

IDE

Index of Dynamic Entrepreneurship

Entrepreneurship as a vehicle
to enhance digitalization

2019

Hugo Kantis
Juan Federico
Sabrina Ibarra García

ABOUT THE AUTHORS



Hugo Kantis

He holds a PhD in Entrepreneurship and Small Business Management (Universitat Autònoma de Barcelona- Växjö University) and a BA in Economics and Business Administration (UBA). Director of Prodem. He has more than fifteen years of experience designing, advising and evaluating entrepreneurship policies and programs throughout Latin America. He is a member of the Editorial Boards of Journals such as Venture Capital and Journal of Small Business Management. Director and Professor of the Master in Industrial Economics and Development with emphasis on SMEs (UNGS). He has authored several articles, books and chapters focused on entrepreneurship in Latin America and he is the Director of Dinamica Emprendedora, the newsletter of Prodem. He received in 2016 the Start Up Nation Award for Groundbreaking Policy Thinking, granted by the Global Entrepreneurship Network.



Juan Federico

PhD in Entrepreneurship and Small Business Management at the Universitat Autònoma de Barcelona, M.Sc. in Industrial Economics and Development (UNGS) and BA in Economics (UNS). Juan joined Prodem at its earlier phases in 2000 and since then he has worked there as researcher and lecturer. He has authored several articles, books and chapters about dynamic new ventures in Latin America, young firms and entrepreneurship policies. In addition, he has worked as a consultant for national and international organisms in research projects about entrepreneurship and entrepreneurship policies. He is Professor and Coordinator of the Master Course in Industrial Economics and Development with emphasis on SMEs (UNGS).



Sabrina Ibarra García

M.Sc. in Industrial Economics and Development with emphasis on SMEs (UNGS) and BA in Economics (UBA). Sabrina is currently doing her PhD courses on Economic Development (UNQ). She joined Prodem in 2008 as research assistant and lecturer. Since then, she has been involved in several research projects in quantitative data processing and analysis. Her main research interests are the determinants of dynamic new ventures (especially in Latin America), the elaboration of composite indicators of entrepreneurship and quantitative research methods.

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 2016 for Groundbreaking Policy Thinking granted by the Global Entrepreneurship Network.

For more information about Prodem, please visit:

www.prodem.ungs.edu.ar

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.

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GLOBAL ENTREPRENEURSHIP NETWORK



The Global Entrepreneurship Network operates a platform of projects and programs in 170 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 helps celebrate, understand, support, and connect entrepreneurs and those who champion them.

Stay up-to-date on news and updates via genglobal.org.

GLOBAL ENTREPRENEURSHIP WEEK

Global Entrepreneurship Week is a celebration of innovators who dream big and launch startups that bring ideas to life. Each November, GEW reaches millions of people through local, national and global events and activities. From large-scale startup competitions and workshops to small, community discussions - GEW reaches new audiences and connects participants to a network that can help them take the next step, no matter where they are on their entrepreneurial journey.

Across the globe, more than 35,000 events are planned across 170 different countries by a wide variety of organizations. Why do so many people celebrate GEW? Because it's a simple way to reach beyond their immediate network and connect with potential new partners, funders and members.

Learn more at gew.co.

GLOBAL ENTREPRENEURSHIP RESEARCH NETWORK

The Global Entrepreneurship Research Network is a working coalition that catalyzes and aligns research that is integrally linked with the practice of entrepreneurship and the growth of entrepreneurial ecosystems. Each member organization, including PRODEM in Argentina, is a leader in its nation or region in promoting entrepreneurship broadly. GERN undertakes this work with a conscious understanding of the practitioner origin of the insights on which research is based, and a clear focus on the mission of realizing a world in which entrepreneurial impact is as widely distributed as entrepreneurial potential.

Learn more at gern.co.

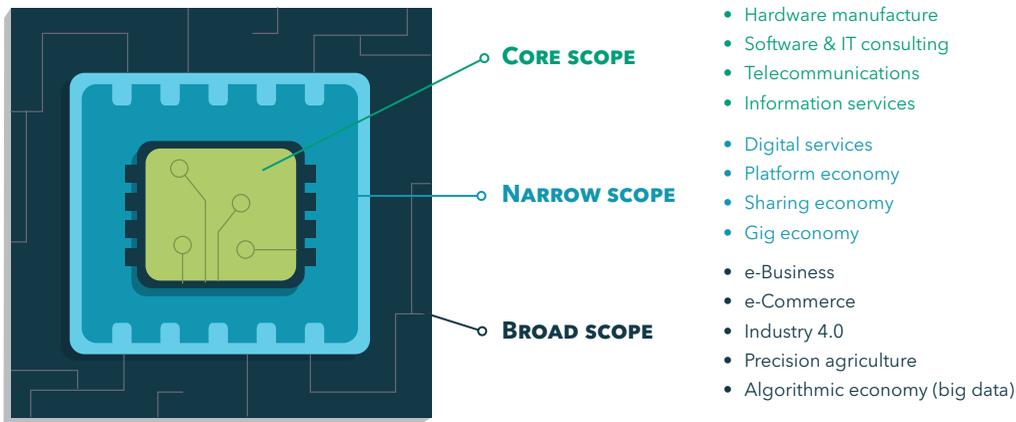
INTRODUCTION AND CONCEPTUAL FRAMEWORK

The context in which new businesses emerge is important. A key aspect to consider is technological change and its implications on society, with its relevant impact on the opportunities and challenges that entrepreneurs face. In this sense, the past few years have witnessed the impact of digital transformation on everyday life.

Nowadays, from our mobile phones, we carry out bank transactions, watch our favorite tv series, request loans, reconnect with old school friends, catch up with family updates, coordinate deliveries and transport, and plan our vacations, among other tasks. Businesses, on their end, can access new commercial channels and payment options, produce on a smaller scale making use of the benefits of 3D printing, and/or become more efficient thanks to robotics and artificial intelligence.

The sustained accumulation of scientific and technological progress in areas such as IT, physics, mathematics, electronics, biotechnology and nanotechnology, combined with the convergence of different technological waves and systems (internet and mobile phones; the internet of things; artificial intelligence; cloud computing; advanced robotics; big data; 3D printing and 5G) have created the qualitative change that we are witnessing today and that is affecting almost all economic sectors and society as a whole. In this new scenario, innovation costs have dropped dramatically and users' incorporation time of new technologies has substantially decreased (UNCTAD, 2017; Kantis, 2018). Additionally, new areas of business opportunities have opened, and certain necessary conditions for the emergence and later expansion of new businesses, which stand out for their particular capacity to introduce disruptive innovation, have been facilitated. (Autio and others, 2018; UNCTAD, 2017).

One distinctive feature of the technological change in course is the significant expansive power of digital transformation on economic activities, including on traditional sectors and society. Furthermore, the costs and risks for businesses of "being left out" are multiplied given that new technologies redefine and question traditional business models. All of this occurs in the context of a digital economy that to date has no widely accepted definition (García-Zeballos and Iglesias-Rodríguez, 2017, Thomas, Passaro and Quinto, 2019). The outline proposed by UNCTAD (2017), for example, includes three main scopes: the core scope, the narrow scope and the broad scope. Firstly, the core scope refers to the group of activities that produce digital goods and services aimed to electronically capture, transmit and show data and information. Secondly, the narrow scope refers to digital services and platforms that magnify this phenomenon and encourage their use. Finally, the broad scope considers the way in which the use of technology permeates and has an effect on all economic activities, as well as its impact on an organizational and social level.



Source: Own elaboration based on UNCTAD (2017)

New businesses are key players in the digital transformation, and are present in the three scopes of the UNCTAD outline. This can be observed in the following trends (Autio, 2017; Kantis, 2018):

- Lower barriers to entry. This is not only because of the decrease in the cost of innovation but also due to the “disintermediation” and “reintermediation” phenomena of new commercialization platforms that reconfigure the value chain (e.g. Amazon, Alibaba, Mercado Libre, Despegar, among some well-known cases).
- Drop in transaction costs (lower asset specificity) due to the increased flexibility of technological platforms associated with reprogramming possibilities.
- The crowdsourcing of ideas and crowdfunding of resources tend to promote the creation of communities that enable entrepreneurship.
- There are increasingly more big companies that support startups in the context of open innovation strategies and corporate venture capital.
- The collaboration on horizontal networks with other digital ventures favors the creation and development process of companies given that the competition is mainly with traditional business models.
- Traditional network advantages associated to proximity (externalities), relevant to sector-specific clusters, are boosted in the entrepreneurial ecosystems through remote interconnectivity with participants and far-off resources that are facilitated by digital technologies (open ecosystems).

Entrepreneurial and innovation ecosystems are transformed by both the impact of new technologies on entrepreneurial practices, as well as by the emergence and development of new digital ventures

In this way, entrepreneurial and innovation ecosystems are transformed by both the impact of new technologies on entrepreneurial practices, as well as by the emergence and development of new digital ventures. However, it is not clear that these transformations are occurring equally in different countries and regions, widening existing development gaps. In this context, it is of utmost importance to explore to what degree the systemic conditions for dynamic and innovative new firms interact with those conditions underlying the dynamics of digital transformation.

CONCEPTUAL FRAMEWORK AND METHODOLOGY

The IDE has two distinctive aspects which are developed in further detail below.

THE FOCUS ON DYNAMIC ENTREPRENEURSHIP

Today, there is a widely accepted view that entrepreneurship positively contributes to economic growth and development by means of job creation and innovation. This “mantra” that circulates in different environments, such as governments, academia or the media, bears the risk of grouping all entrepreneurs and enterprises in the same category, as if their needs and contributions were the same.

Today, we know that this is not the case, thanks to different studies in the subject. What we know from extensive data panels’ analyses is that only a limited proportion of all the newly born firms are responsible for such positive outcomes¹. Following Birch’s analogy, these firms are named *gazelles*, showing evidence of their impact on employment as well as on aggregate productivity levels².

Prodem’s experience in different countries, in cooperation with international agencies, governments and organizations, demonstrates that these gazelles are rather an exception when it comes to developing countries. In contrast, we propose the concepts of dynamic entrepreneurship and new dynamic enterprises, terms that were first proposed by Prodem in the ground-breaking studies of the IDB and Prodem (2002 and 2004)³.

This definition includes the entrepreneurial projects and companies that, after a few years, have overcome the early phase of higher mortality and abandoned the micro-enterprise world to become (at least) a competitive SME with the potential and drive to continue growing. Dynamic companies are usually founded by teams that have enthusiasm, aspirations and competencies that allow them to grow and leverage helpful contact networks to pursue value propositions based on differentiation, innovation and/or business opportunities targeting the capitalization of dynamic and scalable economic trends.

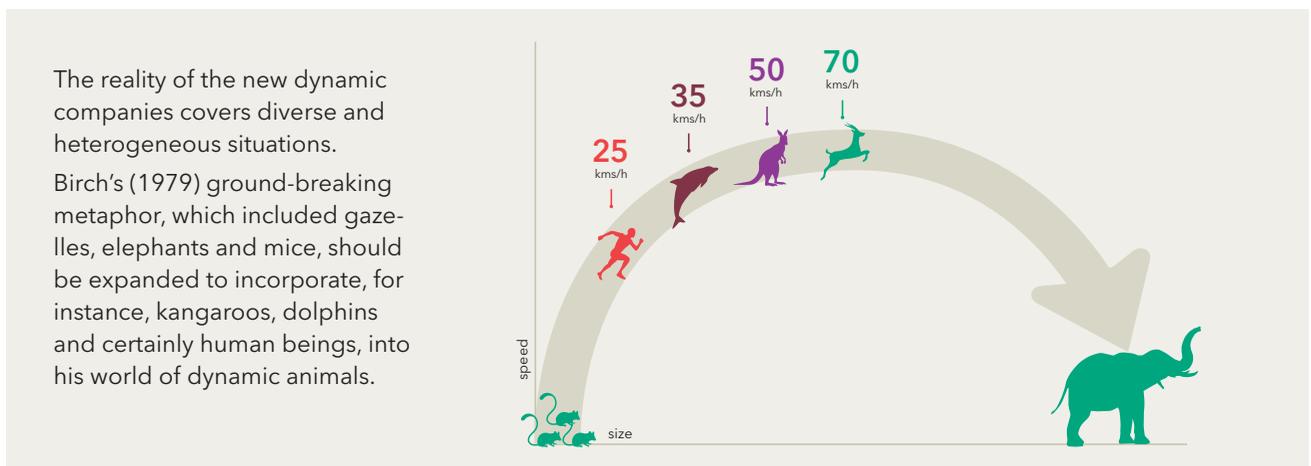
The dynamic entrepreneurship concept fits better not only with the reality of the developing world but also with the complexity of the business growth process in comparison with other rather rigid definitions based on the determination of minimum levels of sales or employment over the first year, or specific growth rates (e.g., 20% or 30% over the past three years).

Dynamic entrepreneurship includes the entrepreneurial projects and companies that, after a few years, have overcome the early phase of higher mortality and abandoned the micro-enterprise world to become (at least) a competitive SME with the potential and drive to continue growing.

1. Haltiwanger, J., Jarmin, R. S., Kulick, R., & Miranda, J. (2016). High Growth Young Firms: Contribution to Job, Output, and Productivity Growth. In *Measuring Entrepreneurial Businesses: Current Knowledge and Challenges*. University of Chicago Press.

2. Henrekson, M., & Johansson, D. (2010). Gazelles as job creators: a survey and interpretation of the evidence. *Small Business Economics*, 35(2), 227-244. Coad, A., Daunfeldt, S. O., Hözl, W., Johansson, D., & Nightingale, P. (2014). High-growth firms: introduction to the special section. *Industrial and Corporate Change*, 23(1), 91-112. Anyadike-Danes, M., Bjuggren, C. M., Dumont, M., Gottschalk, S., Hözl, W., Johansson, D., ... & Zheng, G. (2018). An international comparison of the contribution to job creation by high-growth firms (No. 1216). IFN Working Paper.

3. Kantis, H. Angelelli, P & Moori Koenig, V. (2004). *Desarrollo Emprendedor*. Banco Interamericano de Desarrollo. Fundes internacional Kantis, H., Ishida, M., & Komori, M. (2002). *Empresarialidad en economías emergentes: Creación y desarrollo de nuevas empresas en América Latina y el Este de Asia*. Banco Interamericano de Desarrollo.



By using the dynamic entrepreneurship approach, the gazelle metaphor becomes a simplification and should be revised to account for the complexity of the enterprise dynamism phenomenon. Other animal species that do not get the same speed of gazelles but are still valuable should be integrated into the metaphor. Kangaroos, dolphins and certainly human beings, for instance, should be incorporated into this world of dynamic animals. In other words, different growth patterns of companies should be also considered. In simple and real terms, dynamic enterprises may fit into one of the following types or patterns of growth:

- **Type 1:** They grow rapidly and continuously.
- **Type 2:** They take their time until they take off.
- **Type 3:** They grow moderately, 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.

Moreover, in the case of young companies, some authors have drawn attention to the presence of relatively stable periods in the middle of high-growth stages. Furthermore, there are some cases in which high growth is followed by a period of crisis and shrinkage, after which a new period of growth begins at a slower pace. More recently, the debate has shifted from the idea of defining patterns to a more general one: how stable is growth over time, especially high growth? So far, international evidence tends to show that high growth is a generally unstable trend and that such gazelles are just "one-hit wonders"⁴.

In short, the existing knowledge about business growth raises the need to avoid rigid definitions when establishing the type of business that will be supported. The concept of dynamic entrepreneurship provides a clear view of the type of companies that are desired, instead of rigid rules.

THE SYSTEMIC APPROACH AND THE SPECIFICITIES OF DEVELOPING COUNTRIES

The second distinctive feature of the IDE is the systemic approach upon which it is based. Accordingly, the creation 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 approach⁵.

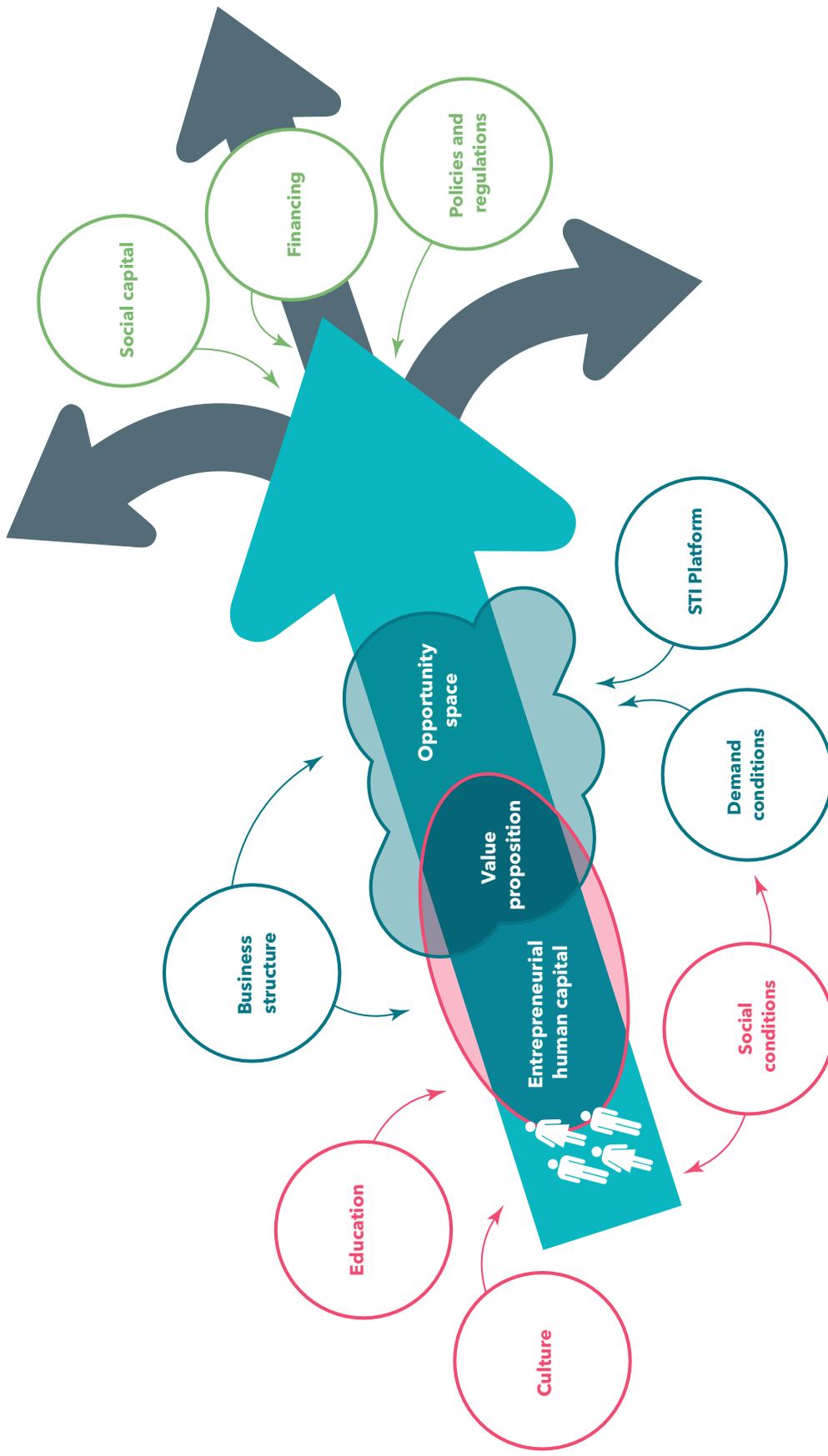
The IDE is built around 10 key dimensions that have an impact on the quantity and quality of emerging companies. The first one –and main one– is the existence of entrepreneurs capable of conceiving powerful and value propositions: the **entrepreneurial human capital**.

