	365	12.1%	-6.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Ireland
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Israel

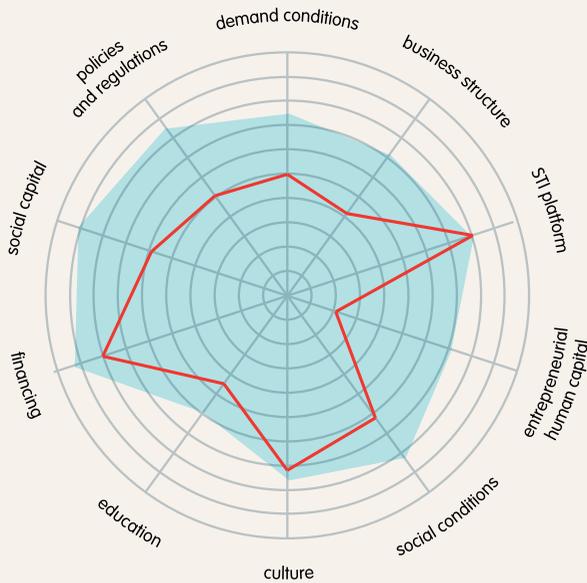
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
20	52.7		40,740		9.2 M

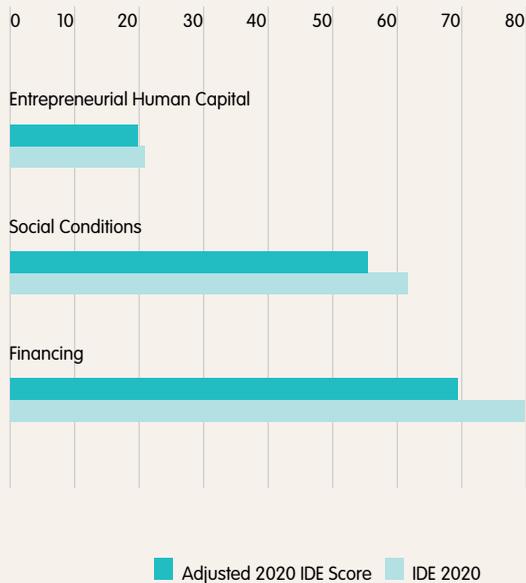
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
20	50.7	26,691	169	12%	-6.3%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Israel
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Italy

2020

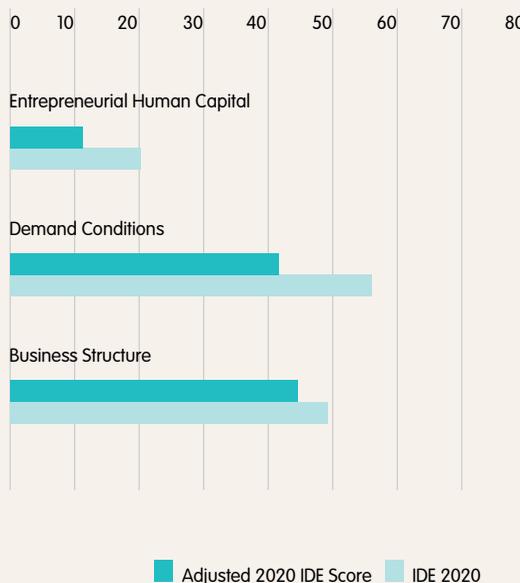
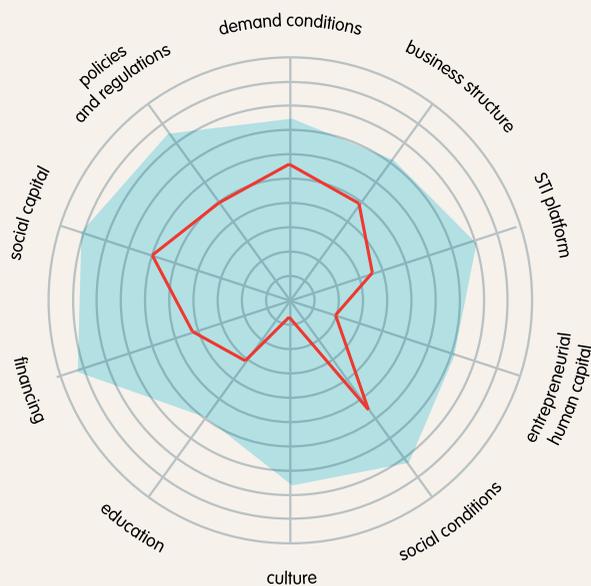
IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
38	35.5		41,998		60.2 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
44	32.1	5,125	593	12.7%	-12.8%

Systemic Conditions for Entrepreneurship (before COVID)

Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Italy
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Japan

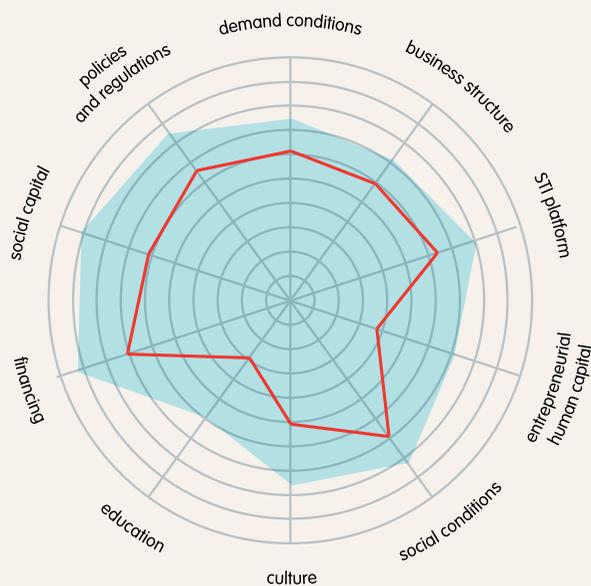
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
17	55.2		47,296		125.8 M

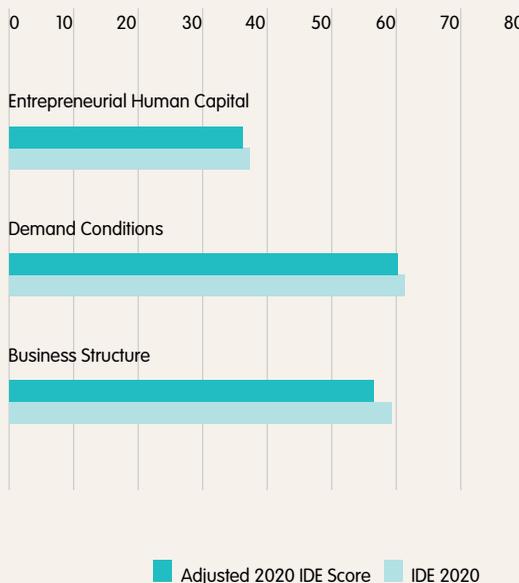
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
10	55.8	649	12	3%	-5.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Japan
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Latvia

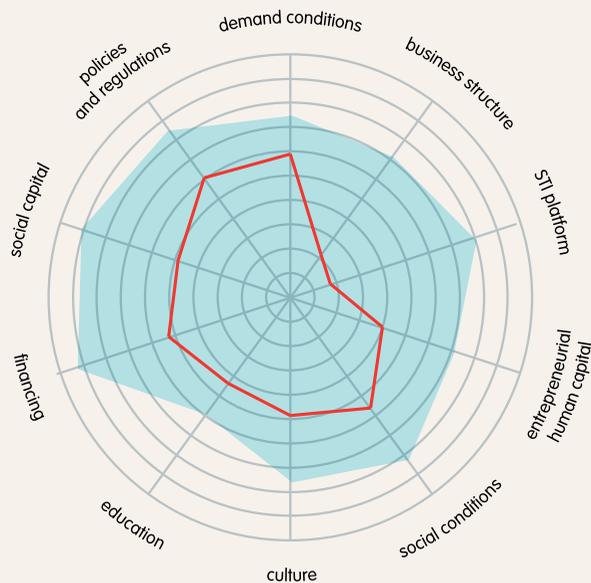
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
32	41.9		33,316		1.9 M

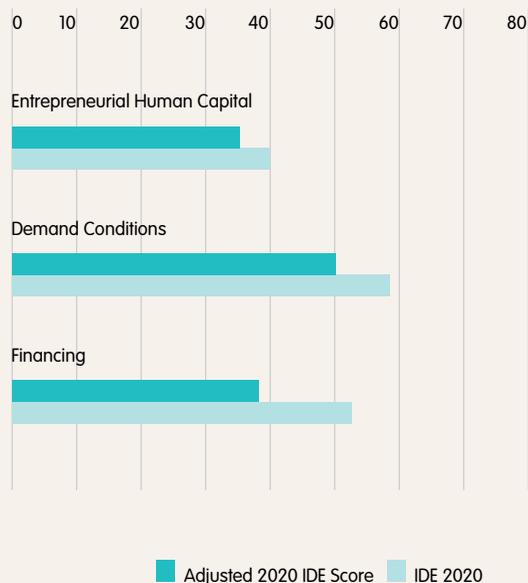
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
32	39.4	889	19	8%	-8.6%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Latvia
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Luxembourg

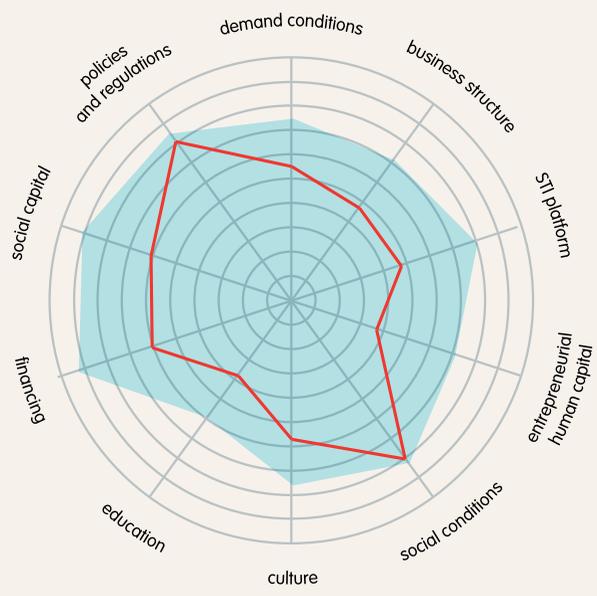
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
18	54.5		113,165		0.6 M

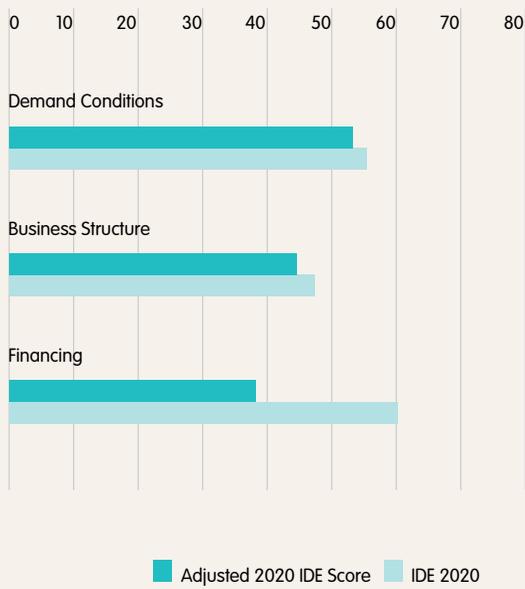
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
19	51.3	13,350	198	7.7%	-4.9%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Luxembourg
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Malaysia

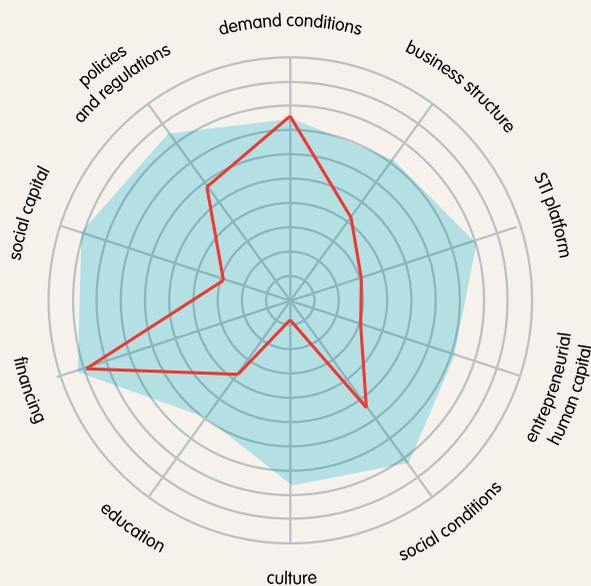
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
36	38.2		34,913		33.2 M

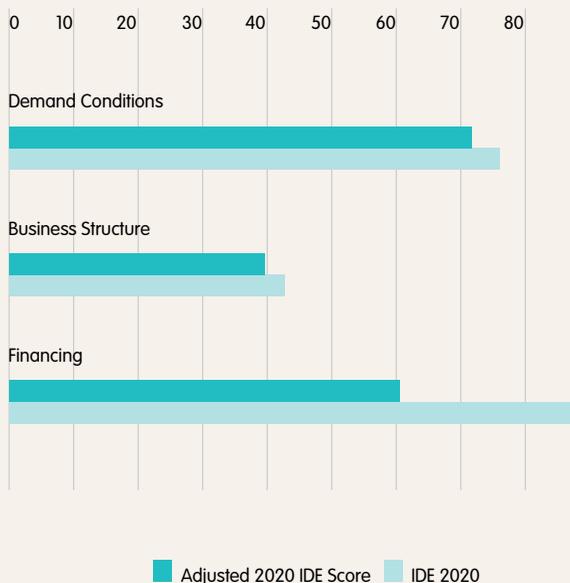
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
36	36.1	337	4	4.9%	-3.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Malaysia
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Mexico

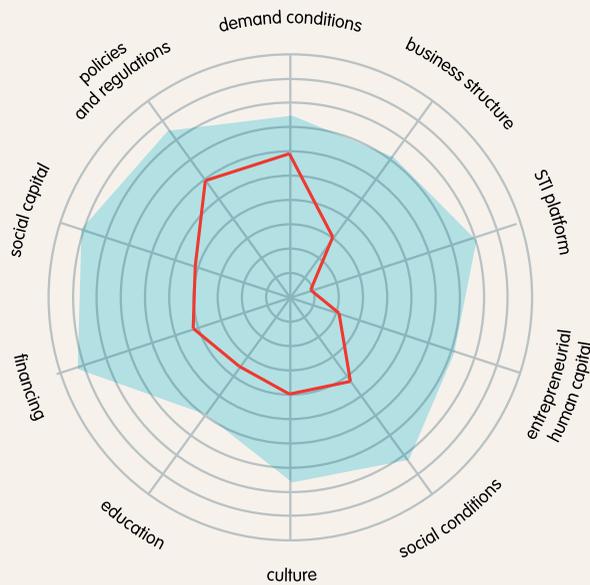
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
39	34.4		21,576		127.1 M

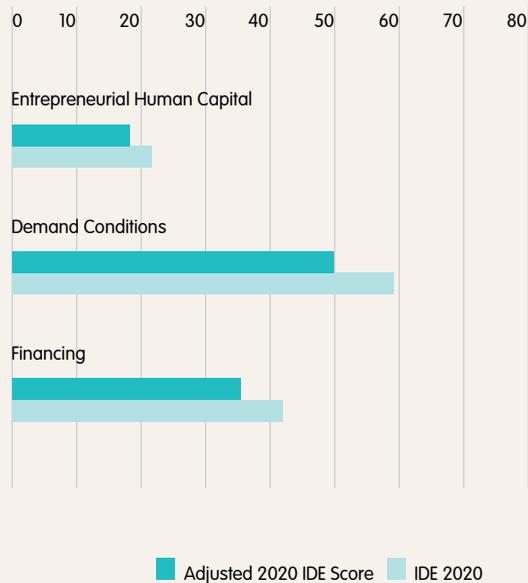
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
42	32.3	5,664	593	5.3%	-10.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Mexico
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Morocco

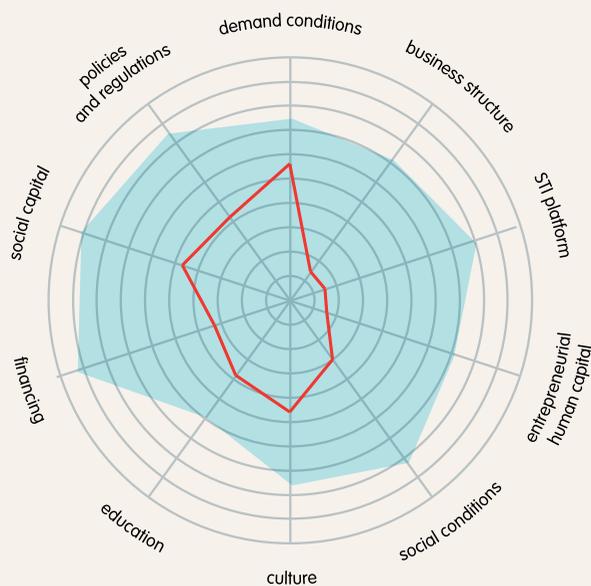
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
51	30.7		9,763		36 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
48	30.8	3,188	56	12.5%	-3.7%

Systemic Conditions for Entrepreneurship (before COVID)



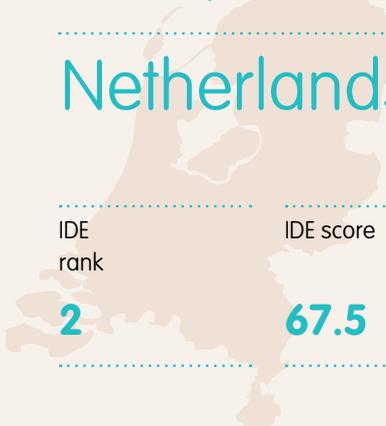
Note: this country does not report significant differences between the situation before COVID and the adjusted values.