The emergence of these entrepreneurs is influenced by the values and beliefs that make up the **culture**, the **social conditions** of the families in which they are born and raised, and the way in which the **educational system** operates. Later, during adulthood, the companies where they work will complete the development of said entrepreneurial human capital.

4. Daunfeldt, S. O., & Halvarsson, D. (2015). Are high-growth firms one-hit wonders? Evidence from Sweden. *Small Business Economics*, 44(2), 361-383. Nightingale, P., & Coad, A. (2013). Mup-pets and gazelles: political and methodological biases in entrepreneurship research. *Industrial and Corporate Change*, 23(1), 113-143. Brown, R., Mawson, S., & Mason, C. (2017). Myth-busting and entrepreneurship policy: the case of high growth firms. *Entrepreneurship & Regional Development*, 29(5-6), 414-443.

5. See other contributions in the same vein in Verheul, I., Wennekers, S., Audretsch, D., & Thurik, R. (2002). An eclectic theory of entrepreneurship: policies, institutions and culture. In *Entrepreneurship: Determinants and policy in a European-US comparison* (pp. 11-81). Springer, Boston, MA or 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 new ventures



- 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 (businessmen, institutions, etc.) and accessing resources that will contribute to the creation and development of a start-up.

Finally, the start-up process is affected by **policies and regulations**. Governments establish sets of rules (e.g., licenses and permits, taxes, foreign trade restrictions), which may be more or less friendly for entrepreneurs, as well as policies that, through action or omission, have an impact on them and their companies. Entrepreneurship policy in particular is the type which mainly 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

The Organisation for Economic Co-operation and Development (OECD) best practices for constructing indexes were followed when building the IDE. The 10 dimensions that make up the IDE are based on the normalization of 41 variables obtained from different secondary information databases recognized at the international level (e.g., World Bank, Global Entrepreneurship Monitor, Global Competitive Index, World Value Survey, UNESCO).

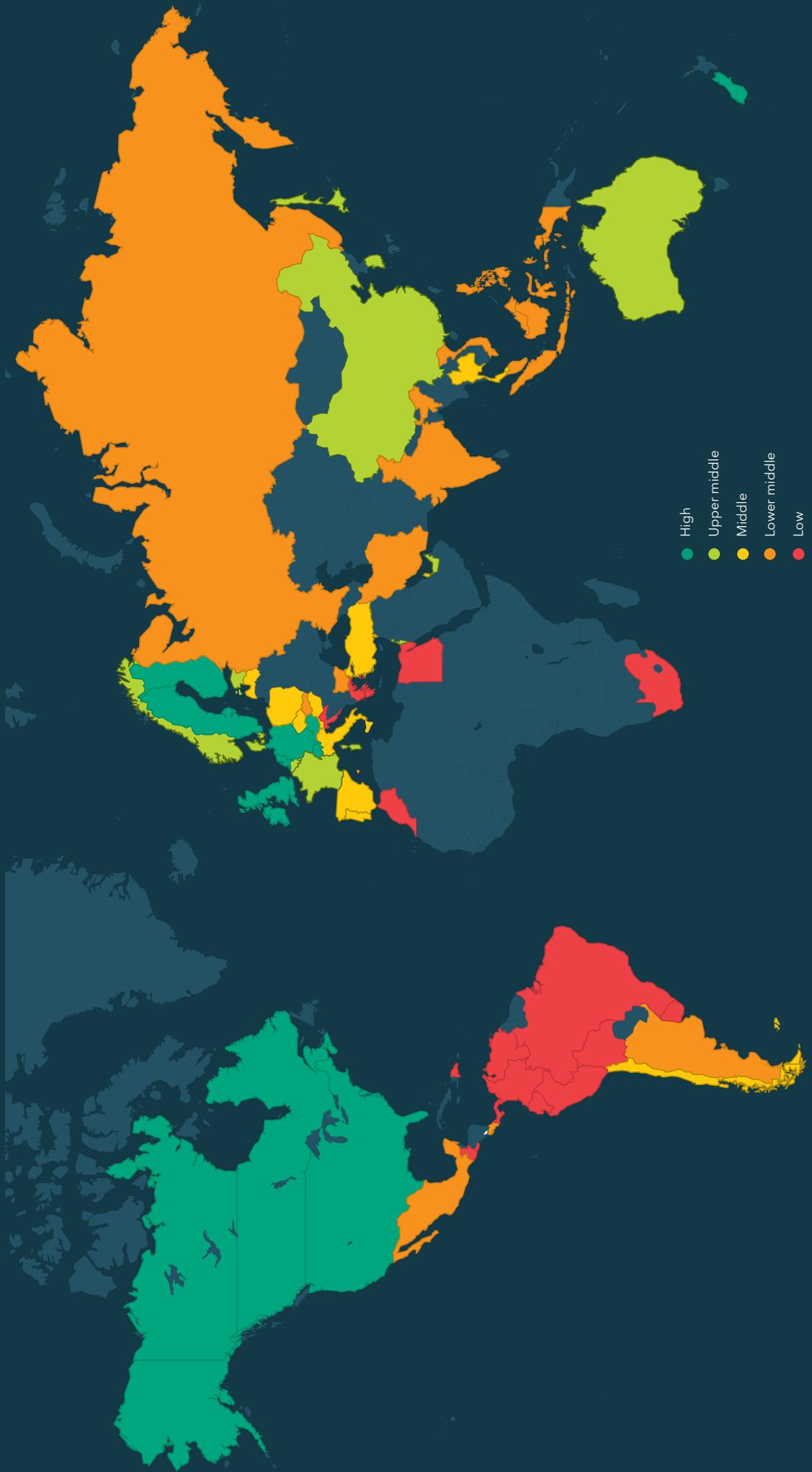
Following the recommendations of specialized literature, the final value of the Index is obtained with the help of the geometric mean. This method is consistent with the systemic approach, since the weaker dimensions have a greater impact on the final IDE value than the stronger ones. Hence, the weaker dimensions may be considered as restrictions to the start-up process. Further details on the variables used, the sources and the IDE construction process can be found in www.prodem.ungs.edu.ar

A BRIEF GLOBAL OVERVIEW

A first glance at the global map of systemic conditions for entrepreneurship shows the prevalence of more developed countries and, among them, North American and western European countries scoring more than 60 points. On the other end of the spectrum, Latin American and African countries cannot on average pass the 30 point mark.

As will be shown further on, in less developed countries, the burden of structural restrictions requires entrepreneurial policies to be complemented and articulated with efforts to transform their scientific and technological platforms as well as their business structure.

Additionally, these countries face a double challenge. On one hand, they need to generate appropriate systemic conditions for the creation of entrepreneurs and businesses. On the other hand, these conditions should allow for their capabilities and resources to be translated into benefits for the development of their ecosystems and societies. Otherwise, the stories of entrepreneurs that decide to migrate towards developed ecosystems to realize their dreams ("entrepreneurial drain") will tend to multiply. More so given that in the last 5 years, several of these countries have adopted programs and legislations to attract entrepreneurial "talent".



This global outlook encompasses important contrasts, not only between regions but also between countries. The 2019 ICSEd-Prodem index illustrates this, with relatively stable results compared to last year's, especially within the leading top 5 group which includes-despite some changes in their internal ranking-the same list of countries: United States, Finland, Netherlands, Singapore and Germany.

IDE 2019 Global ranking

1. United States	66,8	33. Spain	41,0	● High	
2. Finland	64,6	34. Latvia	41,0		● Upper middle
3. Netherlands	64,4	35. Turkey	39,2		
4. Singapore	62,4	36. Chile	35,6		
5. Germany	62,1	37. Russian Federation	34,9		
6. Sweden	60,0	38. Malaysia	34,0	● Middle	
7. Switzerland	60,0	39. India	33,7		
8. Ireland	59,3	40. Bulgaria	33,6		
9. Canada	59,3	41. Iran	32,0		
10. United Kingdom	57,2	42. Mexico	32,0		
11. Austria	56,1	43. Vietnam	31,6	● Lower middle	
12. Australia	54,3	44. Argentina	31,6		
13. South Korea	53,6	45. Slovakia	31,6		
14. Belgium	53,5	46. Costa Rica	30,5		
15. Luxembourg	53,2	47. Indonesia	30,2		
16. France	53,2	48. Philippines	29,8	● Low	
17. Norway	52,9	49. Uruguay	29,2		
18. Japan	52,5	50. Egypt	28,8		
19. Estonia	52,0	51. Morocco	28,7		
20. Israel	51,4	52. Colombia	28,7		
21. Hong Kong	50,8	53. Brazil	26,2		
22. United Arab Emirates	48,1	54. South Africa	26,2		
23. China	47,0	55. Peru	26,2		
24. Denmark	46,3	56. Croatia	24,6		
25. Slovenia	45,4	57. Panama	22,8		
26. Czech Republic	44,8	58. Dominican Republic	22,2		
27. Portugal	43,7	59. Greece	21,8		
28. Thailand	43,6	60. Bolivia	21,1		
29. Poland	43,6	61. Ecuador	19,1		
30. Qatar	43,2	62. El Salvador	17,6		
31. Italy	41,9	63. Venezuela	11,7		
32. Hungary	41,2	64. Guatemala	2,0		

Generally, leading countries stand out from the rest for showing strengths in the aspects that are most closely tied to the realization of entrepreneurial projects and their subsequent scaling. On one hand, they have a platform of social capital that, except for the specific case of Singapore, achieved over 70 points, which reflects very favorable conditions for cooperation and growing a network, a key ingredient for all entrepreneurial processes. Additionally, there is more sophistication in terms of specific funding sources for entrepreneurs, an important governmental initiative in terms of entrepreneurship policies, and a regulatory environment that favors the creation and development of new ventures.



1. UNITED STATES



66,8

● Top 10 average

2. FINLAND 66,8



3. NETHERLANDS 64,4



4. SINGAPORE 62,4



5. GERMANY 62,1



As previously mentioned, this is not a random occurrence but supported on STI platforms and entrepreneurial structures with greater capacity to contribute to innovation. Both dimensions are very important to boost ecosystems, and go hand in hand with the opportunity to create value propositions in regards to new technologies and the emergence of business sectors and activities.

Changes did appear in the group of countries that are ranked 10th to 15th on the index. South Korea stands out in this group after rising 7 places and occupying the 13th position in 2019. Belgium also became part of this prominent group and rose from 17th place to 14th place, mostly due to improvements in its corporate structure and its cultural conditions.



The case of South Korea... an experience to follow closely

South Korea is the country with the highest growth on the IDE index in the last year. This expansion is to a large extent due to the improvements in entrepreneurial human capital (up 3 places), and also a result of formative factors, such as education for entrepreneurship and cultural conditions, particularly the social value placed on entrepreneurs. In this way, the entrepreneurial foundation seems sustainable throughout time. There are also advances in sources of opportunities (corporate structure and STI platform) and in the specific funding for entrepreneurs (up 6 places). Regarding this last aspect, the government has played a key role by encouraging the emergence of new investment funds for early stages. Another aspect that equally stands out is the hierarchical value placed on entrepreneurship in the political agenda with the upgrade of what used to be the SMEs Secretariat to the rank of Ministry that now includes both SMEs and Startups in its designation.

On the other hand, Norway has been set back 5 places and now occupies the 17th place. This is due to the advancements of other countries within the top 15 ranks and also to a degree of decrease in Norway's access to funding specifically designed for entrepreneurs, which consolidates a declining trend that had already surfaced in the 2018 report.

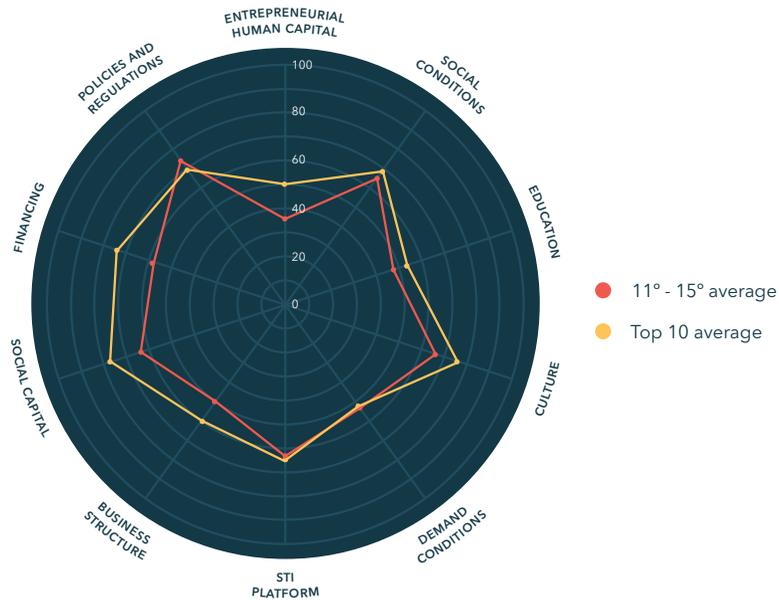
Finally, one last dimension to highlight refers to the systemic balance that can be observed among leading countries. This analysis, which was introduced in the 2018 IDE report, shows the degree of symmetry that different countries exhibit in the development of their systemic conditions. In this regard, it can be observed that, in general, the countries that occupy the top 15 places of the IDE-Prodem ranking have well balanced structures, that is to say that the gaps between the more favorable dimensions and the less developed ones are of little significance.

However, it is possible to note some differences, especially among the top 10 countries (that score a balance average of 20 points), and those that occupy the 11th to 15th places (with balance scores of 26 points). Furthermore, the following graphics show that there are certain gaps between both groups, at first glance, related to the entrepreneurial human capital, social capital, financing and, to a smaller degree, the corporate structure. Advancing on these dimensions not only helps to bridge the gap between leading countries, but also increases the level of systemic balance of the group of runner-up countries.

SYSTEMIC BALANCE

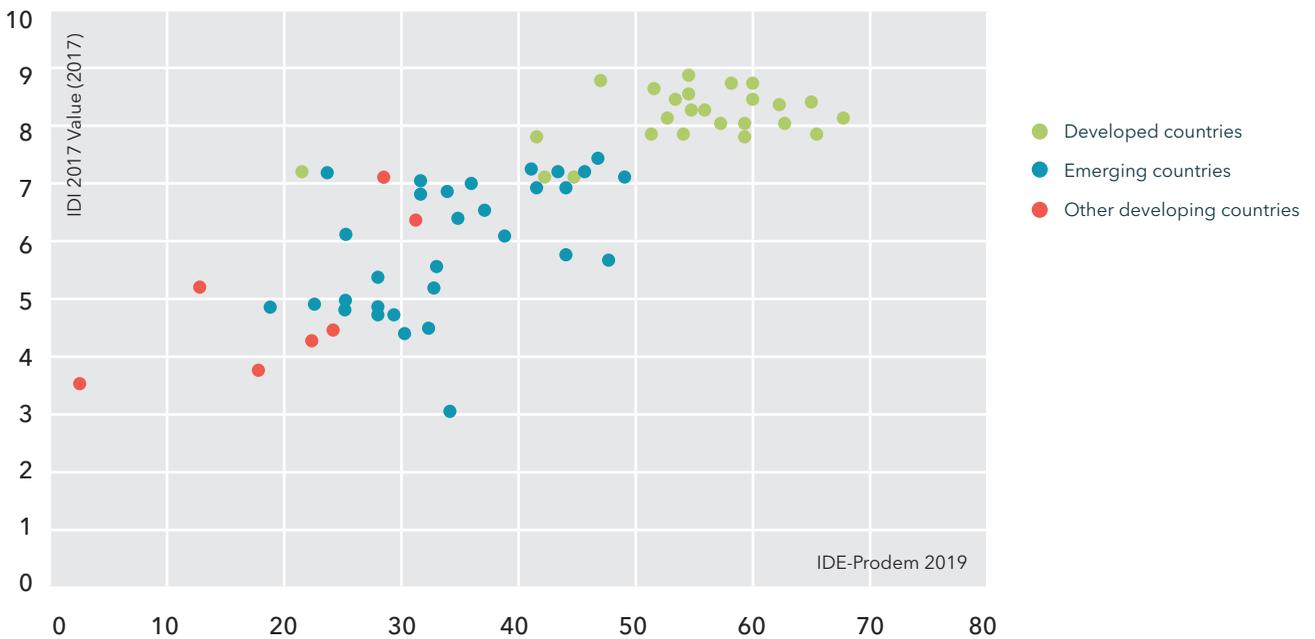
Refers to the degree of symmetry among the different dimensions that make up the index.