□ Morocco
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Netherlands

2020



IDE rank

2

IDE score

67.5



GDP per capita PPP (2020 estimate)

60,902



Population (Million habitants)

17.3 M

COVID-19 Impact

Adjusted IDE rank

4

Adjusted IDE score

63.4

Total cases per million (Sept 2020)

6,508

Total deaths per million (Sept 2020)

371

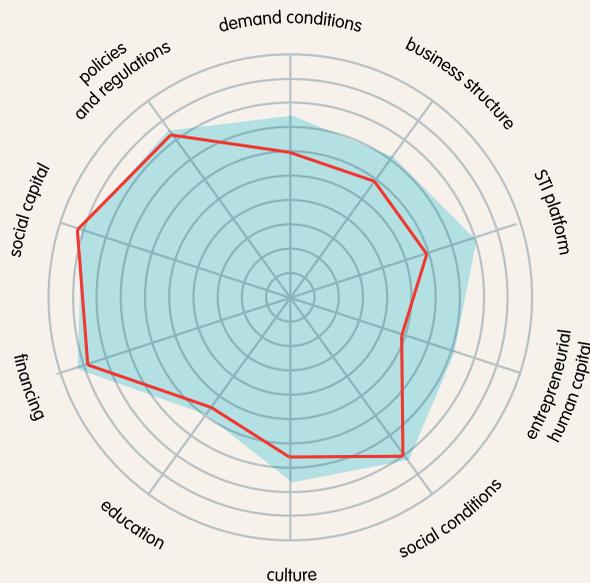
Unemployment (2020 estimate)

6.5%

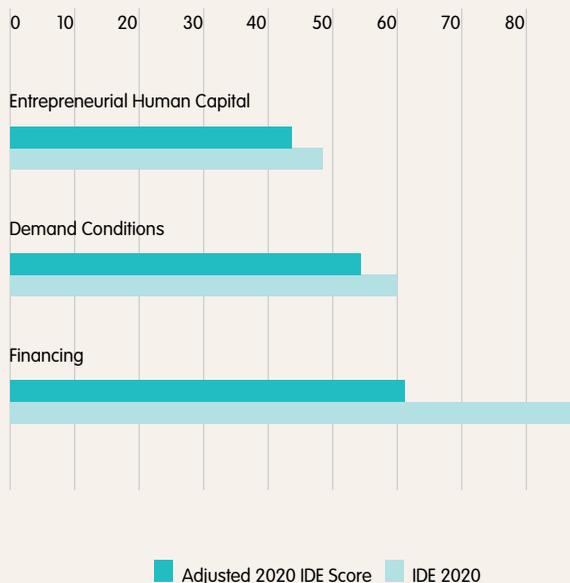
GDP growth rate (2020 estimate)

-7.7%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Netherlands
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Norway

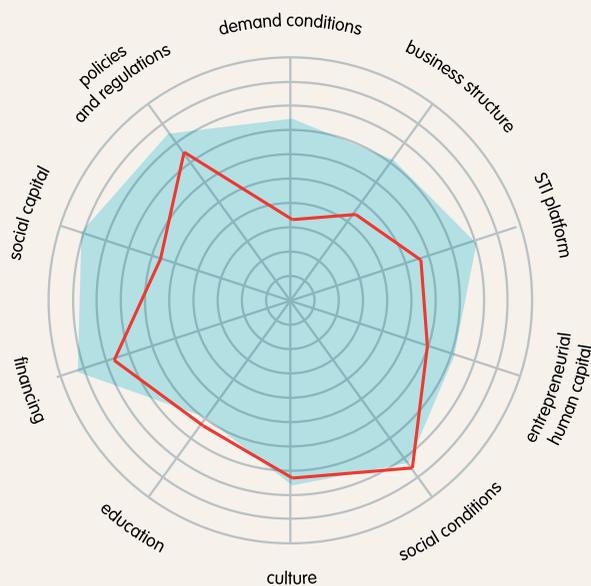
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
8	60.2		80,434		5.4 M

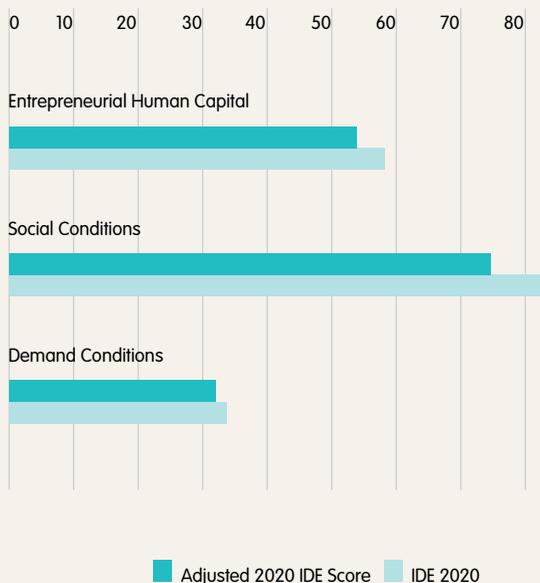
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
8	58.7	2,473	50	13%	-6.3%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Norway
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Panama

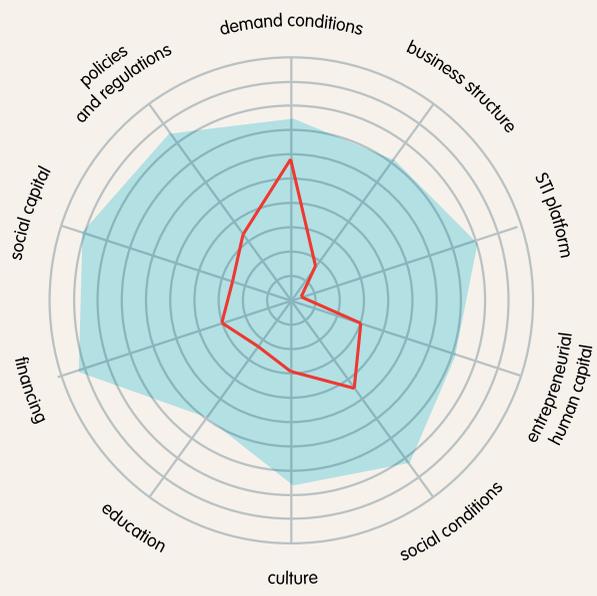
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
58	25.5		28,741		4.3 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
55	25.4	25,622	542	8.8%	-2.1%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Panama
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Peru

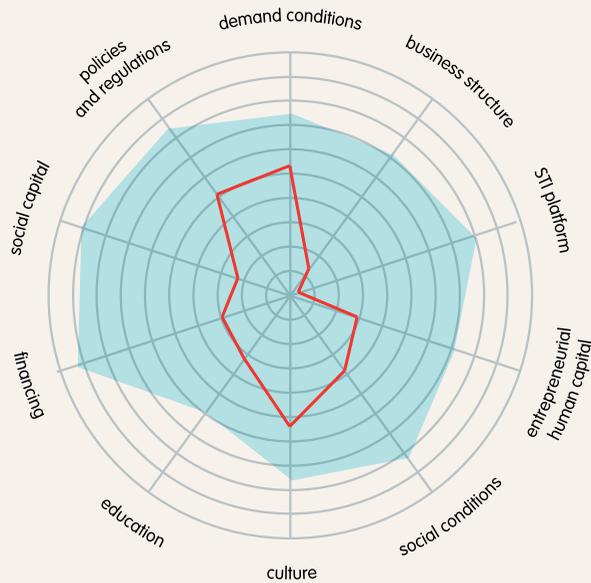
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
56	26.8		15,553		32.8 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
57	24.9	24,424	978	7.1%	-4.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Peru
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Philippines

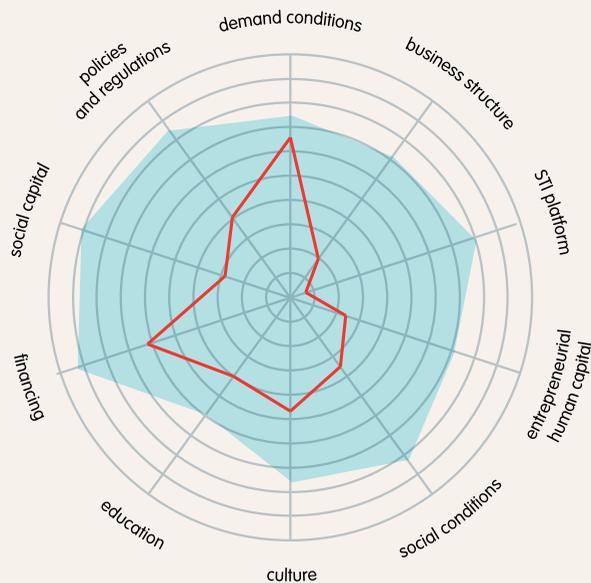
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
46	31.6		10,195		110 M

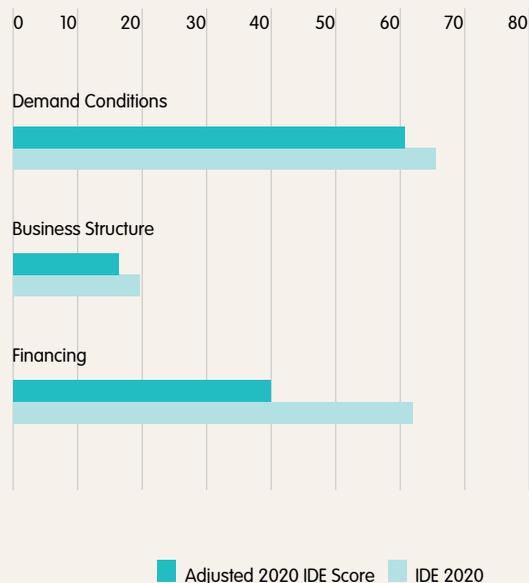
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
51	29.5	2,776	49	6.2%	-3.6%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Philippines
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Poland