•••
Mathematically, the systemic balance is estimated by using the variation coefficient $cv = (\frac{\sigma}{\bar{x}})$ of the different IDE dimensions for each country



Finally, given the relevance of new businesses in the digital economy scene, an exploratory analysis was made of the existing connection between those conditions related to entrepreneurship and those related to access and use of digital technologies.

To do so, the ICT development index (IDI) calculated by the International Telecommunications Union (ITU) was compared with the IDE index values. At first glance, there is a positive correlation between both variables which are related to the general level of development of each country. As can be seen in the following graph, the vast majority of developed countries are located in the top right hand area.



Source: Own elaboration based on IDE-Prodem and ITU

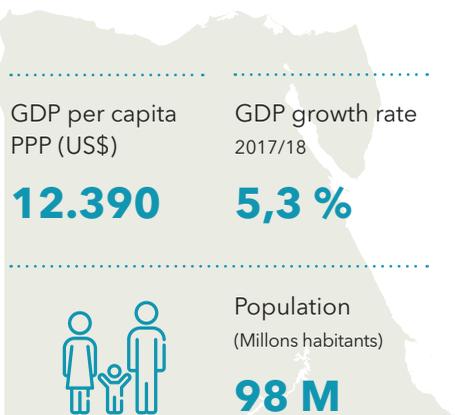
In conclusion, the combined perspective of entrepreneurship conditions and conditions for the development of the digital economy shows several commonalities that call for further studies that can go deeper into the interrelations and synergies between both phenomena. And this should come as no surprise, given that new businesses are called to be major players in the digitalization of the economy.

A CLOSER LOOK AT THE COUNTRY LEVEL

AFRICA & MIDDLE EAST

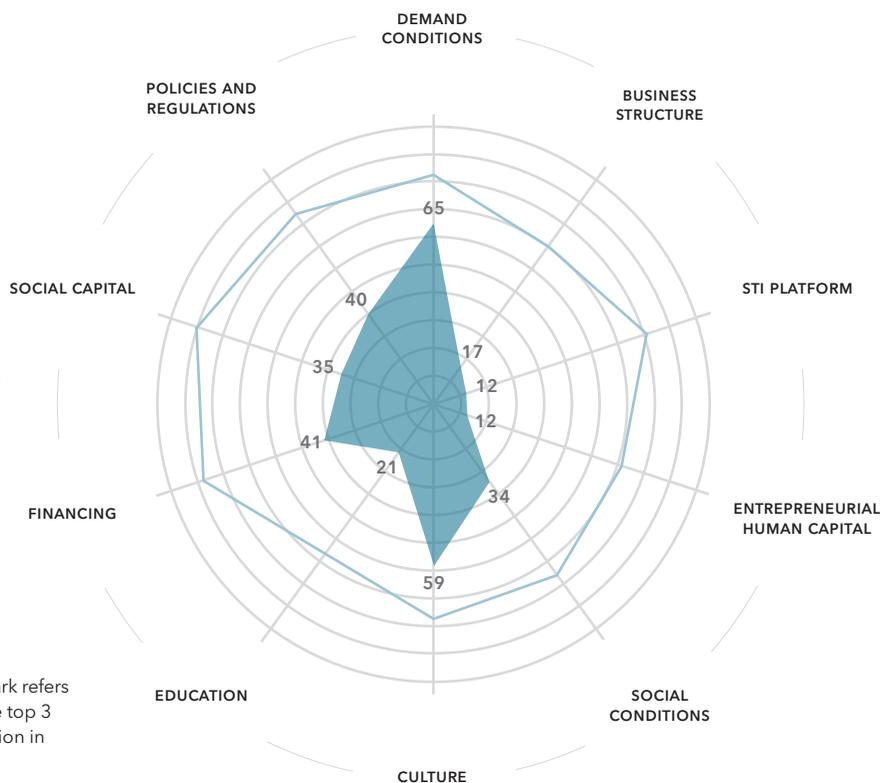
Egypt

2019



■ Egypt, Arab Rep.
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Most favorable aspects:** Demand conditions stand out due to the size and expansion of the economy as well as to the competitive prices, which could benefit entrepreneurs in terms of capitalizing opportunities in the international market. Regarding culture, the media plays an important role in promoting entrepreneurship topics and strengthening the social value given to entrepreneurs.

✗ **Improvement opportunities:** The circulation of ideas and the emergence of innovative, high-value proposals are limited by a weak science and technology platform, with low R+D efforts in the private sector and scant dialogue between the academic sector and a very heterogeneous business structure that shows low competitiveness. Additionally, the pool of entrepreneurs with growth prospects is narrow. The fragile social conditions of families, the low presence of university graduates and the few advancements in entrepreneurship education do not seem to contribute to change this situation in the future. Finally, when it comes to turning projects into business ventures, the social capital limits the possibility of building contact networks in order to access resources and advice.

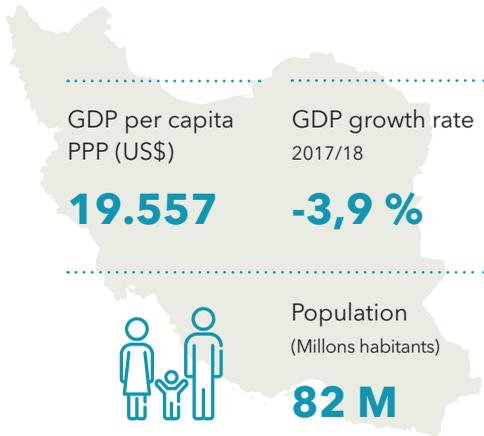
It would also be positive to bring entrepreneurship policies to front and to advance in the offer of funding options, especially of venture capital.

Strategic actions:

- » Work on science and technology policies in tandem with entrepreneurship and development policies towards the construction of a science and technology platform that intensifies the efforts of the private sector, that is directed towards the resolution of social and business problems, and that is connected to the entrepreneurial world and the rest of the ecosystem.
- » Promote the expansion of the entrepreneurial human capital through the strengthening of the educational system, especially by increasing the population's access to higher education, and by including entrepreneurship topics on all educational levels.
- » Strengthen advances in the development of policies and programs to support entrepreneurs, including the development of venture capital funding options, in the context of a systemic strategy.

Iran, Islamic Rep.

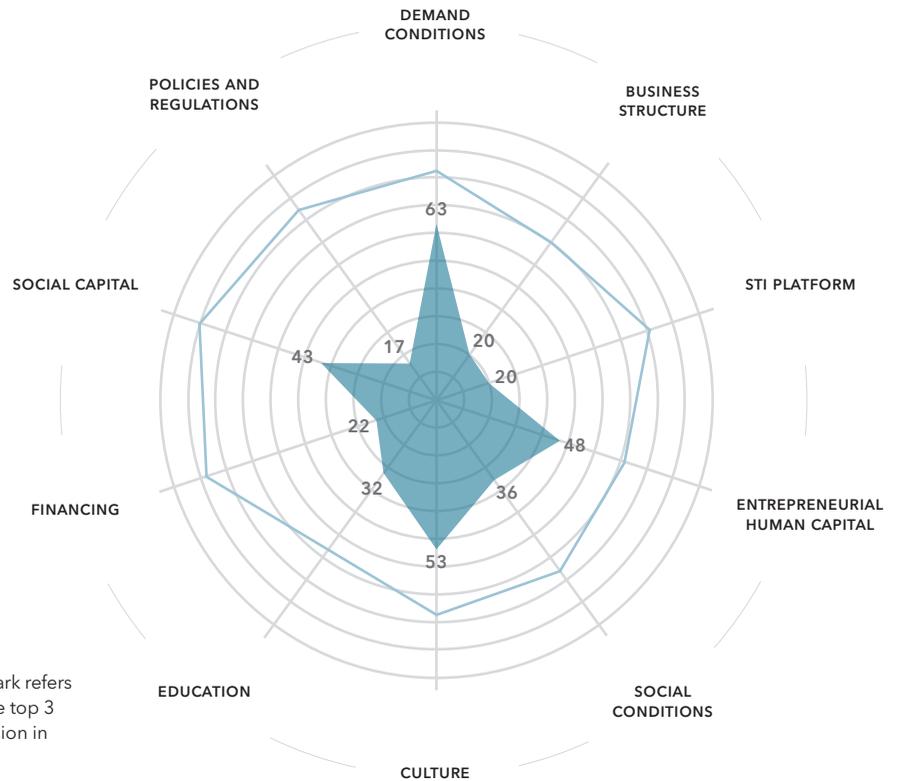
2019



IDE value	IDE ranking
32,04	41°

■ Iran, Islamic Rep.
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** demand conditions, especially in terms of capitalizing on international market demands based on the competitive prices of the goods that they produce.

✘ **Improvement opportunities:** appear across most of the dimensions. Those that stand out include the STI platform, business structure and policies and regulations. Next in line are financing, social conditions and education. On one hand, there are limited R+D efforts on behalf of businesses, and a low generation of knowledge. Added to this, there is little dialogue between the academic and business sectors. Furthermore, the business structure features low competitiveness, productivity and articulation, which creates an environment that is not altogether fertile for the circulation of ideas and the emergence of powerful and valuable proposals. The limited role of the government to define policies that support entrepreneurship and a favorable regulatory framework, combined with limited funding options hinder the set-up of businesses. Another

aspect to consider is the weak social conditions, with many low-income families that in turn have limited access to resources. Also, the scope of entrepreneurship education is limited within the educational system. Both these aspects affect the emergence of entrepreneurs.

Strategic actions:

- » Given the generalized nature of the improvement opportunities, significant and long-term efforts must be implemented in terms of a comprehensive and systemic program to boost dynamic entrepreneurship.
- » Strengthen the strategy for entrepreneurship and innovation on the government agenda.
- » Develop science, technology and innovation policies that foster the development of institutional capacities and strengthen research and development related to the needs of society and businesses.
- » Develop a financing chain that covers the different entrepreneurship stages.

Israel

2019

GDP per capita
PPP (US\$)

40.786

GDP growth rate
2017/18

3,3 %



Population
(Millions habitants)

9 M

IDE value

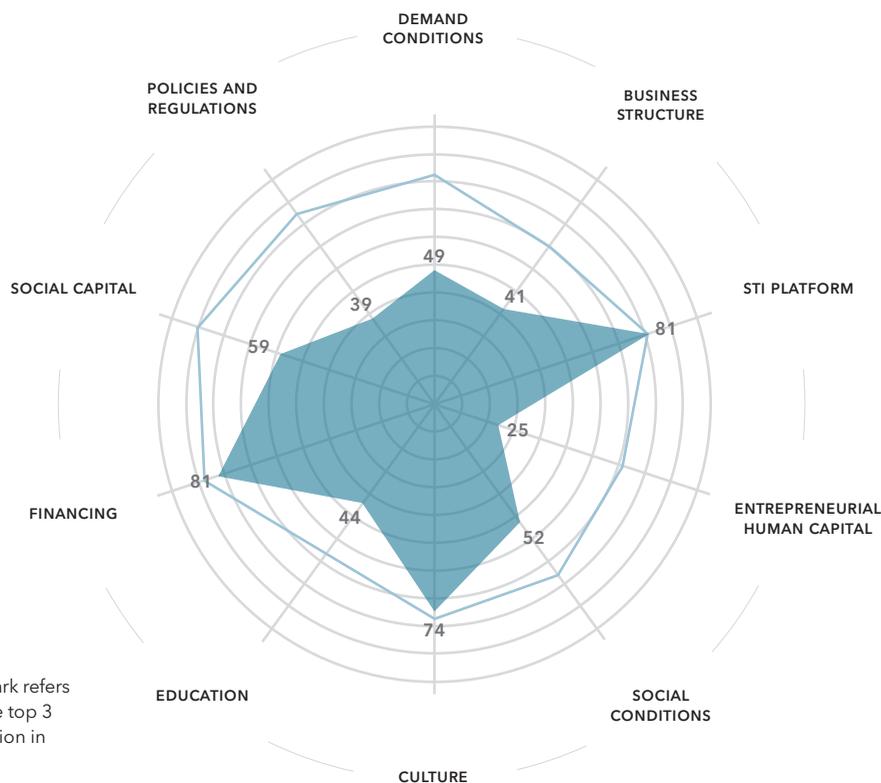
51,38

IDE
ranking

20°

- Israel
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** the most developed dimensions are the STI platform, financing and culture. The R&D efforts, knowledge generation and the links between academia and the productive sector define a fertile environment for the creation of technology- and science-based companies. Ventures find a wide range of sources of financing. Finally, the culture encourages entrepreneurship due to the high social value given to entrepreneurs and the media's promotion of inspiring figures.

✘ **Improvement opportunities:** In order to continue growing and consolidating its position in the ranking, some efforts should be directed towards strengthening the entrepreneurial human capital, particularly the participation of growth-oriented entrepreneurs. The incorporation of entrepreneurship topics in the initial and secondary levels of education remains as a pending task. Also, surprisingly, the level of importance that the government is assigning to entrepreneurship policies and programs seems to have declined. Finally, the business structure dimension reveals a duality, indicating the

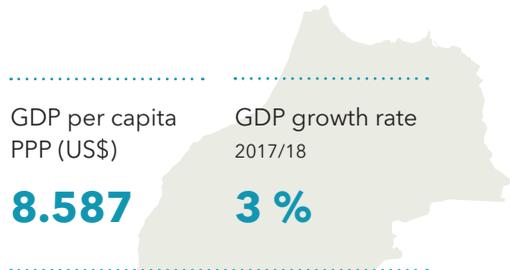
need to articulate between technology sectors and the rest of the economy, something that would contribute to broadening the foundations for dynamic ventures to emerge in more diverse fields.

Strategic actions:

- » Assign entrepreneurship policies and programs the importance that in the past led Israel to become the Startup Nation.
- » Implement initiatives aimed at strengthening the managerial capabilities of potential entrepreneurs, and deepen efforts to promote entrepreneurship in segments of the population that are underrepresented in the creation of companies.
- » Promote entrepreneurship education at the initial and middle levels of the education system.
- » Evaluate and deepen efforts to balance the development of technology sectors with that of the rest of the economy, promoting the emergence of enterprises that meet the needs and challenges of traditional sectors based on open innovation strategies.

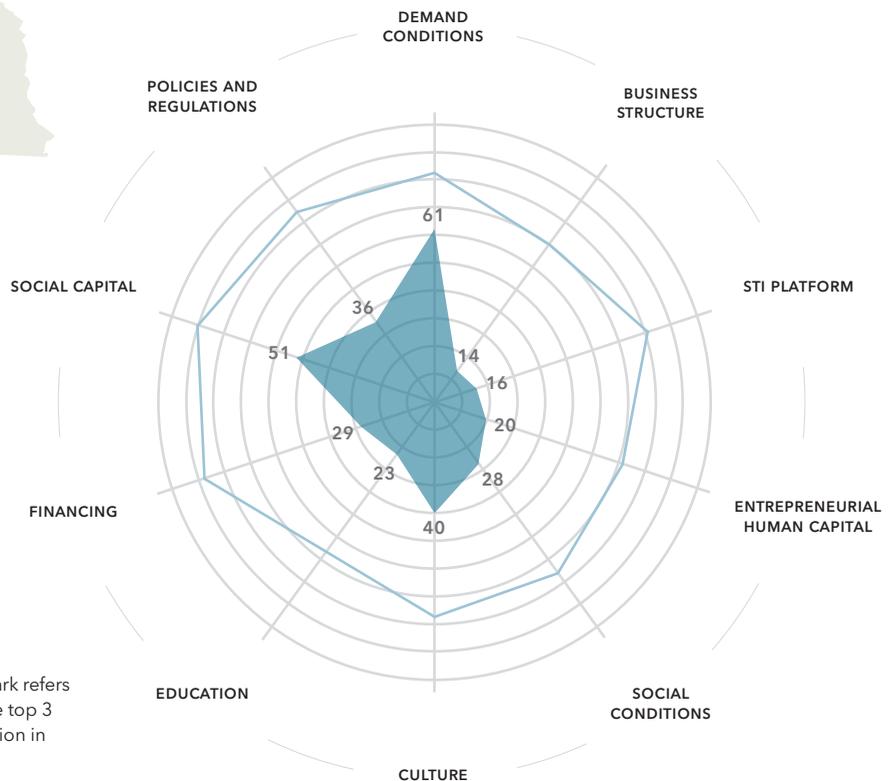
Morocco

2019



■ Morocco
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions, specifically due to the possibility to benefit from international demands based on the competitive prices of the goods that they produce.

⊗ **Improvement opportunities:** are present across all the dimensions. On one hand, the STI platform and the business structure are not contributing positively as sources of opportunity for the emergence of high-value, innovative proposals. On the other hand, the entrepreneurial human capital does not display competencies to identify opportunities and carry out ambitious proposals with a global outlook. Weaknesses in social conditions, education and culture do not contribute to change this scenario. Additionally, the conversion of projects into new businesses is set back by the lack of funding options and government support programs.

Strategic actions:

- » Advance towards the implementation of a comprehensive systemic strategy for the development of dynamic and innovative entrepreneurship.
- » Work in tandem on science and technology policies with entrepreneurial and development policies, advancing towards open innovation platforms where businesses, institutions and entrepreneurs can come together.
- » Promote an increased awareness and outreach of inspiring entrepreneurial cases that serve to encourage a better social consideration of entrepreneurs.
- » Develop programs to strengthen vision and ambition and apply them to entrepreneurial education initiatives.
- » Make venture capital more accessible to startups and young businesses.

Qatar

2019

GDP per capita
PPP (US\$)

126.598

GDP growth rate
2017/18

1,43 %



Population
(Millions habitants)

3 M

IDE value

43,19

IDE
ranking

30°

- Qatar
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** are centered on access to financing and the active role of the government in terms of entrepreneurship support programs. Also, demand conditions are favorable and are fostered by the high levels of income and the household demand quality, as well as by the competitive prices that the country has to serve international demands.