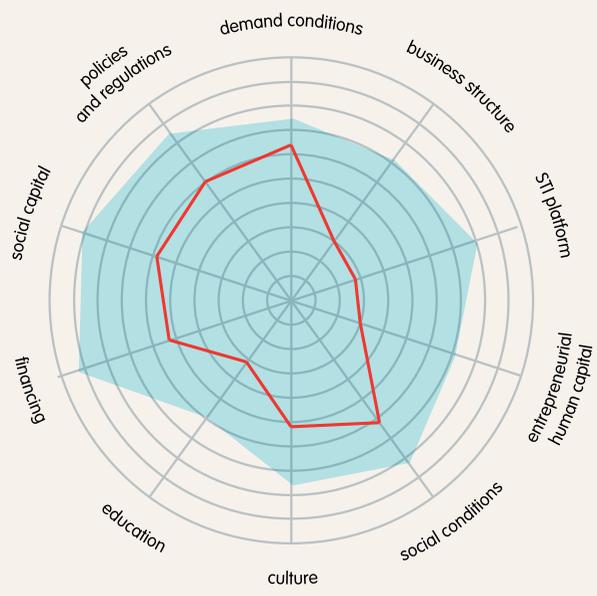
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
30	44.6		36,008		37.9 M

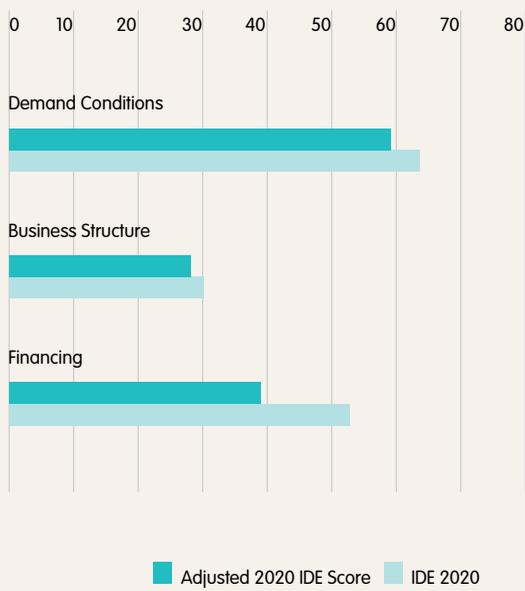
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
28	42.3	2,307	64	9.9%	-4.6%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Poland
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Portugal

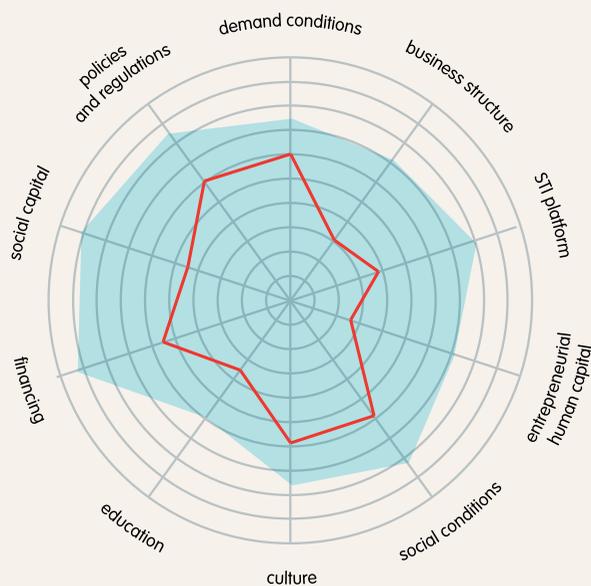
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
29	45.0		35,285		10.2 M

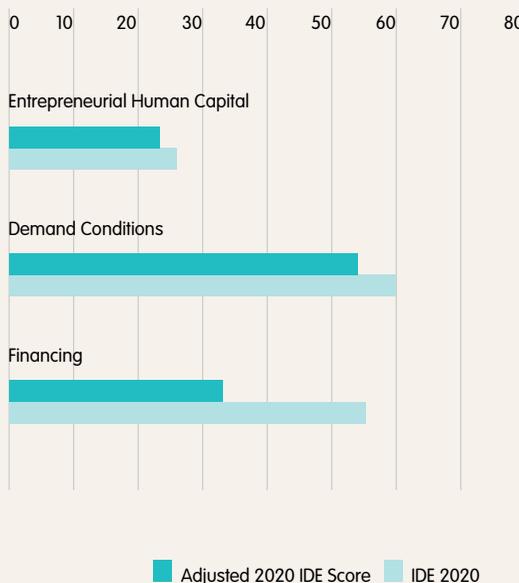
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
29	41.1	7,218	192	13.9%	-8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Portugal
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Qatar

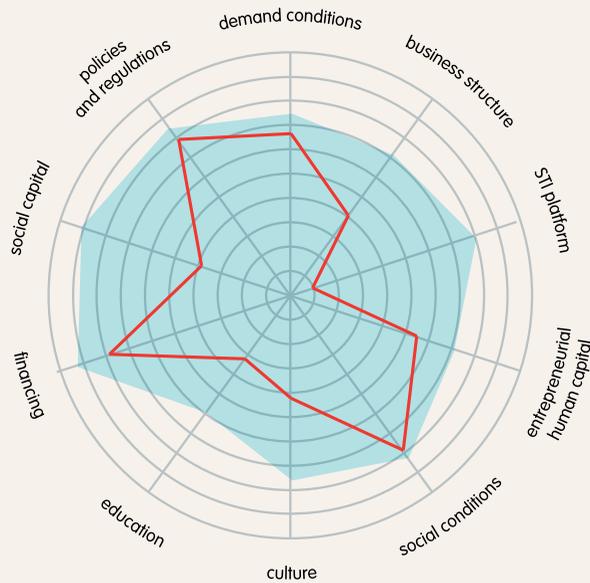
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
28	45.3		140,299		2.8 M

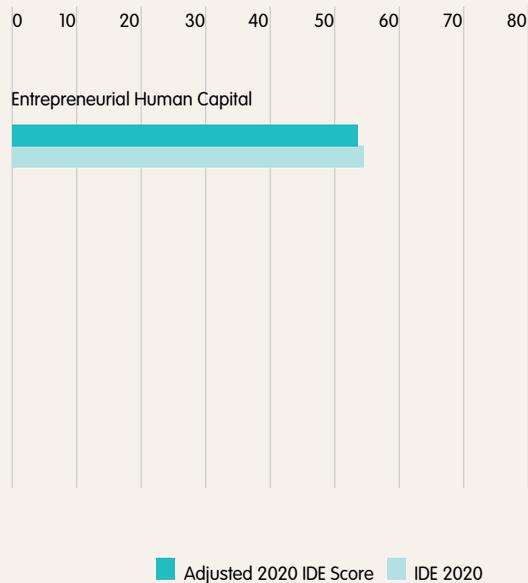
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
25	45.2	43,416	74	0.1%	-4.3%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Qatar
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Russia

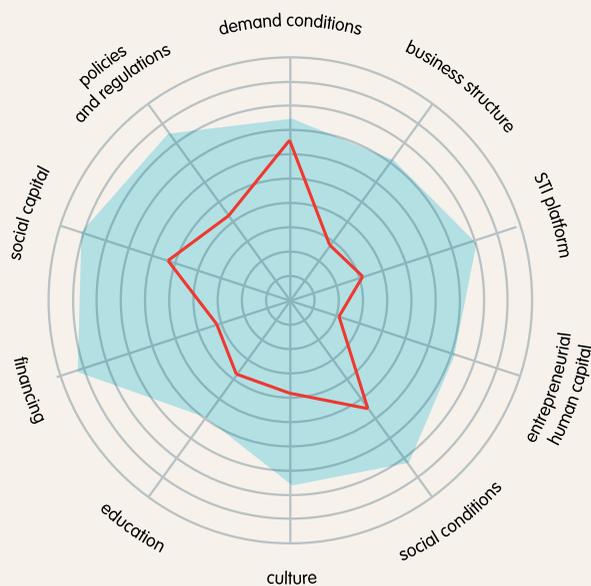
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
35	38.5		31,128		146.6 M

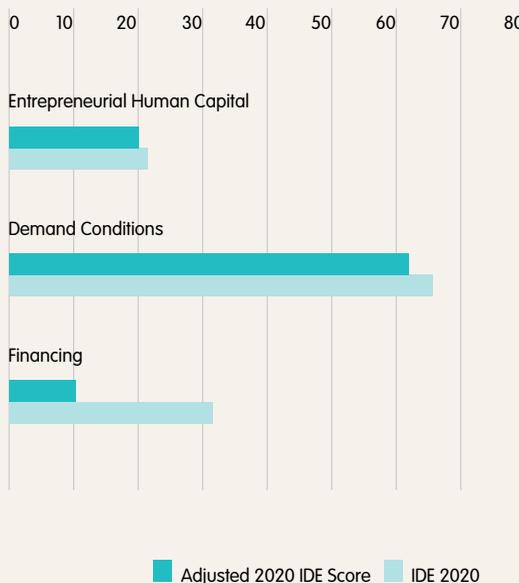
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
39	33.9	7,890	139	4.9%	-6.6%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Russia
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Singapore

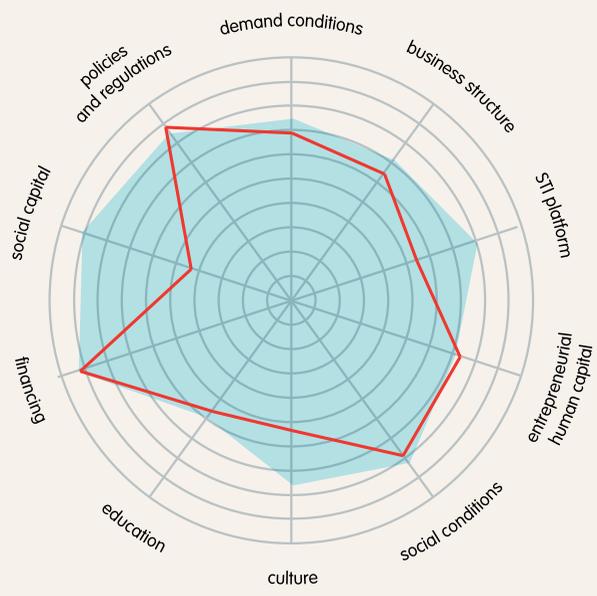
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
3	65.4		106,746		5.7 M