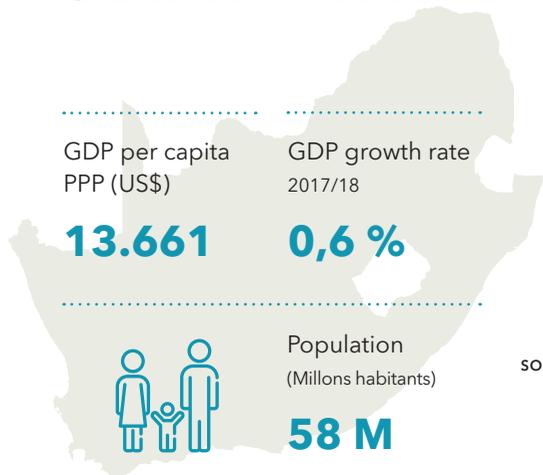
✘ **Improvement opportunities:** are mostly observed in the STI platform, given the limited efforts and resources destined to R+D and the meagre results regarding the generation of knowledge. This limits the emergence of science-based ventures. Additionally, there are significant lags in the educational system, given the limited access to and graduation from higher level education. Finally, the low levels of horizontality in society negatively affect the entrepreneurial culture and also the social capital needed to build networks outside close-knit circles.

Strategic actions:

- » Strengthen both public and private efforts in R+D, including open innovation strategies that foster the creation of opportunities for new ventures, while capitalizing on the existing relationship between businesses and knowledge institutions.
- » Encourage the development of the population's capacities and competencies, specifically by providing greater access to the educational system and producing more professionals.
- » Multiply the social capital channels so that entrepreneurs can have meeting platforms and a more open trust building environment.

South Africa

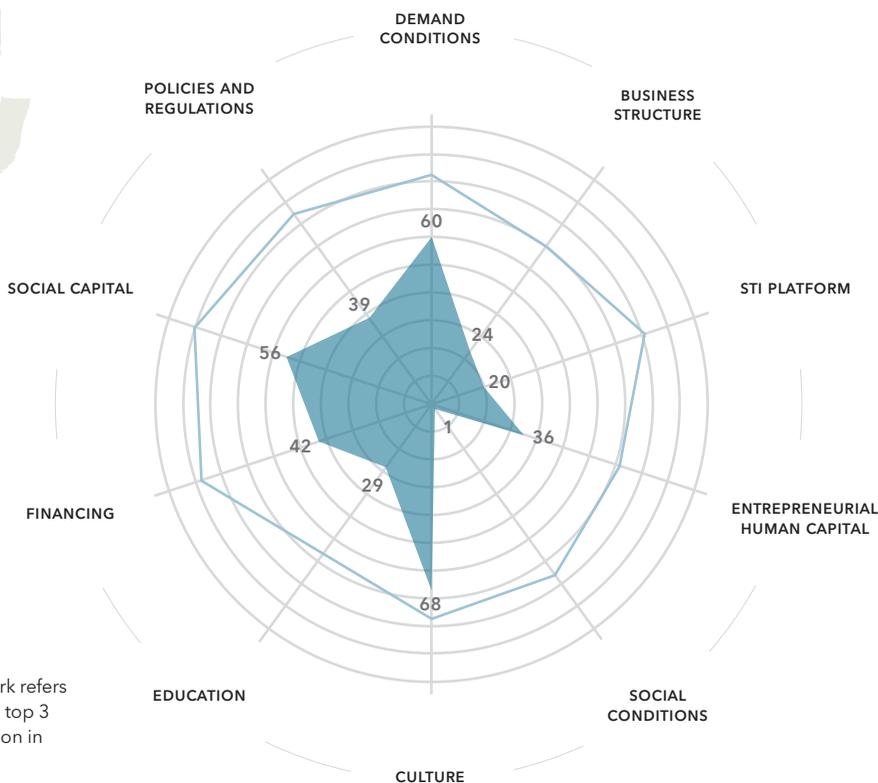
2019



IDE value	IDE ranking
26,24	54°

■ South Africa
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** demand conditions and culture are the most prominent dimensions. In the first case, this is due to the size of its economy and the price advantages it offers to satisfy external markets. Due to the favorable entrepreneurship culture, the country ranks among the top 10 in that dimension, and this is thanks to the role that the media plays in promoting stories of success cases as well as to the social value given to entrepreneurs.

✘ **Improvement opportunities:** Those dimensions that impact on the opportunity space, such as STI platform and business structure, need improvement. This is also true for the main formative aspects of the entrepreneurial human capital, like the social conditions of families and education. The high levels of inequality limit the access that young people have to education and to developing entrepreneurial competences. Only a small number of people have a university degree. On the other hand, advances in entrepreneurship education are

modest. Added to this, the government does not take a considerably active role in supporting entrepreneurship.

Strategic actions:

- » Leverage favorable cultural conditions and demand to implement a systemic strategy that favors dynamic and innovative entrepreneurship.
- » Develop science, technology and innovation policies that foster institutional capacities and strengthen research and development initiatives linked to the needs of society and businesses.
- » Make educational policies a strategy for human development, including entrepreneurship education.
- » Foster triple impact ventures that have a positive effect on social inclusion and productive development.

Turkey

2019



Population (Millions habitants)
82 M

IDE value

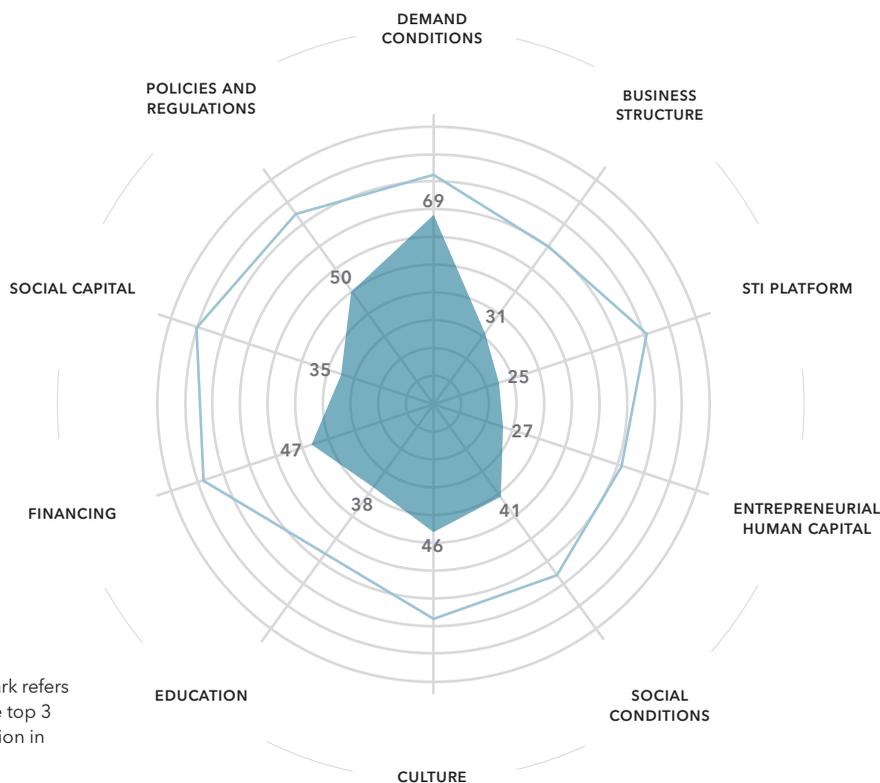
IDE ranking

39,21

35°

- Turkey
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions stand out and constitute its main strength. They are explained by the size and dynamism of its market and the price advantages it offers to satisfy external demands.

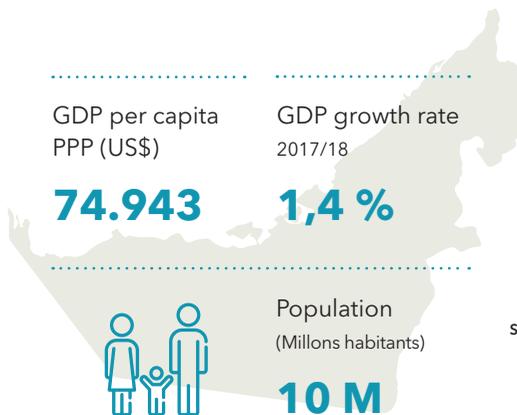
✗ **Improvement opportunities:** are present in most dimensions, with the STI platform and business structure at the top. In the first place, R+D efforts are limited, mainly in businesses, which translates to low generation of knowledge and little dialogue between the academic and business sectors. Added to this, the business structure presents a situation of low competitiveness, productivity and articulation. Also, limited access to the educational system, low investment, and the limited reach of entrepreneurship education have a negative impact on the generation of entrepreneurial competencies. Lastly, the social capital presents low levels of interpersonal trust which limits the reach of networks outside of close-knit circles, restricting access to advice and resources.

Strategic actions:

- » Work in tandem on science and technology policies with entrepreneurial and industrial development policies, advancing towards open innovation platforms where businesses, institutions and entrepreneurs can come together.
- » Develop programs for competitiveness and innovation, and for example, use digital startups that provide solutions to increase productivity and favor the integration of value chains.
- » Promote the expansion of the entrepreneurial human capital pool by strengthening the educational system, especially by granting the population greater access to higher education and by including entrepreneurship education at the different levels of the system.
- » Develop explicitly directed actions to strengthen the social capital, granting special importance to the contact networks of entrepreneurs, and the networks between entrepreneurs and organizations within the ecosystem.

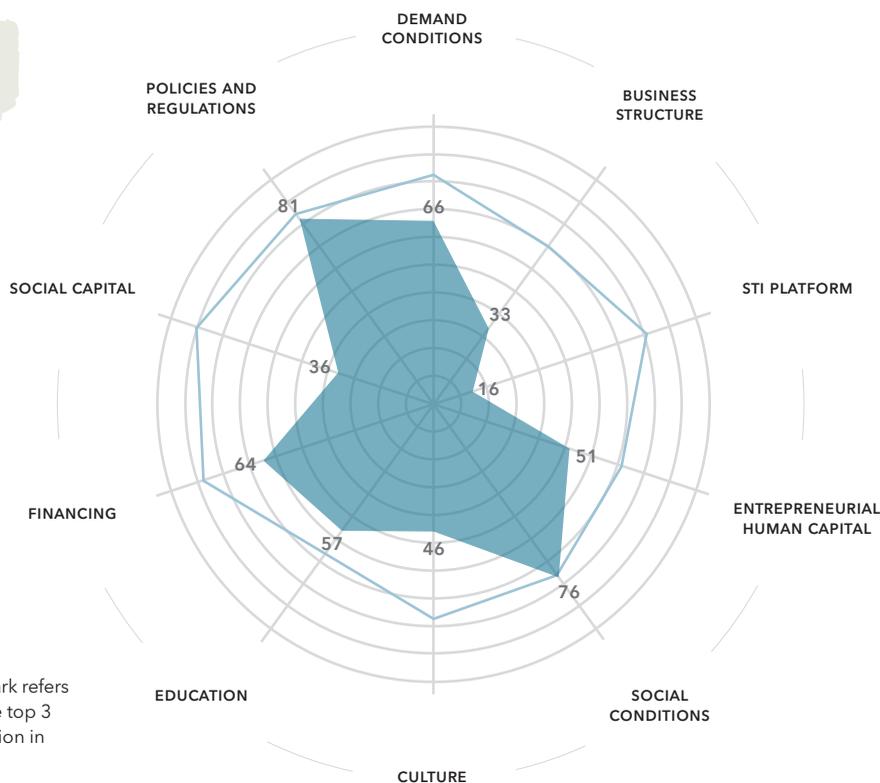
United Arab Emirates

2019



IDE value	IDE ranking
48,11	22°

■ United Arab Emirates The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.
□ International benchmark



✔ **Strengths:** policies and regulations aim to favor entrepreneurs and financing options enable the conversion of projects into businesses. Additionally, the social conditions of families combine favorably with other aspects that foster the emergence of entrepreneurs, such as the advances of entrepreneurship education on different levels, the presence of university graduates, the role of the media in promoting inspiring success cases and the social value given to entrepreneurs. In this context, the entrepreneurial human capital constitutes a favorable dimension.

✘ **Improvement opportunities:** the STI platform and the business structure do not significantly contribute to the emergence of opportunities for innovative ideas due to the limited investment in R+D and to the low production of new knowledge. Lastly, the social capital to create networks is weak as a result of the limited bases of trust among individuals.

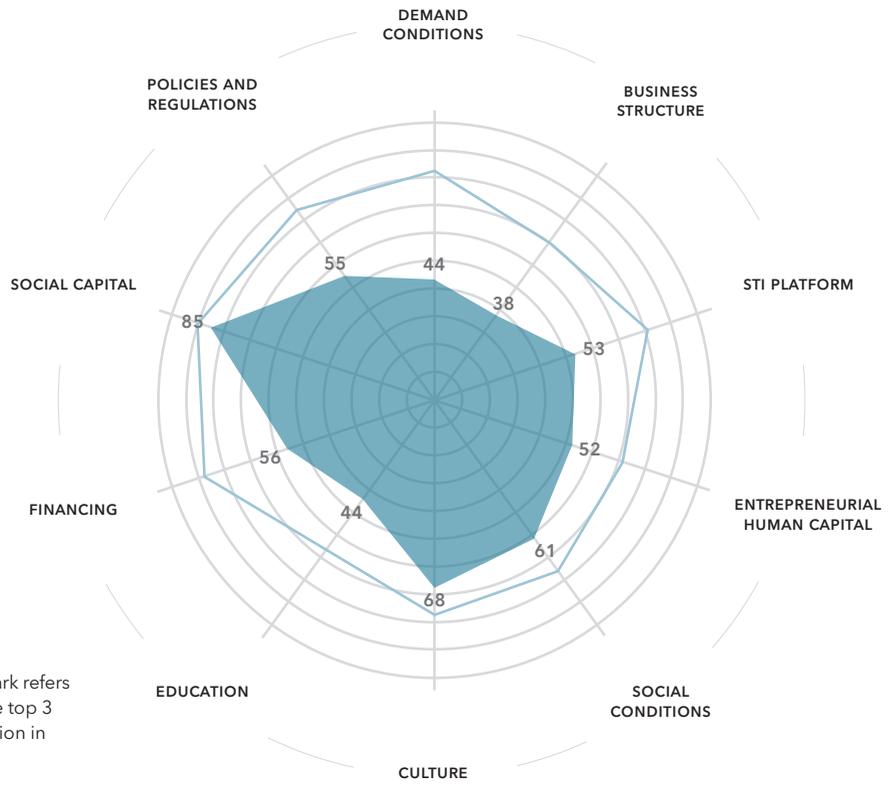
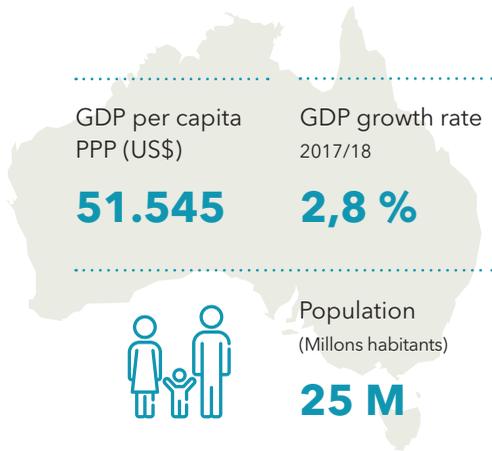
Strategic actions:

- » Intensify efforts to build an STI platform based on a research agenda linked to social and business problems, while seeking to articulate it with entrepreneurship and business promotion in order to commercialize research results through new businesses.
- » Multiply the social capital channels, as well as strengthen the efforts of incubators and accelerators, so that entrepreneurs can have meeting platforms and a more open trust building environment.

ASIA-PACIFIC

Australia

2019



IDE value
54,29

IDE ranking
12°

■ Australia
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.

✔ **Strengths:** its main strengths are social capital and culture. The level of trust between individuals, horizontal structures and social equality foster the development of networks beyond the close-knit circle of entrepreneurs, and also enable youth to access educational and entrepreneurship opportunities. Additionally, the promotion of inspiring entrepreneurship cases in the media also favors the entrepreneurial human capital.

✘ **Improvement opportunities:** Limitations in the competitiveness of companies and demand conditions do not favor the emergence of opportunities for new innovative ventures and, especially, their possibility to participate in international markets. Also, the educational system does not contribute to the training of entrepreneurial human capital due to the low level of investment and the limited presence of entrepreneurship education in mid and upper-level programs.

Strategic actions:

- » Promote entrepreneurial competitiveness through open innovation and corporate venturing programs that connect big companies with startups.
- » Set export incentives for young businesses and activities to promote their internationalization.
- » Foster the introduction of entrepreneurship training in mid and upper-level educational programs.

China

2019

GDP per capita
PPP (US\$)

18.210

GDP growth rate
2017/18

6,6 %



Population
(Millions habitants)

1.393 M

IDE value

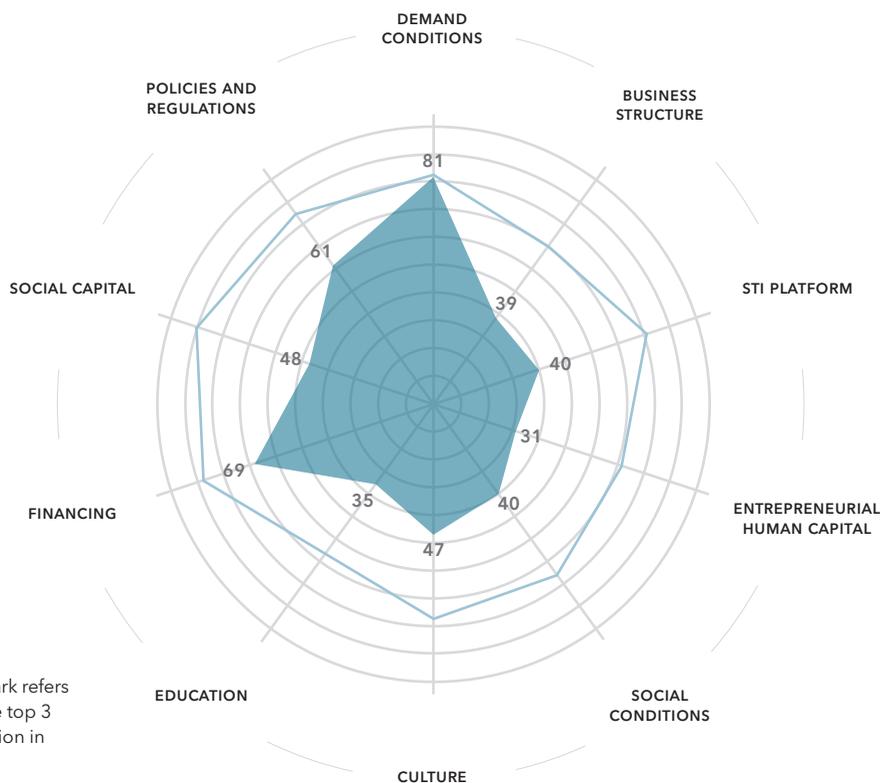
46,99

IDE
ranking

23°

- China
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** demand conditions and aspects that foster project consolidation, such as financing, and policies and regulations. In the first case, both the size and momentum of its economy, as well as demand quality and price advantages it offers to satisfy external markets, grant an ample window of opportunity for entrepreneurship. This is combined with funding options for the different stages of entrepreneurship and a favorable regulatory framework.

⊗ **Improvement opportunities:** to cap the ranking, China should increase the entrepreneurial human capital and strengthen its main formative factors. The number of entrepreneurs with competencies to identify opportunities and develop networks outside their close social group is still limited. Although the middle class has grown vigorously, there is still room to improve the social conditions and to broaden the social base for the emergence of entrepreneurs. Linked to the social conditions, the population's access to higher education is key for the development of technical and entrepreneurial skills. Additionally, the sophistication and integration of the different components of its business structure

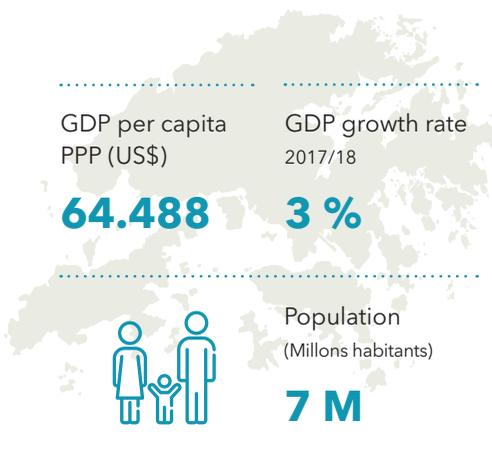
is also needed, as well as stepping up efforts in STI platform. Furthermore, despite the existence of clusters and corporate collaboration, average productivity is still very low, and reveals a very heterogeneous business structure that limits the circulation of ideas and creation of innovative business opportunities.

Strategic actions:

- » Increase the entrepreneurial human capital by strengthening the educational system, especially by increasing access to higher education and the number of professional graduates. Foster entrepreneurship education from initial educational stages.
- » Strengthen research and development efforts and increase the number of scientists while capitalizing on existing relations between advanced knowledge institutions and businesses.
- » Develop competitiveness and innovation programs to reduce the corporate structure's heterogeneity. Explore possibilities of advancing on this path through digital startups that can provide solutions to increase productivity and favor integration of value chains.

Hong Kong SAR, China

2019



IDE value	IDE ranking
50,84	21°

■ Hong Kong SAR, China The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.
 □ International benchmark



✔ **Strengths:** the most significant is the entrepreneurial human capital, an aspect in which Hong Kong is one of the world leaders. Social conditions, which are also favorable, contribute on one hand to enhance the base of potential entrepreneurs, and, on the other hand, to an increasing and qualified demand which fosters the emergence of new opportunities. Additionally, access to financing options for the different entrepreneurial stages, a favorable regulatory framework, and a set of public programs and policies to support entrepreneurs are also strong points. All these aspects decidedly contribute to the conversion of projects into new businesses and their subsequent growth.

⊗ **Improvement opportunities:** are mostly centered on the STI platform and the business structure. In the first case, both public and private efforts destined to R+D developments are weak. In the second case, limitations are centered on the competitiveness of Hong Kong's

industrial sector, despite boasting a favorable situation in terms of clusters and articulation. Perhaps the country's specialization in financial services and logistics explains this situation. Additionally, there are deficiencies in entrepreneurial education that is still not sufficiently present in the formal education system.

Strategic actions:

- » Foster entrepreneurial education throughout the different levels of the educational system, placing special attention on primary and secondary levels.
- » Strengthen efforts in R+D and expand the pool of scientists, while capitalizing on the existing links between advanced knowledge institutions and businesses.
- » Develop competitiveness and innovation programs in the industrial sector, for example, by promoting digital startups that offer solutions to increase productivity and favor the integration of value chains.

India

2019

GDP per capita
PPP (US\$)

7.762

GDP growth rate
2017/18

7 %



Population
(Millions habitants)

1.353 M

IDE value

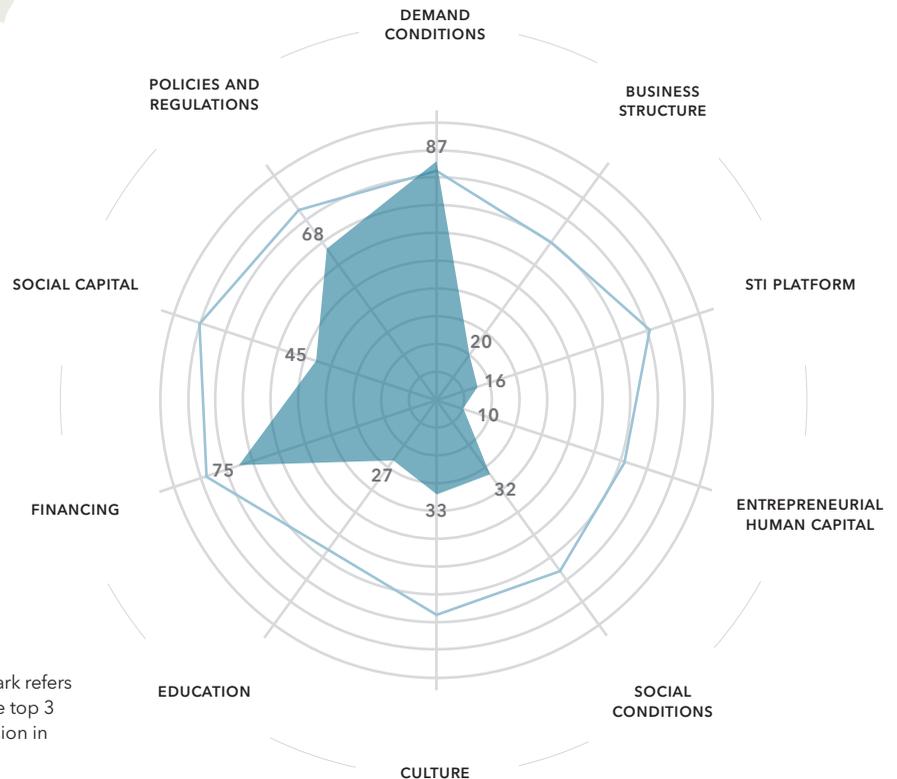
33,67

IDE
ranking

39°

■ India
□ International
benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** demand conditions, financing, and policies and regulations are the dimensions that stand out. In the first place, in the context of one of the biggest growing economies, the demand conditions respond to the size and vitality of the domestic market and to the advantages in terms of prices to satisfy foreign demands. Additionally, setting up new businesses is favored by the significant funding options, and by a proactive government in defining a favorable regulatory framework and the design of programs to support entrepreneurship.

⊗ **Improvement opportunities:** the most important is related to the low entrepreneurial human capital. There is a low number of opportunity-based businesses, and few of these are growth-oriented. The chances that this may change are limited due to weaknesses in social conditions, the educational system, and in culture, which do not help to create a favorable short-term scenario. Other limitations are related to insufficient R+D efforts and an

industrial structure with a low average competitiveness, which reveals an important structural heterogeneity and defines an environment that is not altogether fertile for the emergence of innovative proposals with growth prospects outside of certain specific sectors.

Strategic actions:

- » Invest significant efforts in increasing the active entrepreneurial human capital, with a long-term focus on education, and a short-term focus on attracting entrepreneurs from other countries and fostering youth entrepreneurship.
- » Promote entrepreneurial competitiveness through open innovation programs and corporate venturing that connect large companies with startups.
- » Strengthen science, technology and innovation efforts and articulate them with entrepreneurship incentives to favor the conversion of research results in businesses so that they can cater to social demands and problems.

Indonesia

2019

GDP per capita
PPP (US\$)

13.057

GDP growth rate
2017/18

5,2 %



Population
(Millions habitants)

268 M

IDE value

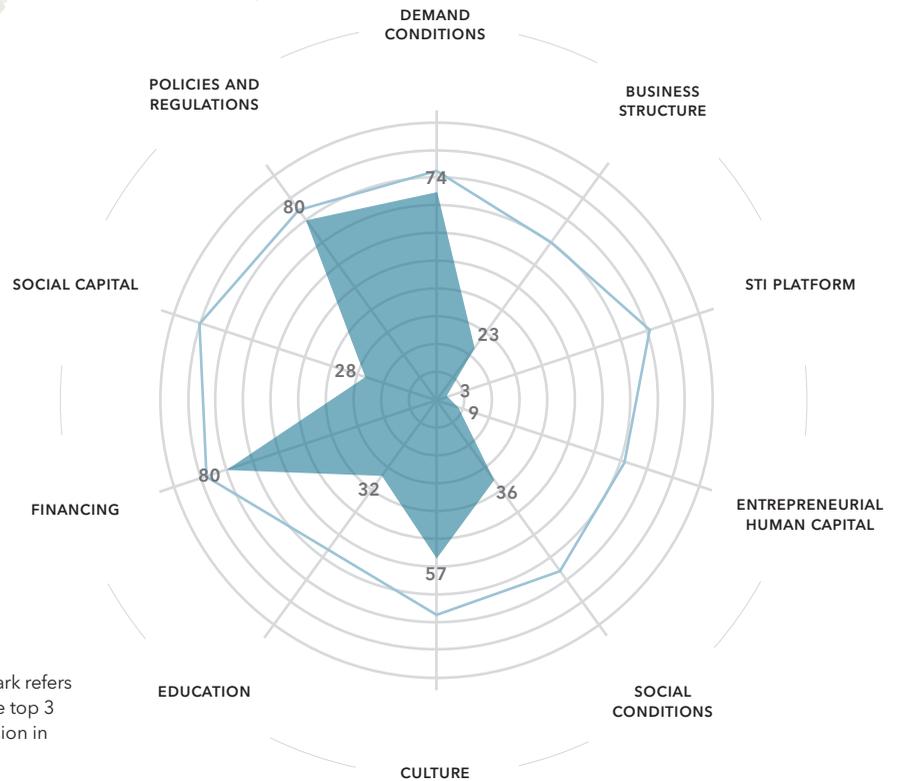
30,19

IDE
ranking

47°

- Indonesia
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** Indonesia's main strengths lie in the access to specific funding options for entrepreneurship, the active role of the government in the development of supporting programs and policies, and, to a lesser degree, the positive demand conditions resulting from price advantages which favor businesses that satisfy foreign demands and also a relatively large domestic market that is in expansion.

⊗ **Improvement opportunities:** the STI platform, the production structure, the entrepreneurial human capital and social capital. On one hand, efforts and resources applied to R+D are very low, especially in businesses, as is the generation of knowledge. Added to this, the production structure shows low competitiveness and productivity, which ends up staging an environment which is not conducive to the emergence of innovative and dynamic enterprises. Another aspect to consider is that the presence of ambitious growth-oriented entrepreneurs

is low, which is related to limitations in terms of access to education and social conditions. These also negatively affect the social capital and access to contact networks.

Strategic actions:

- » Develop science, technology and innovation policies that foster the development of institutional capacities and strengthen research and development related to the needs of society and businesses.
- » Invest significant efforts to broaden the pool of active entrepreneurial human capital, with a long-term perspective based on education and a short-term perspective based on bringing in entrepreneurs from other countries and fostering youth entrepreneurship.
- » Develop explicitly directed actions to strengthen the social capital, granting special importance to the contact networks of entrepreneurs, and between entrepreneurs and organizations within the ecosystem.

Japan

2019

GDP per capita PPP (US\$)

43.349

GDP growth rate 2017/18

0,8 %



Population (Millions habitants)

127 M

IDE value

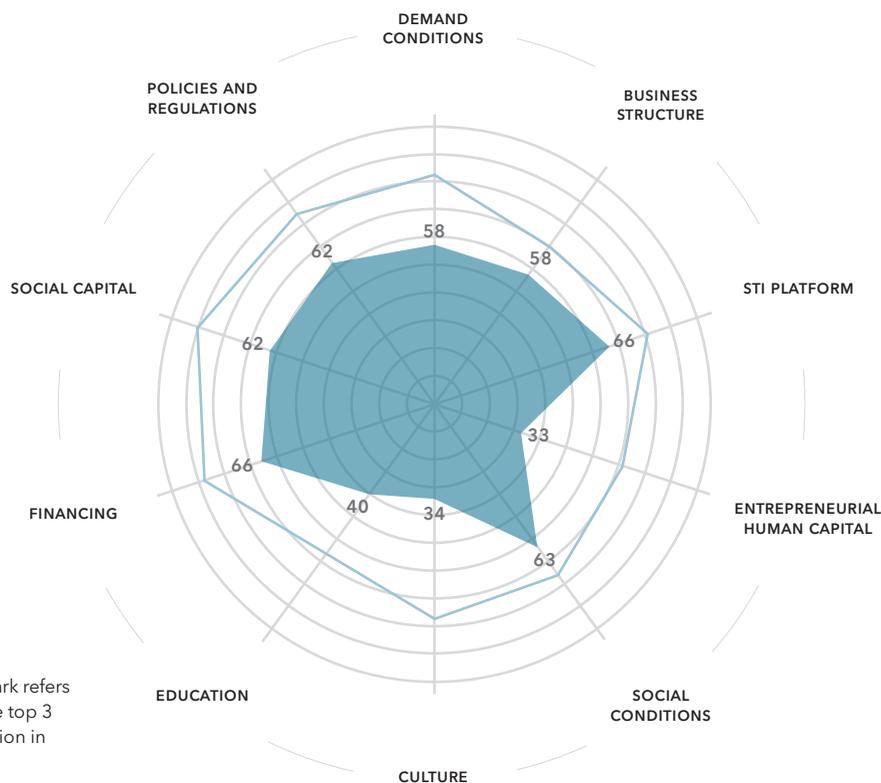
52,47

IDE ranking

18°

- Japan
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** mainly lie in the STI platform, access to funding, policies and regulations, social capital and social conditions. On one hand, public and private efforts regarding R+D, the generation of knowledge and the relationship between the academic and business sectors stand out, and this creates a fertile environment for the emergence of science related businesses. Added to this, there is a favorable regulatory environment, easy access to funding both via VC funds and loans, and a favorable context of relationships between entrepreneurs and institutions that are conducive to the creation and development of businesses. The per capita income and distribution allow families to access educational opportunities and to progress.

⊗ **Improvement opportunities:** are present in the entrepreneurial human capital and some of its formative aspects: culture and education. In the first case, there is a certain degree of aversion to risk in society that

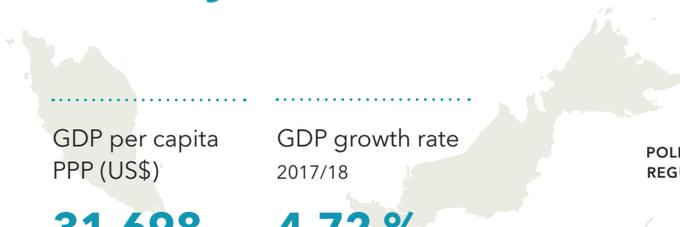
translates into low growth ambitions. The limited reach of entrepreneurship education in the academic curriculum, especially in primary levels, would not appear to favor change in this regard. Additionally, the low value given to entrepreneurs in society and the limited role that the media play in making the topic visible do not foster the entrepreneurial vocations either.

Strategic actions:

- » Strengthen the entrepreneurial human capital, with a long-term focus on culture and education and a short-term focus on bringing in entrepreneurs from other ecosystems and encouraging youth entrepreneurship.
- » Promote spaces that support the outreach and visibility of inspiring entrepreneurs to encourage a higher social regard for entrepreneurship.