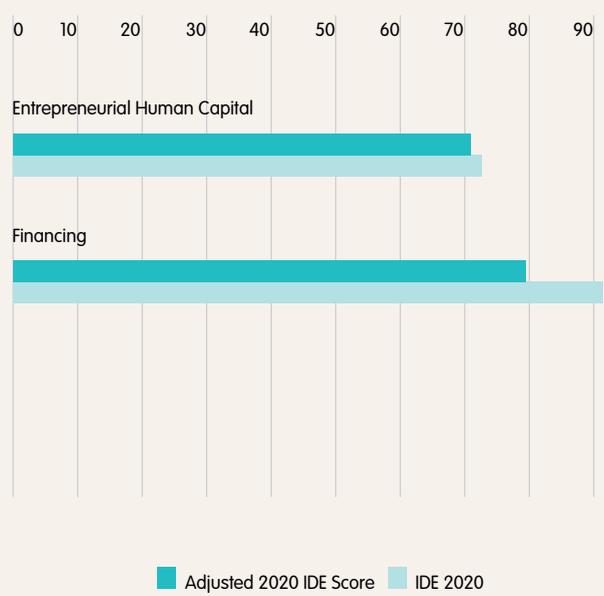
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
2	64.7	9,863	5	2.5%	-3.5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Singapore
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Slovak Republic

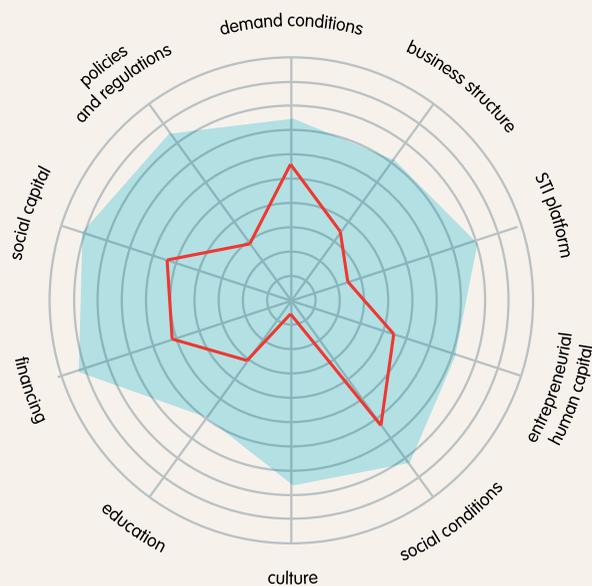
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
41	33.7		38,705		5.5 M

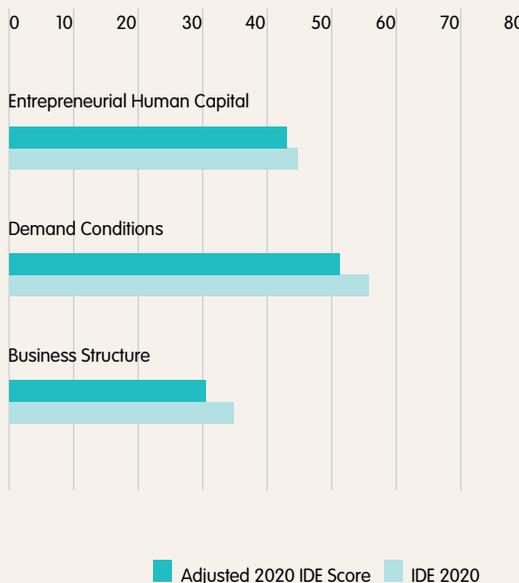
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
41	32.9	1,663	8	8%	-6.2%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Slovak Republic
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Slovenia

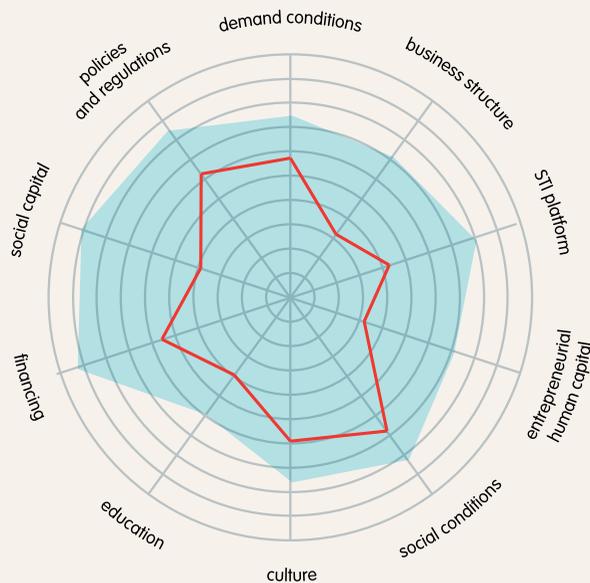
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
24	47.2		40,747		2.1 M

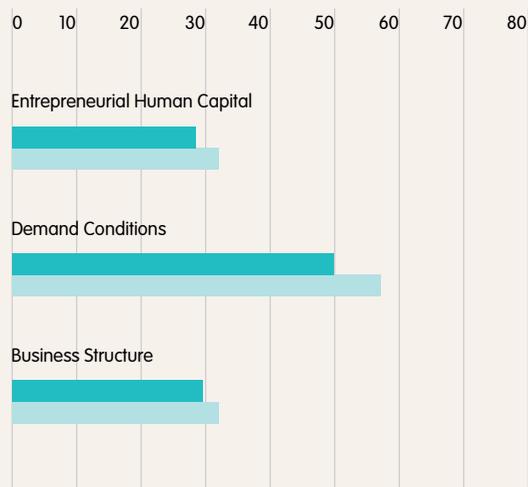
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
24	45.6	2,573	65	9%	-8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Slovenia
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

South Africa

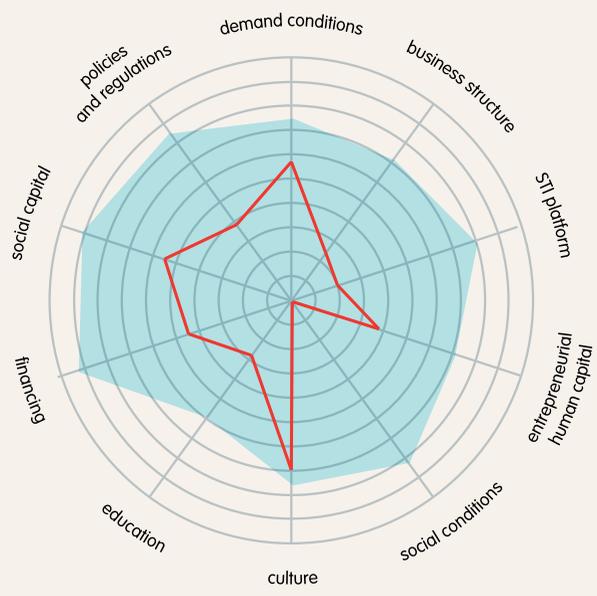
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
57	25.9		14,105		59.7 M

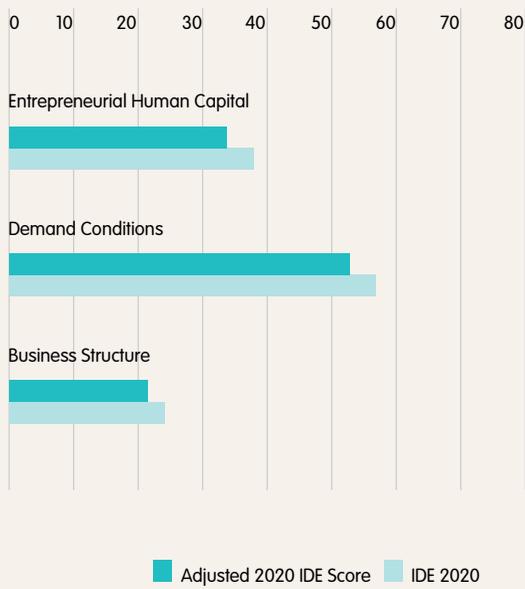
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
58	24.0	11,310	276	35.3%	-8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ South Africa
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

South Korea

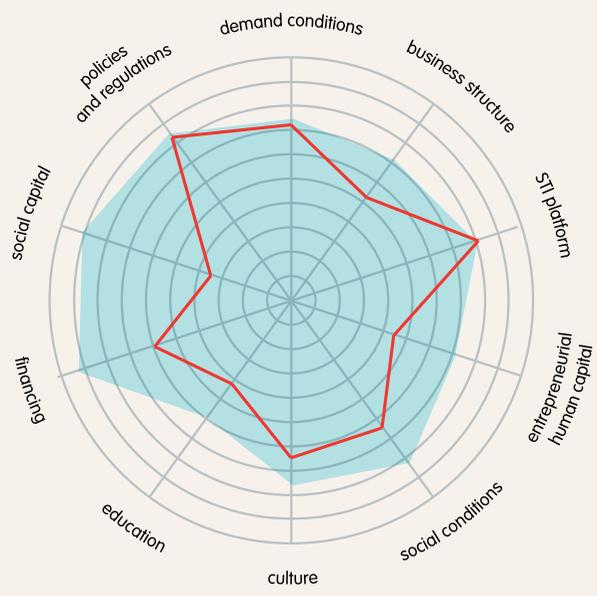
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
13	57.6		46,916		52.1 M

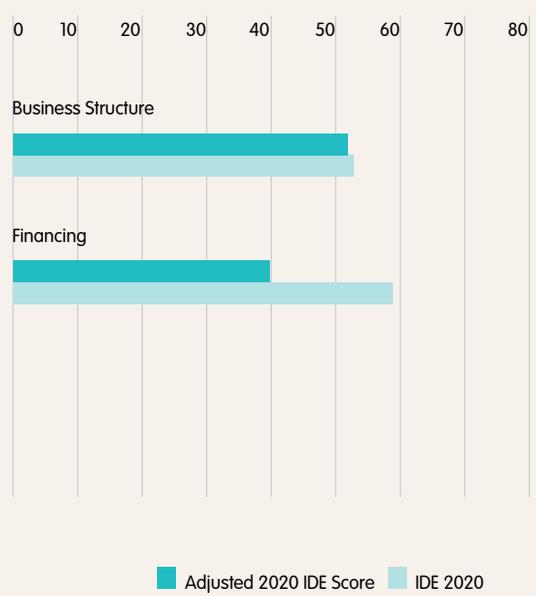
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
11	55.6	462	8	4.5%	-2.1%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ South Korea
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Spain

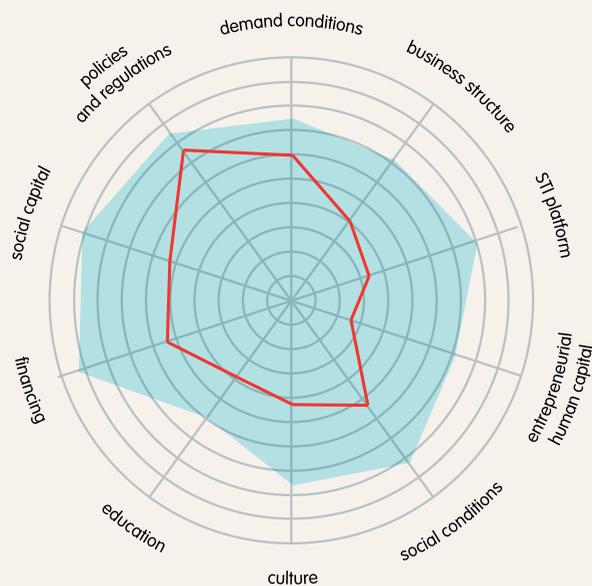
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
27	45.8		43,438		46.9 M

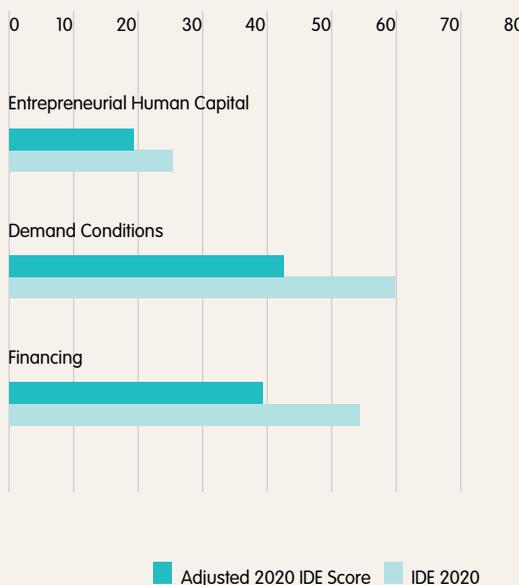
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
30	41.0	15,324	668	20.8%	-12.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Spain
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Sweden

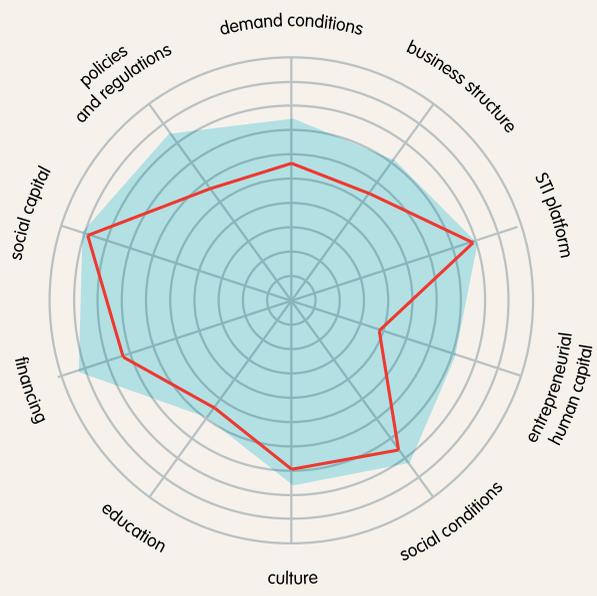
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
7	62.8		56,549		10.4 M

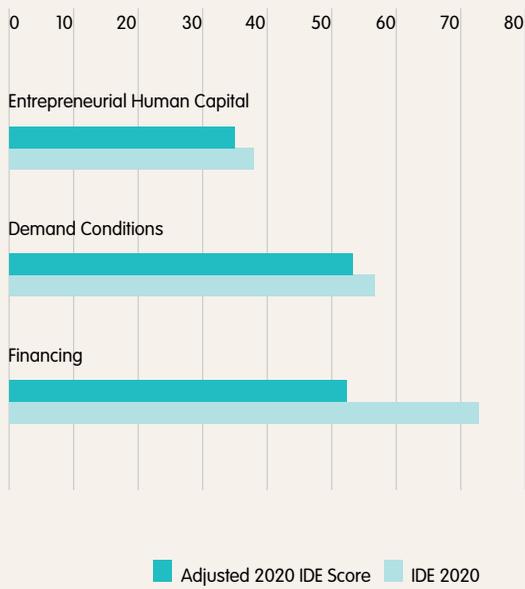
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
7	59.3	9,003	582	10.1%	-6.8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Sweden
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Switzerland

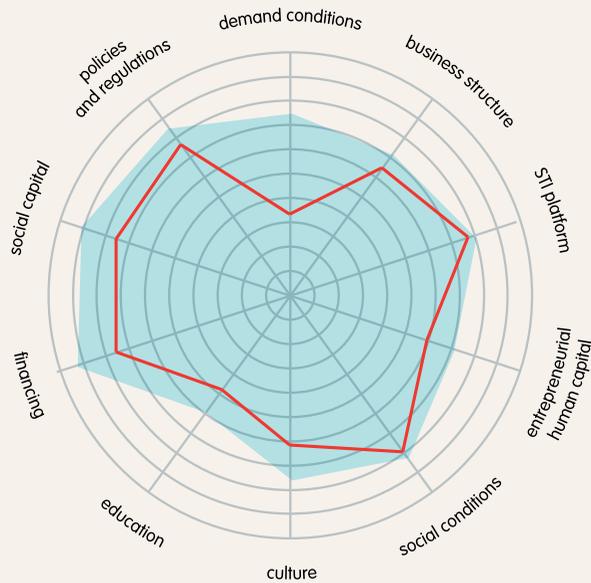
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
6	63.6		68,233		8.6 M

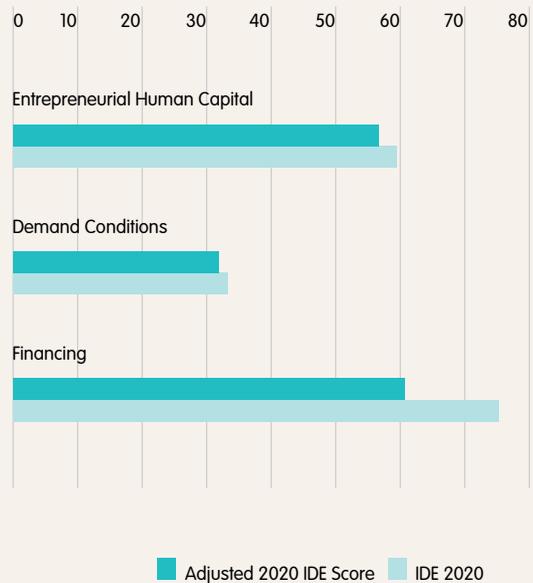
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
5	61.7	5,993	205	2.7%	-6%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Switzerland
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Thailand

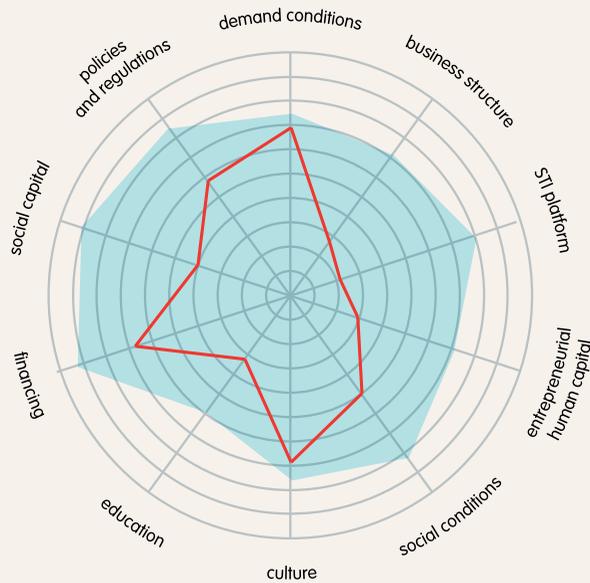
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
31	42.8		21,575		68 M

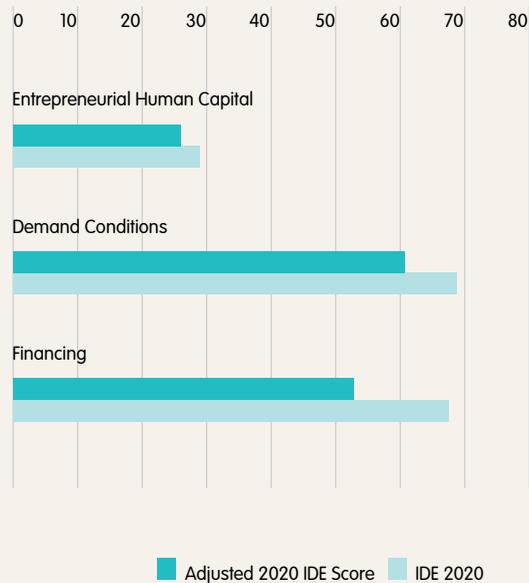
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
31	40.6	51	1	1.1%	-7.7%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Thailand
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.