Malaysia

2019



GDP per capita PPP (US\$)

31.698

GDP growth rate 2017/18

4,72 %



Population (Millions habitants)

32 M

IDE value

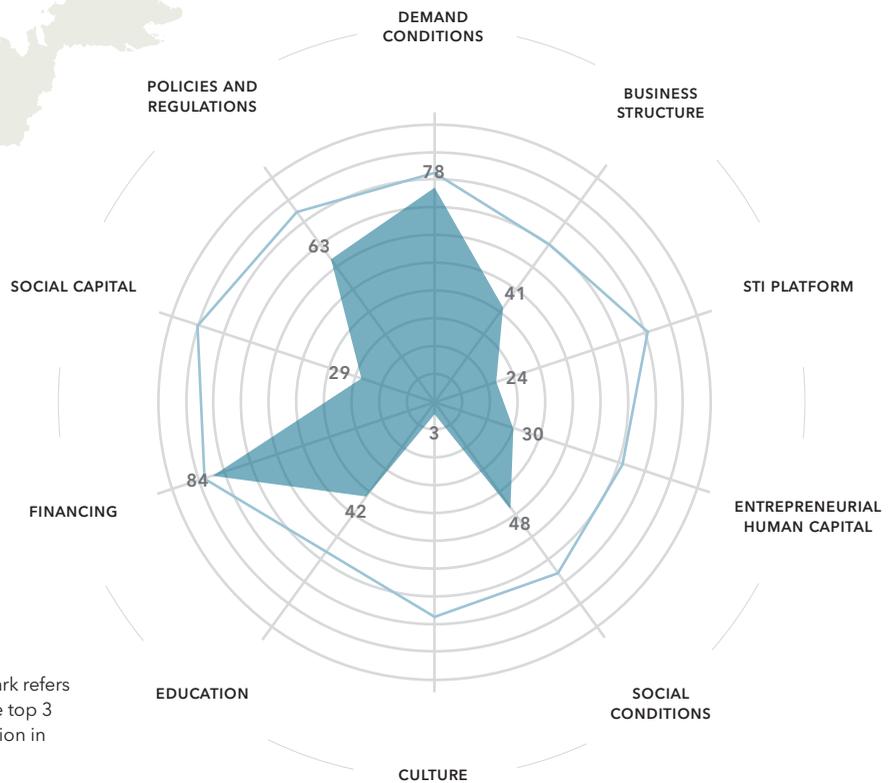
33,95

IDE ranking

38°

- Malaysia
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** aspects that stand out include financing options for the different stages of the entrepreneurial process and a proactive government in defining a regulatory framework and policies to support entrepreneurship. Additionally, there are favorable conditions in terms of demand, both because of the size and vitality of its economy, and because of its growing quality and segmentation.

✘ **Improvement opportunities:** culture appears to be the main restriction due to the low social value of entrepreneurs and the limited visibility given to role models. This aspect has a negative effect on the entrepreneurial human capital dimension, which shows in the low rate of growth-oriented businesses. Additionally, R+D efforts are limited, especially in companies, and there is a low generation of knowledge, which reduces the emergence of science-based businesses. Finally, the low levels of interpersonal trust restrict networks to close-knit circles, which limits the access to advice and resources.

Strategic actions:

- » Promote an increased awareness and outreach of inspiring entrepreneurial cases that serve to encourage a better social consideration of entrepreneurs.
- » Develop strategies aimed at strengthening the base of powerful growth-oriented entrepreneurial human capital. Attracting entrepreneurs from other countries is a path that some countries follow to these effects.
- » Strengthen R+D efforts in businesses, including open innovation strategies that encourage the emergence of technology-based enterprises.
- » Multiply the social capital channels so that entrepreneurs can have meeting platforms and a more open trust building environment.

Philippines

2019

GDP per capita PPP (US\$)

8.935

GDP growth rate 2017/18

6,2 %



Population (Millions habitants)

107 M

IDE value

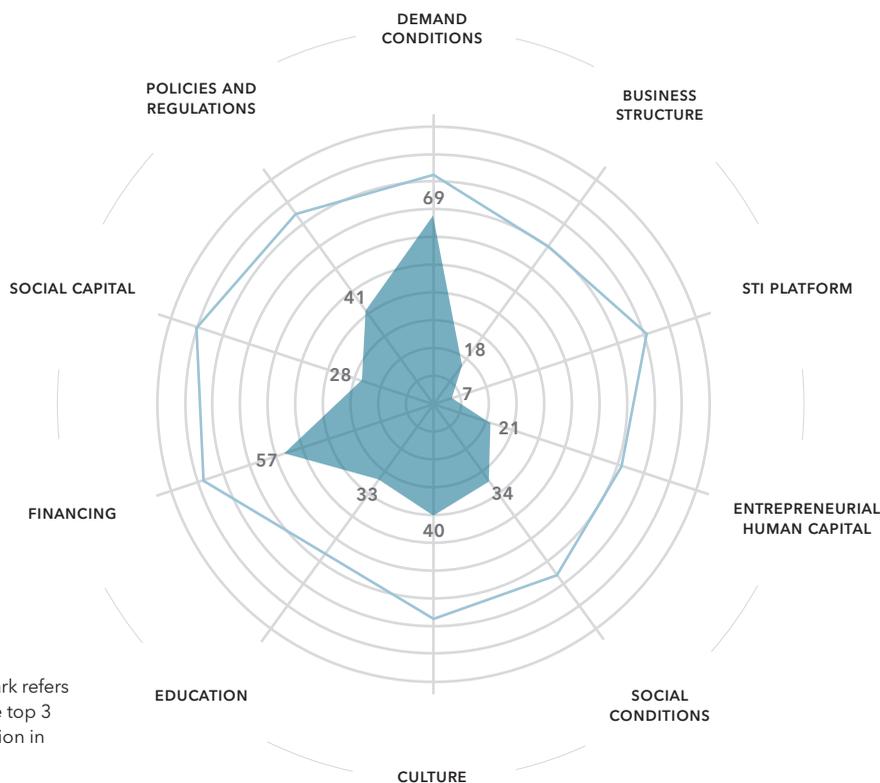
29,75

IDE ranking

48°

- Philippines
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** the advantages in the demand conditions due to the competitive prices that can foster the creation of businesses serving international markets, as well as a dynamic domestic market. This combines with quite a well-developed offer of funding options for the initial stages.

✗ **Improvement opportunities:** mostly present themselves in the STI platform and business structure, that limit the emergence of innovative ideas and proposals with growth prospects. Additionally, there are limitations in the entrepreneurial human capital, especially due to the absence of ambitious entrepreneurs, and to the shortage of resources destined to the educational system, which affects its quality. Lastly, there are also restrictions in terms of access to contact networks which is the result of social capital barriers related to the difference of income levels within society.

Strategic actions:

- » Boost science and technology efforts, both on an investment level as well as in terms of building institutional capacity, based on an agenda that focuses on solving social and business problems.
- » Develop programs for competitiveness and innovation and use digital startups to explore solutions to increase productivity and favor the integration of value chains.
- » Strengthen the educational system, especially, by increasing public resources assigned to each of its levels.
- » Design actions explicitly destined to strengthen the bases of social capital, granting special importance to the contact networks of entrepreneurs, and between entrepreneurs and ecosystem’s organizations.

Singapore

2019

GDP per capita PPP (US\$)

101.353

GDP growth rate 2017/18

3,1 %



Population (Millions habitants)

6 M

IDE value

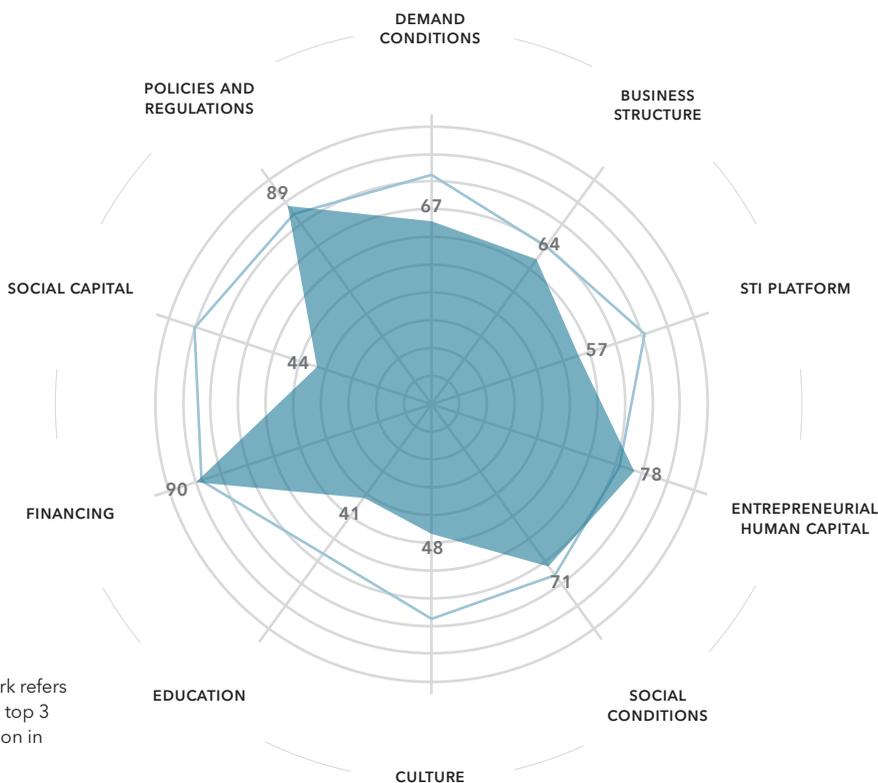
62,43

IDE ranking

4°

■ Singapore
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** it shows strong points across most of its dimensions. Those that stand out include access to financing and the role of the government to define a friendly regulatory environment and entrepreneurship support programs. Next in line is the entrepreneurial human capital, which in turn is favored by advantages in demand conditions as well as in the business structure, all of which positively affect the emergence of high-value, high-potential innovative proposals.

⊗ **Improvement opportunities:** in order to continue growing, and to consolidate its current position in the ranking, the most significant improvement opportunities lie in education and culture. While in the first case deficits are centered on the number of resources destined to the educational system compared to world leaders, in the second case, the limited social value of entrepreneurs stands out. One last aspect that can be advanced in is the social capital, given that networks

tend to concentrate on close-knit circles, limiting the access to resources and advice.

Strategic actions:

- » Increase investment in the educational system to bridge the gap with the world leaders.
- » Promote spaces that support the outreach and visibility of inspiring entrepreneurs to encourage a higher social regard for entrepreneurship.
- » Multiply the social capital channels so that entrepreneurs can have meeting platforms and a more open trust building environment.

South Korea

2019

GDP per capita PPP (US\$)

40.479

GDP growth rate 2017/18

2,7 %



Population (Millions habitants)

52 M

IDE value

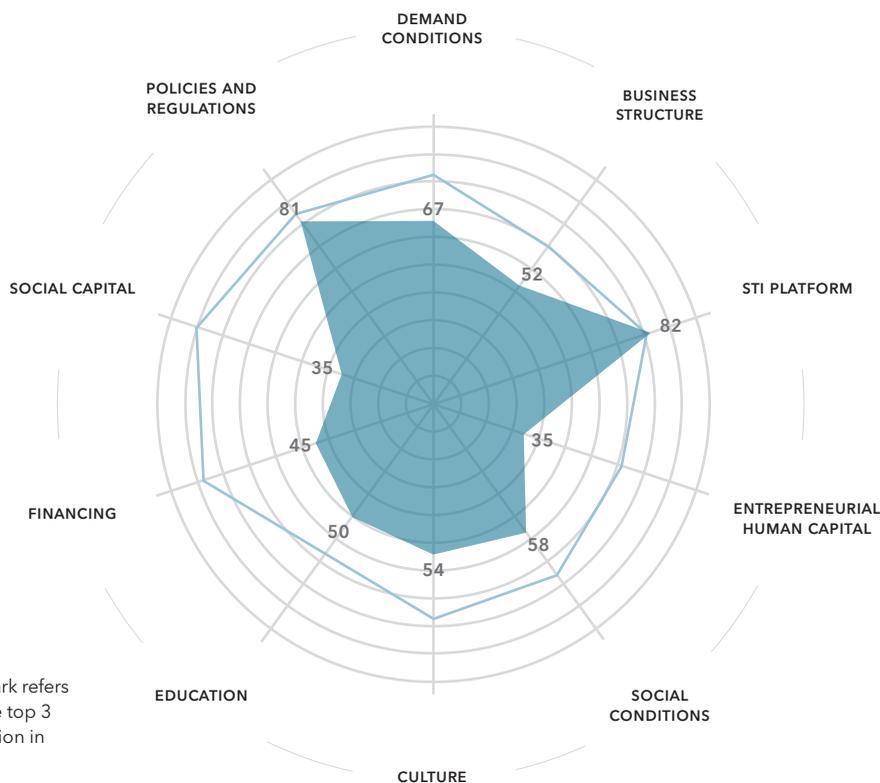
53,61

IDE ranking

13°

- South Korea
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** STI platform and favorable policies and regulations for innovative and dynamic entrepreneurship. In fact, Korea leads the global ranking in terms of STI platform thanks to the efforts made in science and technology that translate into high generation of knowledge. This is complemented by one of the most favorable regulatory environments for new businesses on the ranking, and a high level of commitment on behalf of the government to include issues related to entrepreneurship on the political agenda.

⊗ **Improvement opportunities:** the entrepreneurial human capital and the social capital stand out as two areas that need improvement. The limited presence of ambitious entrepreneurs, on the one hand, and of a trustworthy platform to build networks, on the other, are key aspects to consider in the development of public policies.

Strategic actions:

- » Increase and strengthen the entrepreneurial human capital of local entrepreneurs while also capitalizing on Korea's favorable conditions to attract entrepreneurs from different countries.
- » Foster the education of ambitious entrepreneurs with global perspectives and networking capacities through the educational system.
- » Develop actions that are explicitly directed at strengthening the social capital, granting special attention to networks among entrepreneurs and between entrepreneurs and the ecosystem's organizations.

Thailand

2019

GDP per capita
PPP (US\$)

19.018

GDP growth rate
2017/18

4,13 %



Population
(Millions habitants)

69 M

IDE value

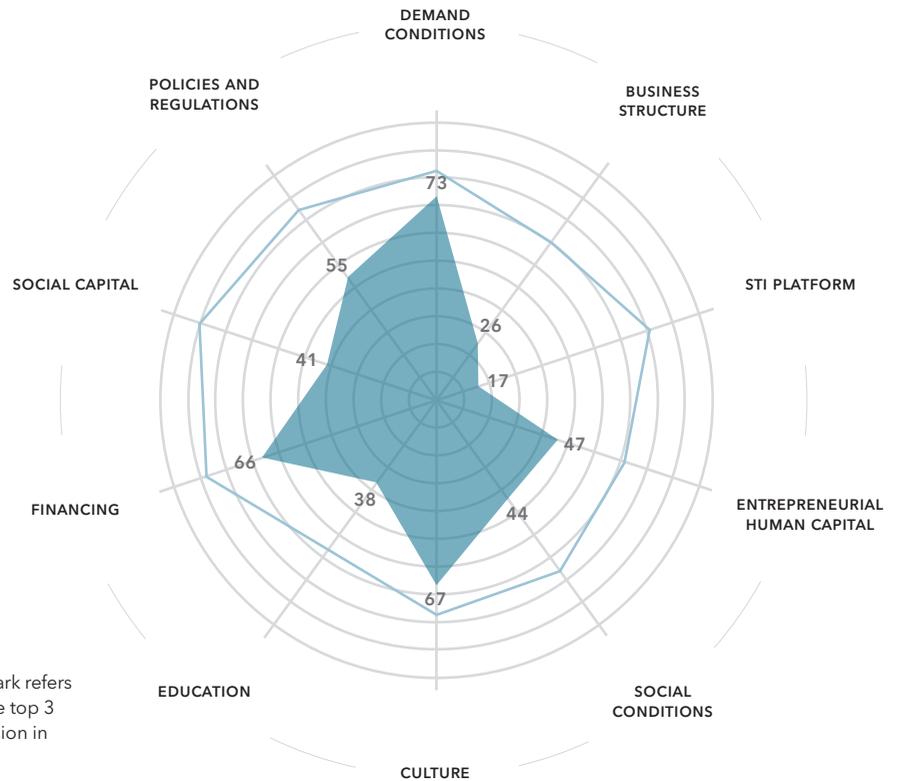
43,64

IDE
ranking

28°

- Thailand
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** demand conditions stand out, due to the size, quality and dynamism of the economy, and to the price advantages to satisfy external demands. This is combined with cultural advantages due to the high value placed on entrepreneurs in society, a result of the high media involvement. One last favorable aspect is related with the financing options for the different phases of the entrepreneurial process.

⊗ **Improvement opportunities:** can be observed in the significant lags of the STI platform and business structure. In the first case, limitations are centered on R+D efforts, especially of businesses, the limited generation of knowledge, and the lack of dialogue between the academic and business sectors. Added to this, the business structure features low competitiveness, productivity and articulation. All these aspects define an environment that is not altogether fertile for the circulation of ideas and the emergence of high-value, high-potential innovative proposals. Other areas of improvement are related to the entrepreneurial human capital, especially

with regards to the number of growth-oriented entrepreneurs. Changing this situation also requires facing existing limitations in social conditions, especially regarding education, particularly in terms of access, low investment, and the little attention given to entrepreneurial education on all educational levels.

Strategic actions:

- » Design science, technology and innovation policies that foster the development of institutional capacities and strengthen research and development related to business needs.
- » Develop programs for competitiveness and innovation, for example, through the promotion of digital startups that provide solutions to increase productivity and favor the integration of value chains.
- » Promote the expansion of the entrepreneurial human capital pool by strengthening the educational system, especially by granting the population greater access to higher education and by including entrepreneurship education at the different levels of the system.

Vietnam

2019

GDP per capita PPP (US\$)

7.435

GDP growth rate 2017/18

7,1 %



Population (Millions habitants)

96 M

IDE value

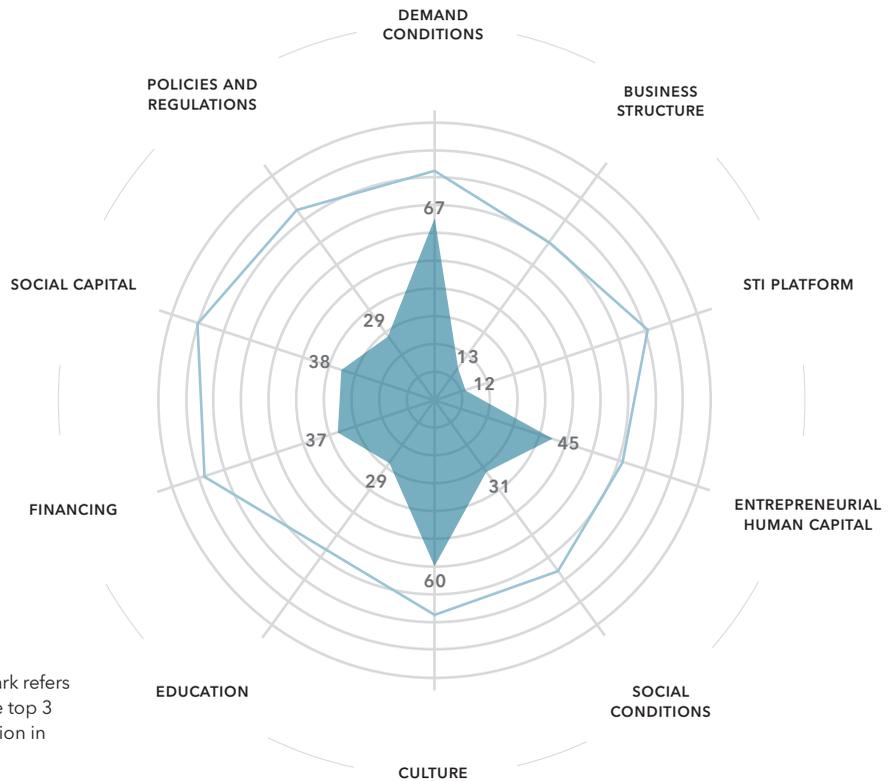
31,62

IDE ranking

43°

- Vietnam
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** the dynamism of its economy and competitive prices to satisfy international markets define the demand conditions which are the country's biggest strong point followed by a culture that is characterized by the visibility of entrepreneurial cases and the high social value of entrepreneurs.

⊗ **Improvement opportunities:** the STI platform and the business structure do not contribute to the circulation of ideas and the emergence of strong high-value innovative proposals. There are limitations in both the social capital to create networks outside of the close-knit circles of entrepreneurs, and in the financing options for the different phases of the entrepreneurial process. Additionally, there is extensive ground to cover in terms of regulations and policies that favor entrepreneurship. Lastly, it is very important to strengthen the pool of growth-oriented entrepreneurial human capital, although restrictions due to the social conditions of families and the educational system may hinder this.

Strategic actions:

- » Strengthen the strategic approach to entrepreneurship and innovation on the public policy agenda as part of a comprehensive strategy for entrepreneurship development.
- » In the mid and long term, it would be very beneficial to build a platform of science and technology institutional capacities that is articulated with the development of business structure more oriented towards innovation and entrepreneurship.
- » The educational system is another area in which a significant agenda is required, which should articulate the challenges that general education faces with those more specific to entrepreneurship education. These include the development of competences related to ambition and growth.
- » In the short term, specific financing options for entrepreneurship must be developed and combined with technical support, as well as with the development of contact networks both on a national and international level.

CENTRAL & EASTERN EUROPE

Bulgaria

2019



Population (Millions habitants)
7 M

IDE value

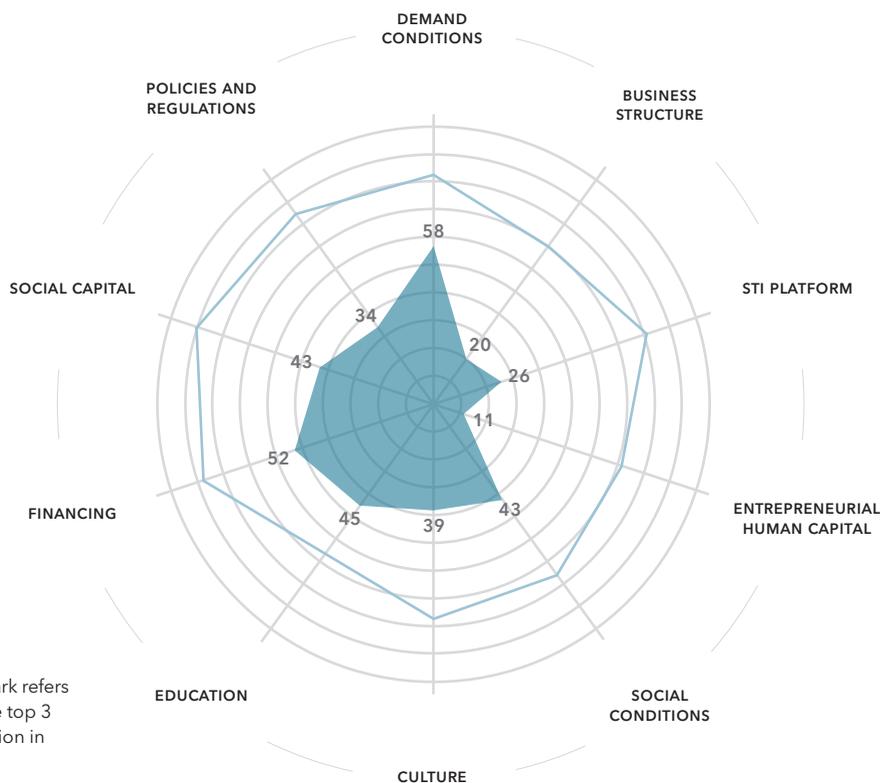
33,57

IDE ranking

40°

- Bulgaria
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** demand conditions, financing and social capital, although they do not rank high enough to be considered strengths. The first aspect is due to the price advantages it offers, which could be leveraged by entrepreneurs to create proposals with competitive value on an international level. There is also some development in terms of initial funding options for new ventures and a valuable social capital, although it is restricted to the entrepreneurs' closer circle.

✘ **Improvement opportunities:** the entrepreneurial human capital, in particular the limited presence of ambitious entrepreneurs with growth prospects. Additionally, there is a vertical culture that shows low receptivity to new initiatives and neither the business nor the science and technology platforms contribute to the emergence of opportunities and ideas for innovative business ventures. Also, entrepreneurship programs do not occupy an important place in the government agenda.

Strategic actions:

- » Broaden and strengthen the active entrepreneurial pool through the implementation of specific policies.
- » Develop science and technology policies to create institutional capacities and entrepreneurial innovation with the aim of optimizing conditions for entrepreneurship.
- » Deepen and give more importance to entrepreneurship policies on the agenda.

Croatia

2019



GDP per capita PPP (US\$)

27.810

GDP growth rate 2017/18

2,6 %



Population (Millions habitants)

4 M

IDE value

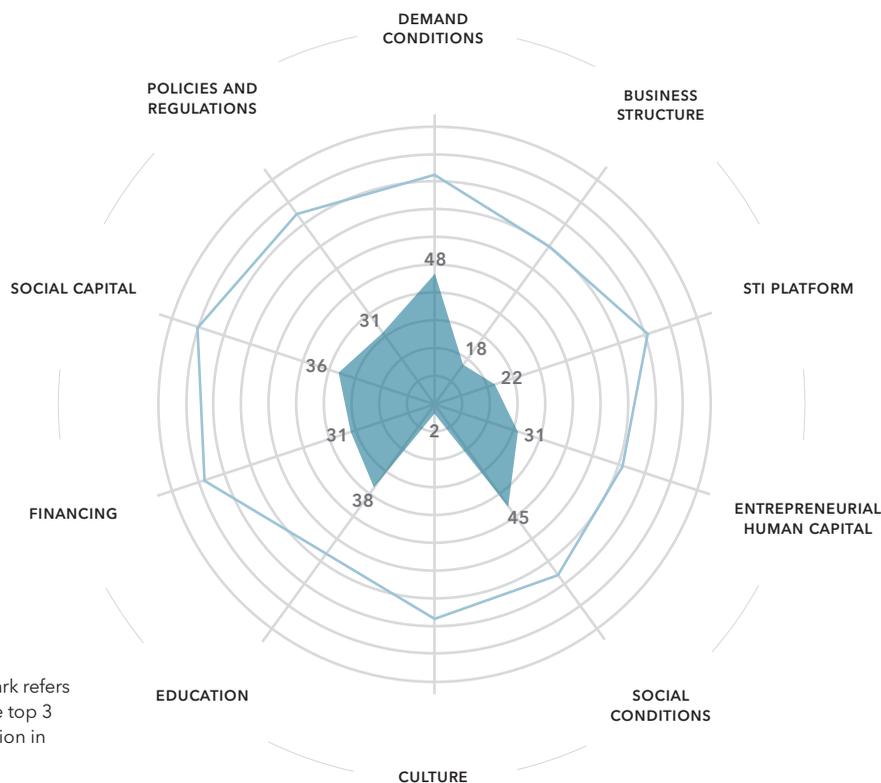
24,63

IDE ranking

56°

- Croatia
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



- ✓ **Favorable aspects:** demand conditions due to the competitiveness based on the price advantages it offers to satisfy external markets could favor international entrepreneurship opportunities.
- ✗ **Improvement opportunities:** culture is the most important dimension to improve given the low social value given to entrepreneurs and the media's low exposure of entrepreneurship related topics. In this context, entrepreneurship education is not sufficiently developed. Both dimensions are key to broaden the entrepreneurial human capital pool that to date is underdeveloped. On the other hand, neither the science and technology platform nor the business structure contribute to the emergence of high-value, innovative proposals. Finally, entrepreneurs face serious challenges when they wish to turn their projects into ventures because there is limited social capital to create networks, financing options and governmental engagement in the promotion of entrepreneurship.

- Strategic actions:**
- » Invest significant efforts to expand the active entrepreneurial human capital pool with a long term focus on education and a short term focus on attracting entrepreneurs and fostering entrepreneurship in underrepresented segments.
 - » Strengthen the science and technology platform and its connection to open innovation strategies of large European companies.
 - » Broaden the bases of social capital, placing special attention to the entrepreneur contact network and to its connection with the ecosystem's organizations.
 - » Develop a financing chain that responds to the different stages of entrepreneurship.

Czech Republic

2019



Population (Millions habitants)

11 M

IDE value

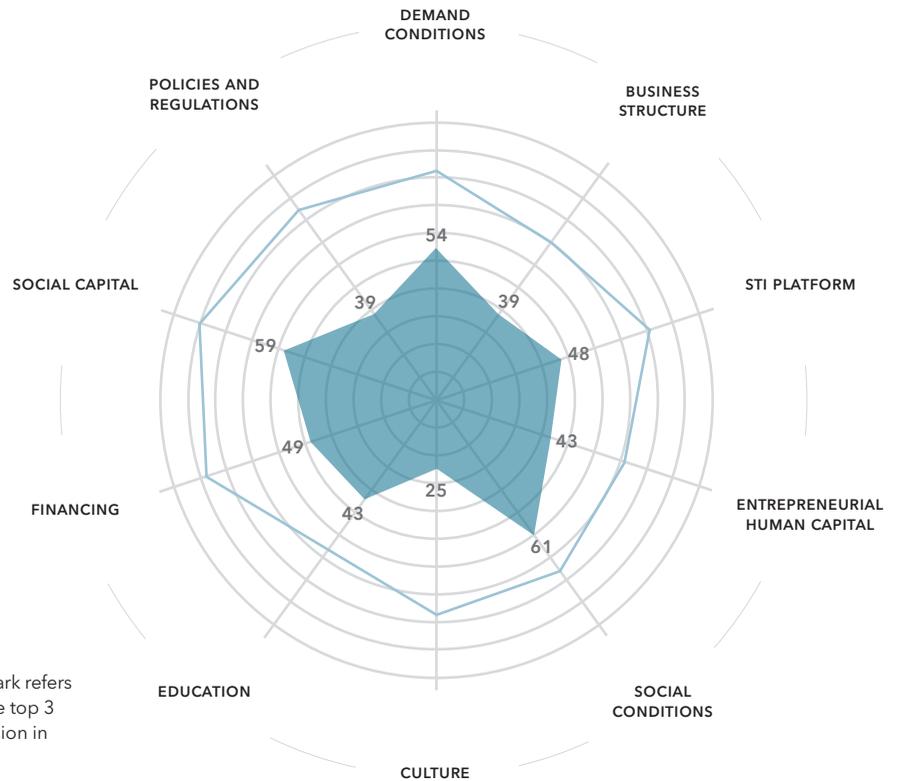
IDE ranking

44,82

26°

- Czech Republic
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** include social conditions that have a positive impact on the social capital which facilitates networking. Additionally, it also offers price advantages to satisfy foreign demands, which widens the opportunity space.

✗ **Improvement opportunities:** weaknesses can be observed in terms of culture, which shows that there is a low social value of entrepreneurs, which conditions entrepreneurial vocations. Added to this, the business structure shows weaknesses in terms of productivity and competitiveness, which creates an environment that is not altogether fertile for the emergence of high-potential innovative proposals. Lastly, the limited role of the government and the low offer of entrepreneurship support programs, is also a setback.

Strategic actions:

- » Strengthen the strategy for entrepreneurship and innovation on the government agenda.
- » Promote spaces that support the outreach and visibility of inspiring entrepreneurs so as to encourage a higher social regard for entrepreneurship.
- » Develop programs for competitiveness and innovation, for example, through the promotion of digital startups that provide solutions to increase productivity and favor the integration of value chains.

Estonia



Population (Millions habitants)
1 M

IDE value

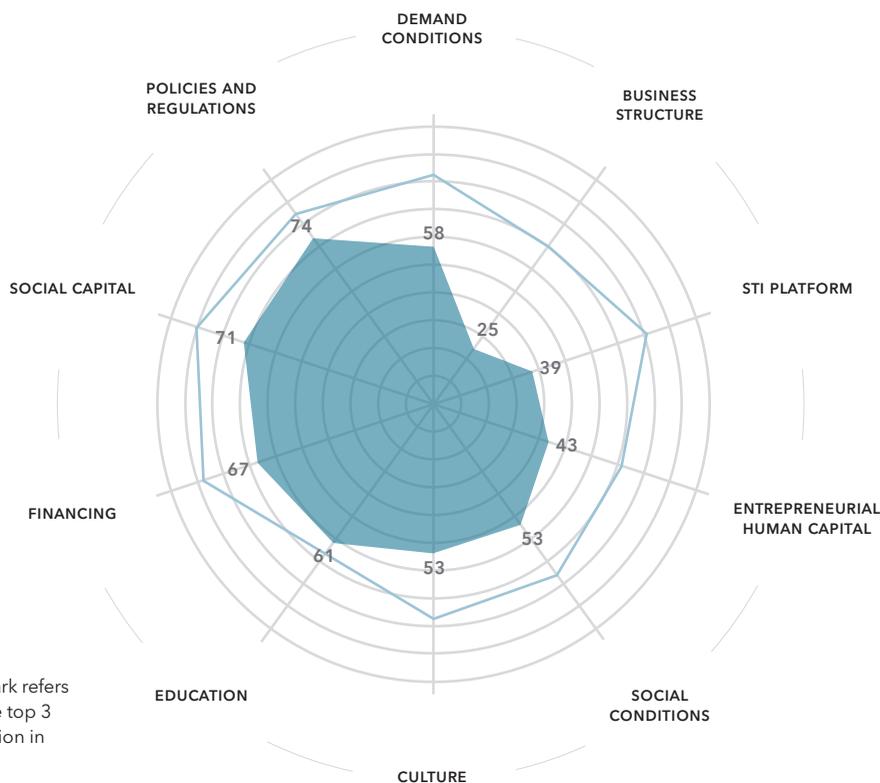
52,03

IDE ranking

19°

- Estonia
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** with a high systemic balance across the different dimensions, the standout aspect is the social capital that favors the creation of contact networks outside the close-knit circle of entrepreneurs and fosters access to resources and advice. Additionally, the country boasts financing options for all entrepreneurship stages, and the government contributes with a favorable regulatory framework and entrepreneurship support programs. On the other hand, entrepreneurial human capital is benefited by the positive conditions of the educational system which is characterized by good access high-quality education, and the incorporation of entrepreneurship topics in the educational curriculum.

✘ **Improvement opportunities:** exist in the STI platform and business structure. On the one hand, the STI platform displays limited R+D efforts, especially by businesses, with low knowledge generation and weak channels to connect the academic and productive sectors. Additionally, the

business structure shows competitiveness and productivity deficits, with a low development of its clusters, which makes it difficult to circulate ideas and identify proposals of innovative value.

Strategic actions:

- » Strengthen science, technology and innovation efforts and articulate them with the promotion of entrepreneurship to favor the conversion of research results in businesses.
- » Strengthen research and development efforts in businesses, including open innovation strategies and corporate venturing to foster the relationship between large companies and startups.
- » Develop competitiveness and innovation programs, for example, through the promotion of digital startups that provide solutions to increase productivity and favor the integration of value chains.

Greece

2019

GDP per capita
PPP (US\$)

29.874

GDP growth rate
2017/18

1,93 %



Population
(Millions habitants)

11 M

IDE value

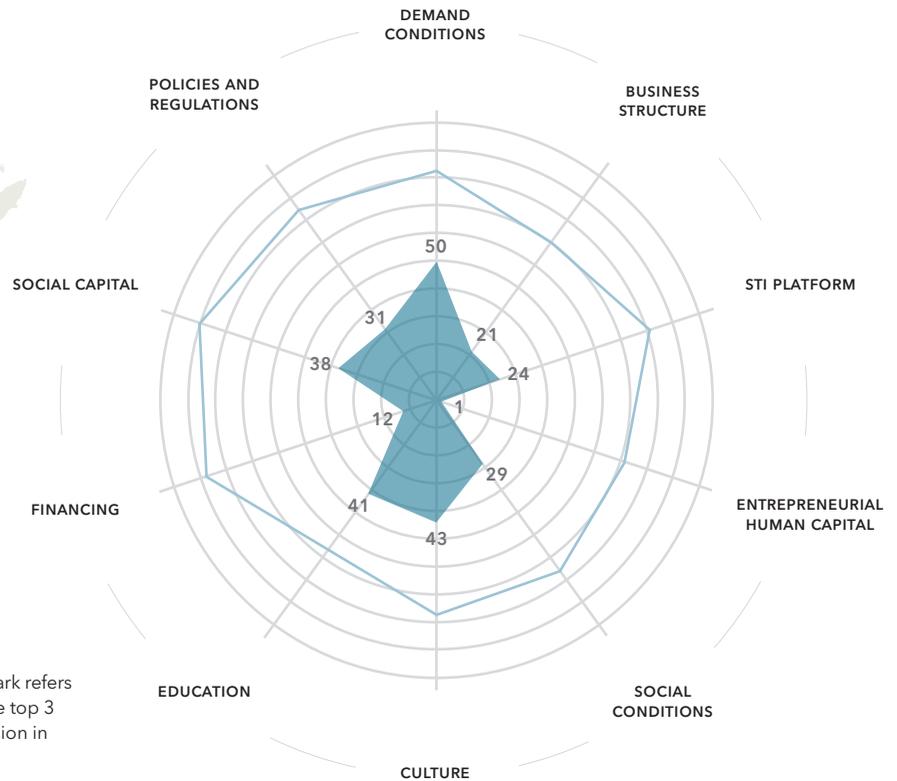
21,81

IDE
ranking

59°

- Greece
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



⊗ **Improvement opportunities:** almost all dimensions show room for improvement. The main weaknesses are related to the entrepreneurial human capital and its formative factors. On one hand, social inequality and the high youth unemployment rate present an unfavorable scenario for progress and access to the development of entrepreneurship competences. Added to this, advancements made in entrepreneurship education are limited. On the other hand, neither the business structure nor the STI platform contribute to the emergence of high-value innovative proposals with growth prospects. And when they do emerge, funding for the setting into motion and scaling of projects is unavailable, as is a social capital platform that facilitates the creation of support networks. Finally, Government policies do not decidedly boost entrepreneurship either.