Turkey

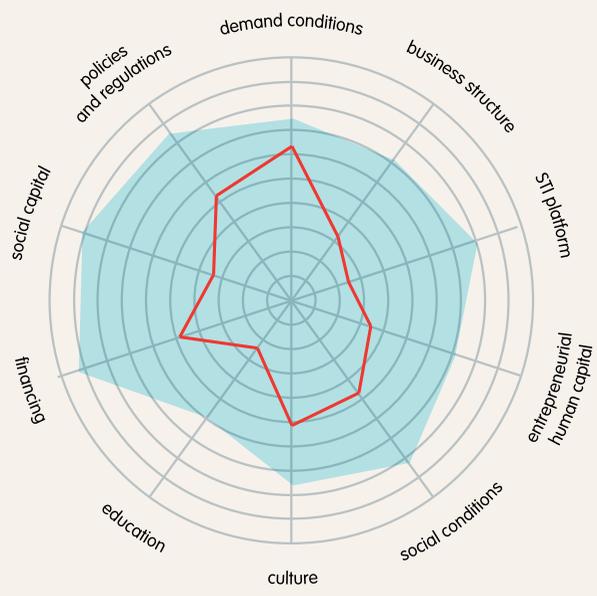
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
34	39.4		29,620		84 M

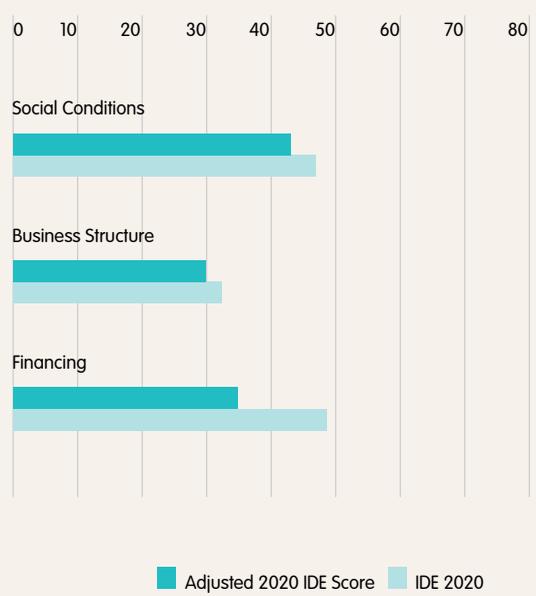
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
33	37.8	3,728	95	17.2%	-5%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ Turkey
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

United Arab Emirates

2020

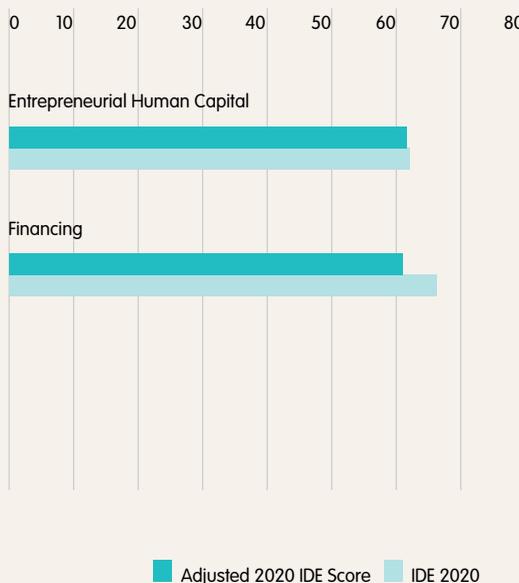
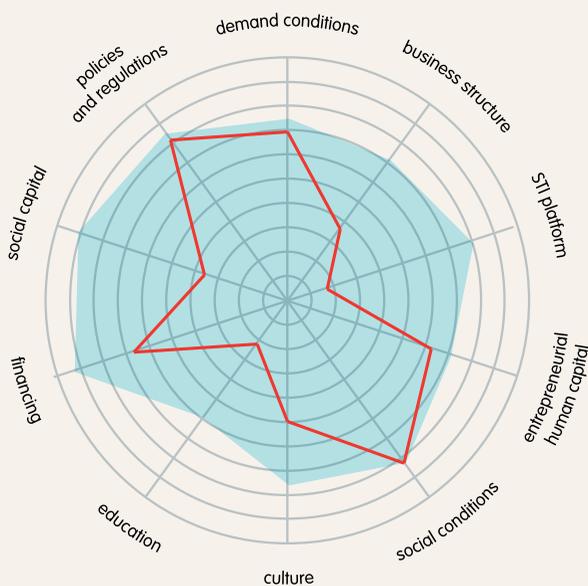
IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
26	46.4		71,146		11.1 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
23	46.1	9,248	42	2.2%	-3.5%

Systemic Conditions for Entrepreneurship (before COVID)

Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ United Arab Emirates The international benchmark reflects the average value of the top 3 countries for each dimension.
■ International benchmark

United Kingdom

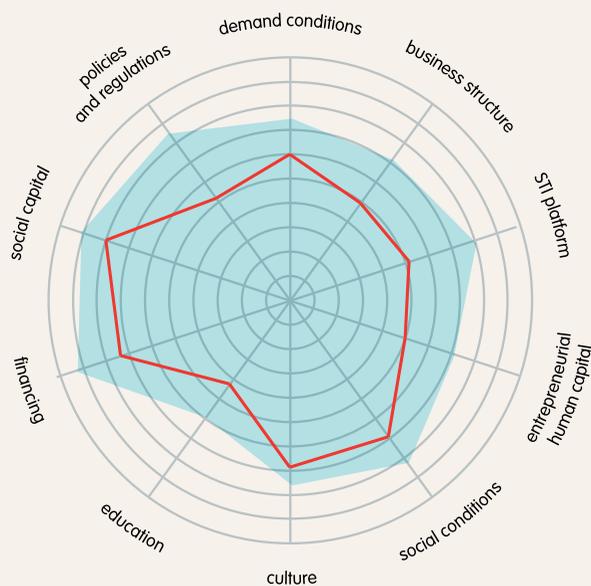
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
10	58.6		48,651		67.3 M

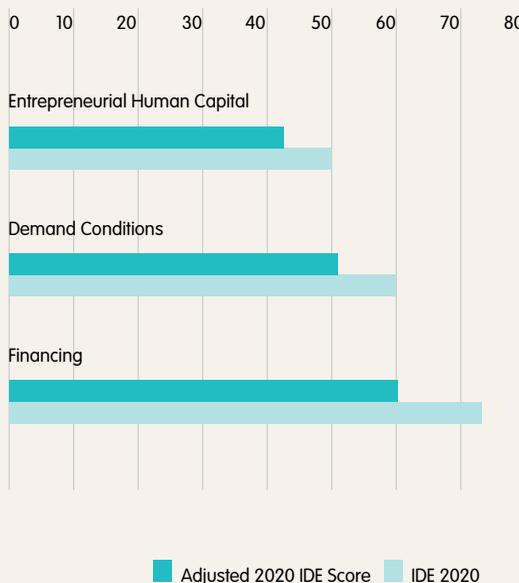
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
14	55.2	6,407	619	4.8%	-10.2%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ United Kingdom
□ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

United States

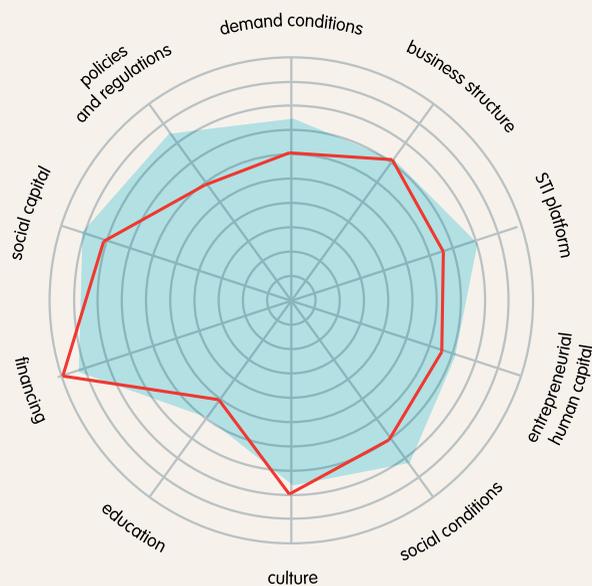
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
1	69.1		68,101		331.1 M

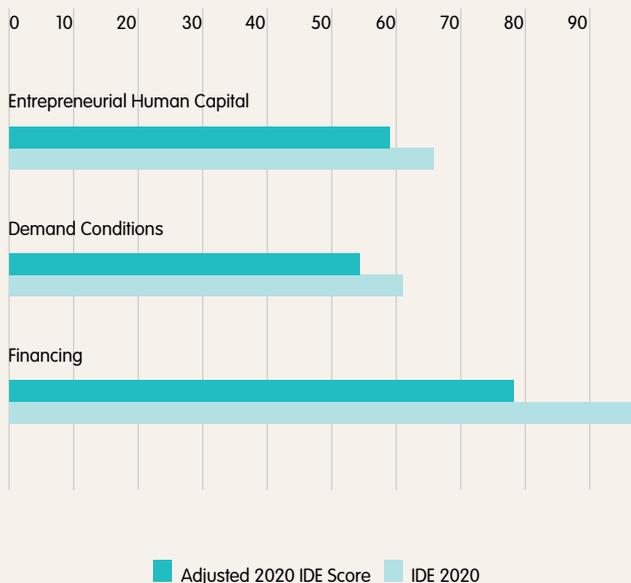
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
1	65.2	21,495	619	10.4%	-8%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



□ United States
■ International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Uruguay

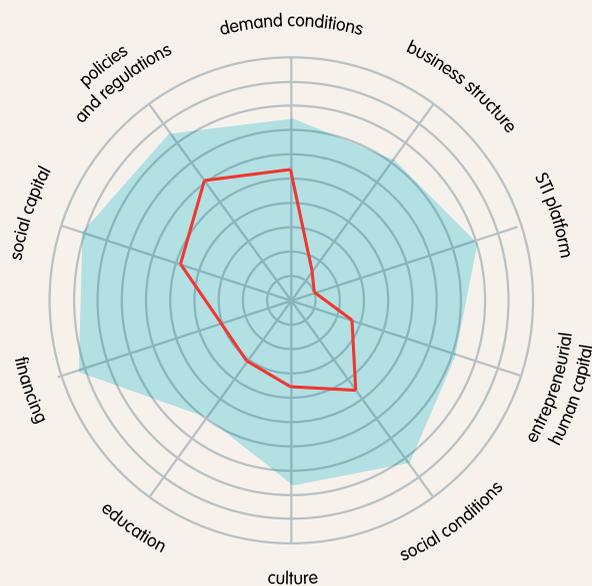
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
44	31.8		24,761		3.5 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
45	31.8	578	14	10.5%	-3%

Systemic Conditions for Entrepreneurship (before COVID)



Note: this country does not report significant differences between the situation before COVID and the adjusted values.

□ Uruguay
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Venezuela

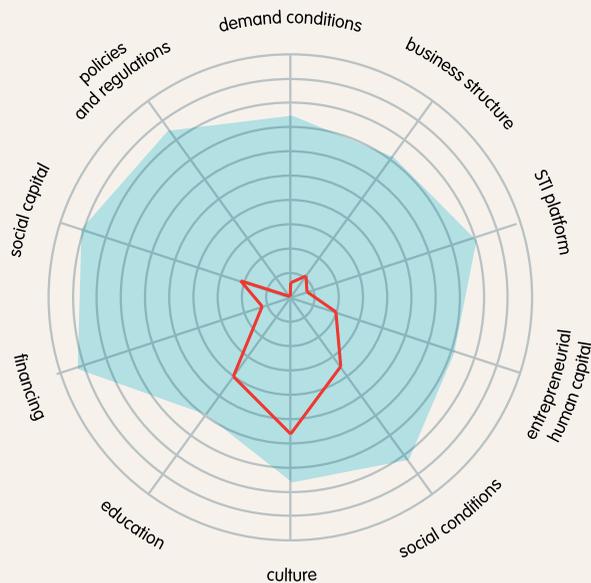
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
63	11.9		10,906		25.9 M

COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
64	6.8	2,556	21	35.5%	-15%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Venezuela
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

Vietnam

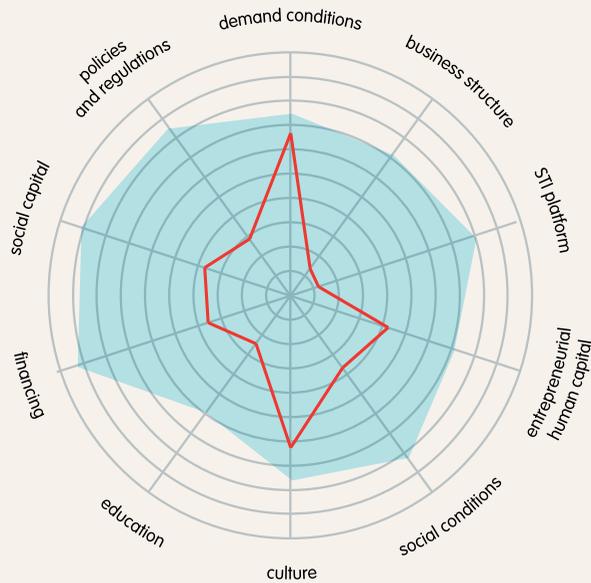
2020

IDE rank	IDE score		GDP per capita PPP (2020 estimate)		Population (Million habitants)
45	31.7		8,764		96.4 M

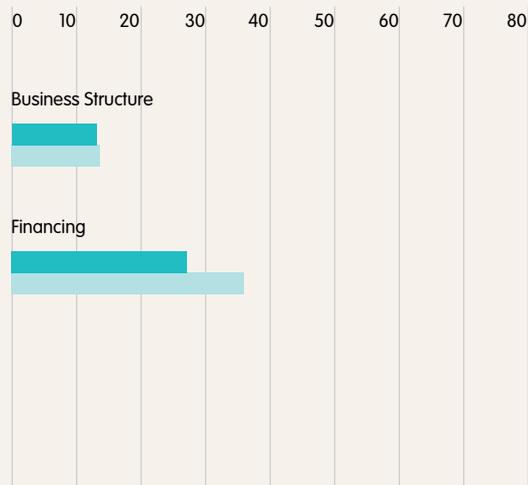
COVID-19 Impact

Adjusted IDE rank	Adjusted IDE score	Total cases per million (Sept 2020)	Total deaths per million (Sept 2020)	Unemployment (2020 estimate)	GDP growth rate (2020 estimate)
47	30.8	11	0	2.2%	2.7%

Systemic Conditions for Entrepreneurship (before COVID)



Adjusted IDE 2020 Scores, Dimensions Most-Impacted by COVID-19



Adjusted 2020 IDE Score IDE 2020

Vietnam
 International benchmark

The international benchmark reflects the average value of the top 3 countries for each dimension.

METHODOLOGICAL ANNEX

ADJUSTMENTS MADE TO ACCOUNT FOR THE IMPACT OF THE COVID-19

As we mentioned earlier, we were able to adjust the values for 5 dimensions of our IDE, namely Entrepreneurial human capital, Social conditions, Demand conditions, Business structure and Financing. Next, we describe the sources and process followed to adjust the IDE scores to account for the impact of COVID-19 in these dimensions.

- **Entrepreneurial human capital.** Conceptually, economic downturn and recession, combined with growing economic uncertainties, negatively affects the opportunities' space and therefore, the intentions to start a business. To estimate the magnitude of this negative relationship we based our estimation on the experience of the last global economic crisis 2008/2009. Accordingly, using data from GEM we estimate for each country included in the IDE the relationship between the GDP growth rate of those years with the corresponding evolution of the Opportunity-based TEA. Then, we averaged these values according to the level of variation in the GDP rate, ending with two different coefficients: one for those countries with higher downturns and one for those countries with modest or low variations in the GDP. Next, we compute these coefficients to the expected variation of the GDP as for July 2020 provided by the IMF, resulting in a sort of average elasticity coefficient for each group of countries. Finally, we compute the corresponding coefficient to the Opportunity-based TEA from 2019 to estimate an adjusted Opportunity-based TEA that captures the impact of the economic downturn.
- **Social conditions.** The main direct impacts of the COVID-19 crisis were on personal incomes and on unemployment rates. Therefore, we adjust our IDE value of social conditions in two ways. First, we adjust the value of the National per capita Income by the estimated evolution of the GDP per capita as for July 2020. Second, we introduce in our calculation the evolution of the rate of unemployment as for July 2020 provided by the ILO.
- **Demand conditions.** To account for the economic downturn registered as a consequence of the different lock-downs and confinement measures, we replace in our calculation of this dimension the value of annual GDP growth rates published in March 2020 by the IMF for their estimated values published in July 2020 by the same source.
- **Business structure.** To adjust the IDE value in this dimension, we use the updated information provided by UNIDO regarding the Index of Industrial Production for the second quarter of 2020 to adjust the Competitive Industrial Performance Index which is the one included in our calculus. So, the value for the last quarter of 2019 was multiplied by the growth rate between the second and first quarter of 2020.
- **Financing.** Regarding this dimension we decided to use the Crunchbase data regarding the evolution in the number of deals by country between the average number in 2019 and the one corresponding to the first semester of 2020. We calculate the evolution of the pre-seed and angel investments to adjust the variable corresponding to the perception as regards the availability of specific financial sources for entrepreneurs. As well, we took the information regarding the evolution of A Series investments to adjust the variable corresponding to the perception as regards the availability of Venture Capital.