Strategic actions:

- » Implement a strategic systemic agenda for the development of dynamic entrepreneurship.
- » Make significant efforts to increase the active entrepreneurial human capital with a long term focus centered on education, and a short term focus on bringing in entrepreneurs from other European countries and fostering youth entrepreneurship.
- » Encourage the development of funding options for business ventures with dynamic potential and the growth of young dynamic businesses.
- » Strengthen science and technology as a platform for the generation of high-value, innovative entrepreneurial proposals.

Hungary

2019



Population (Millions habitants)
10 M

IDE value

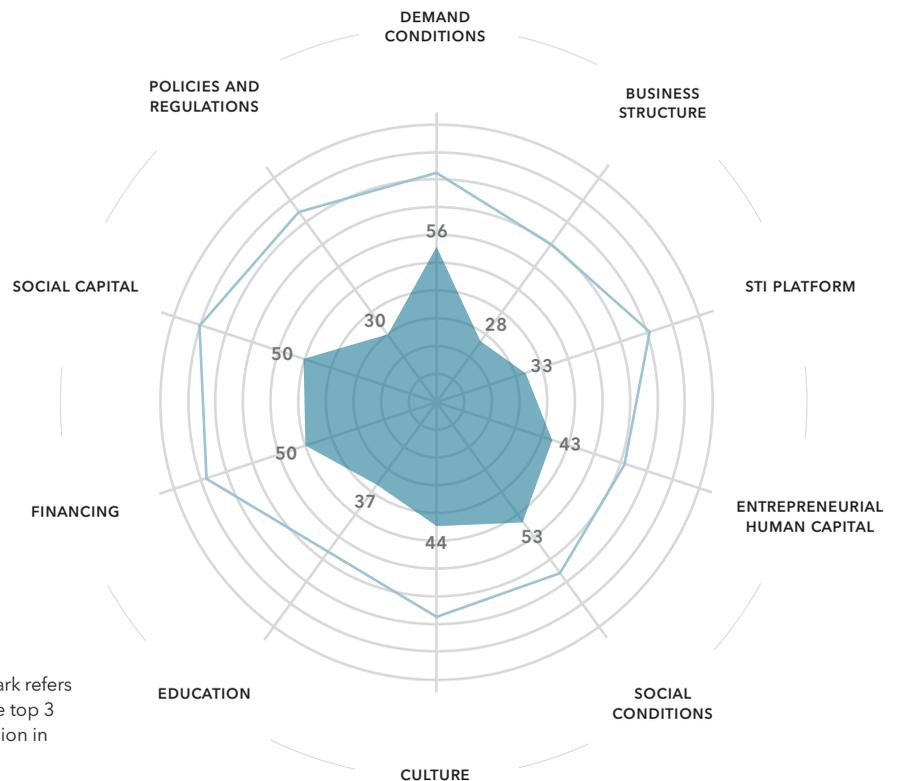
41,18

IDE ranking

32°

■ Hungary
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions, which are explained by the size and dynamism of its economy are the most positive aspects of the country, although not sufficiently so to be considered as a strength. Additionally, the social capital and some advances made in terms of financing options favor the setting into motion and growth of businesses.

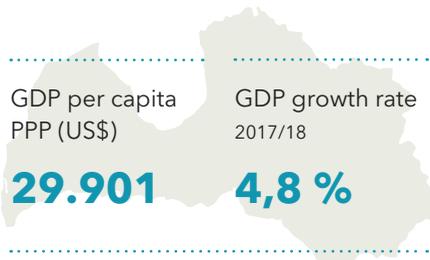
✗ **Improvement opportunities:** the most significant are in the STI platform and business structure. On one hand, there are limited R+D efforts on behalf of businesses, low generation of knowledge, and insufficient articulation between the academic and business sector. Additionally, the competitiveness of the production structure shows weaknesses and there is a low articulation between companies. All these aspects serve to define an environment that is not altogether fertile for the circulation of ideas and the emergence of innovative proposals. Also, the government is not sufficiently active in the development of policies that support entrepreneurship.

Strategic actions:

- » Increase efforts in science and technology both in terms of investment and institutional capacity, with an agenda designed to solve business problems.
- » Explore options to advance towards the development of competitiveness and innovation programs through digital startups that can provide solutions to increase productivity and favor the integration of value chains.
- » Strengthen the strategy for entrepreneurship and innovation on the government agenda.

Latvia

2019



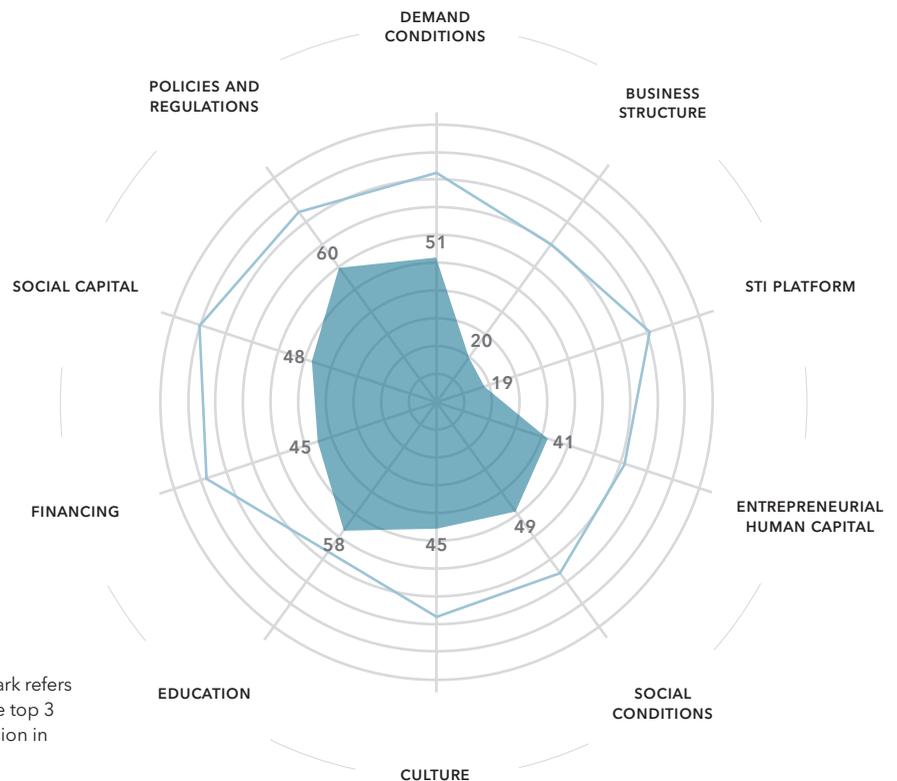
Population (Millions habitants)
2 M

IDE value
41,02

IDE ranking
34°

■ Latvia
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** although it does not rank high enough to be considered a strength, the policies and regulations dimension stands out because of the favorable regulatory framework and to relative advances in the implementation of support programs. In the second place lie the educational system which shows access of the population to higher education, its quality and the advancement of entrepreneurship education on academic curriculums. Lastly, demand conditions are positive, more specifically, due to the possibility to benefit from international demand based on the competitive prices of the goods that they produce and to a certain degree of dynamism in the economy.

✗ **Improvement opportunities:** the STI platform and the business structure are the most significant weak points, mostly due to limited public and private investment efforts in R+D, the generation of knowledge and the limited dialogue between the academic and the business sectors. Added to this, the business structure shows low productivity, competitiveness and articulation. All these

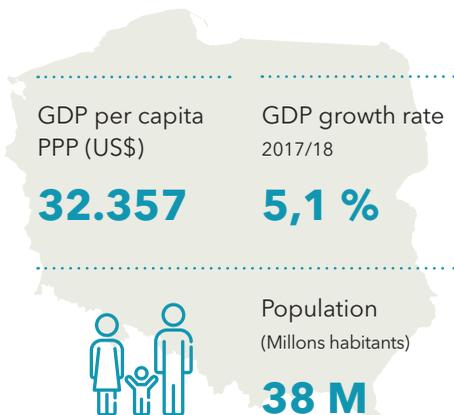
aspects make the circulation of ideas and the identification of innovative proposals with high potential difficult. Likewise, lags in the entrepreneurial human capital, more specifically regarding the presence of growth-oriented entrepreneurs, complete the picture of an environment that is not altogether favorable for the emergence of innovative ventures.

Strategic actions:

- » Capitalize on the favorable conditions observed in the educational system to foster the development of ambitious entrepreneurs with global outlook.
- » Strengthen science, technology and innovation efforts and articulate them with the promotion of entrepreneurship to favor the conversion of research results in businesses.
- » Develop programs for competitiveness and innovation, and for example, use digital startups to explore solutions that increase productivity and favor the integration of value chains.

Poland

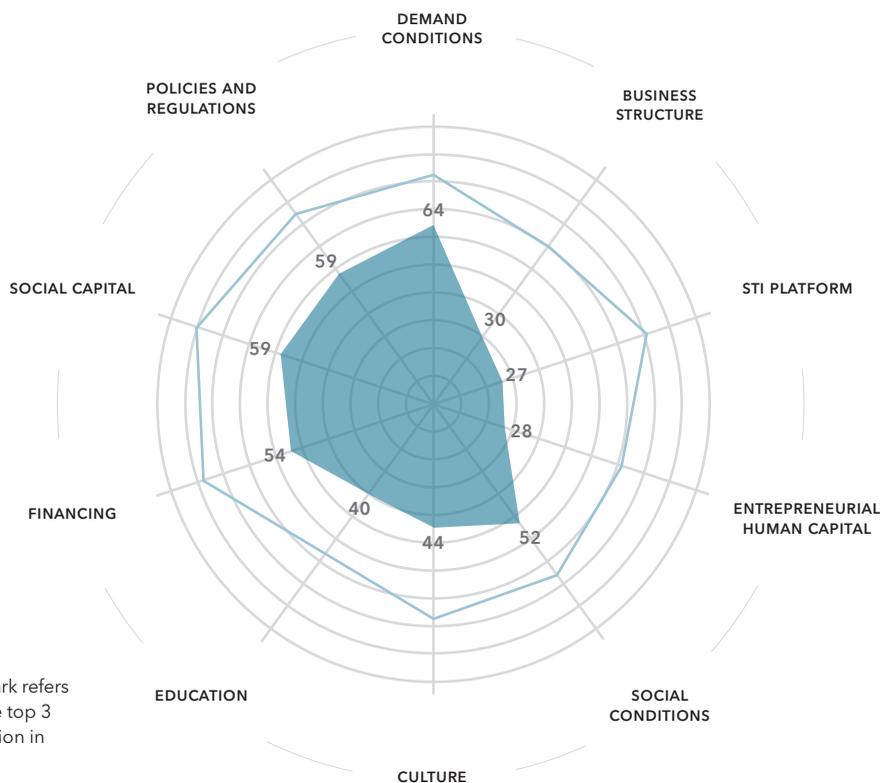
2019



IDE value	IDE ranking
43,59	29°

■ Poland
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** can be appreciated in the demand conditions, which is Poland's main strength, explained by the size and dynamism of its economy as well as by the price advantages to serve external demand. Other favorable aspects include the social capital to develop contact networks, access to funding, especially for businesses that are starting out, and the policies and regulations dimension, most notably in terms of the regulatory framework to do business. All these aspects favor the conversion of projects into businesses and their subsequent development.

✗ **Improvement opportunities:** present themselves especially in the STI platform and the business structure. On one hand, there are limited R+D efforts, low generation of knowledge, and little dialogue between the business and academic sectors. Added to this, the business structure presents low competitiveness, productivity and articulation, which does not favor a fertile environment for the emergence of

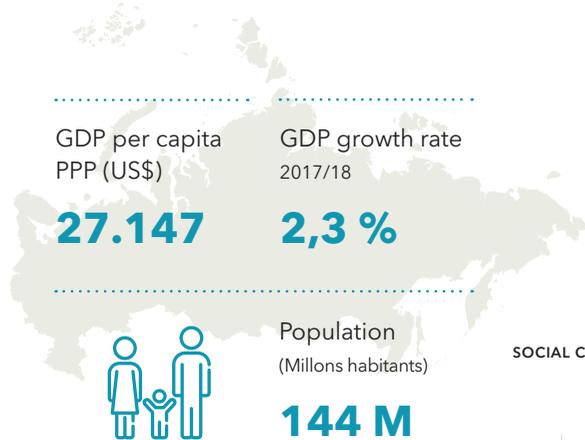
high-value, innovative proposals. Apart from that, there are limitations in the entrepreneurial human capital, especially, there are few ambitious, growth-oriented entrepreneurs, which is related to certain extent to the low presence of entrepreneurship education in the educational system.

Strategic actions:

- » Develop science, technology and innovation policies that foster the development of institutional capacities and strengthen research and development related to business needs.
- » Develop programs for competitiveness and innovation, for example, by promoting digital startups that provide solutions to increase productivity and favor the integration of value chains.
- » Strengthen the entrepreneurial human capital, with a long-term focus on education and a short-term focus on bringing in entrepreneurs from other ecosystems and encouraging youth entrepreneurship.

Russian Federation

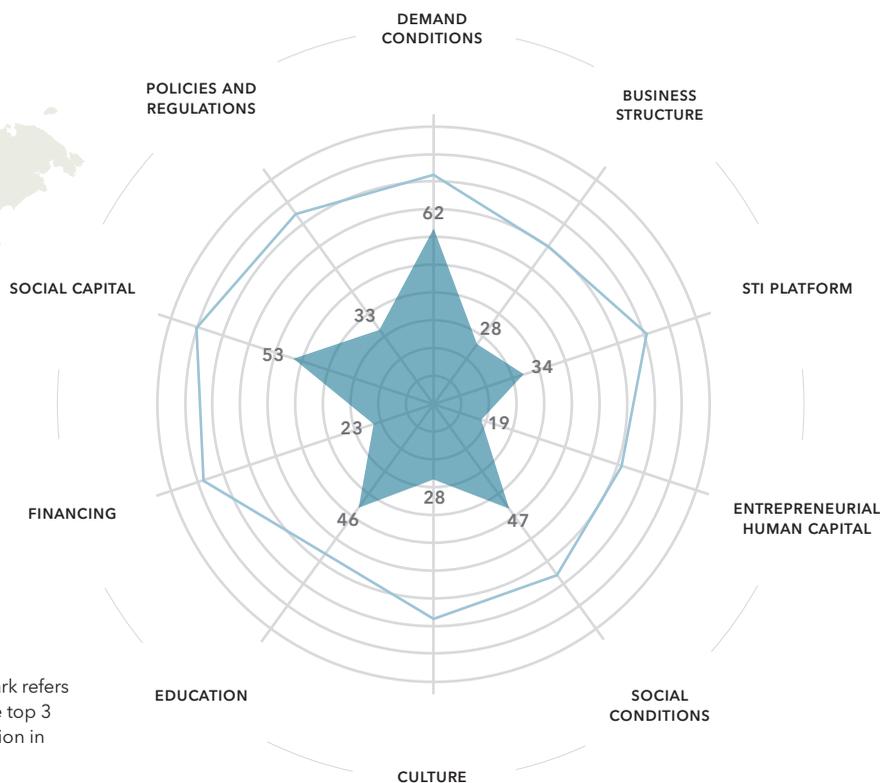
2019



IDE value	IDE ranking
34,93	37°

■ Russian Federation
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions stand out, mainly due to the size of its domestic market as well as to its price advantages to serve foreign demands. Additionally, the high level of interpersonal trust benefits the creation of contact networks to access resources and advice.

✗ **Improvement opportunities:** are mostly related to the entrepreneurial human capital, in terms of the presence of both opportunity-based and growth-oriented entrepreneurs. Chances for this to change are also set back by limitations related to culture and entrepreneurship education. Additionally, when it comes to start up a business, there are limitations regarding financing, and a government that shows little involvement in the support of entrepreneurs. Finally, there are also some weaknesses in the STI platform given the limited R+D efforts, especially on behalf of businesses, and the low generation of knowledge. As well, the business structure is somewhat lagging in terms of competitiveness, productivity and articulation.

Strategic actions:

- » Increase the pool of entrepreneurial human capital, with a long-term focus on culture and education and a short-term focus on bringing in entrepreneurs from other ecosystems, taking advantage of the benefits that the size of its market offers.
- » Strengthen the strategy for entrepreneurship and innovation on the government agenda.
- » Develop a financing chain that covers all the different stages of the entrepreneurial process.
- » Work in tandem on science and technology policies with entrepreneurial and industrial development policies, advancing towards open innovation platforms where businesses, institutions and entrepreneurs can come together.

Slovak Republic

2019

GDP per capita PPP (US\$)

34.329

GDP growth rate 2017/18

4,1 %



Population (Millions habitants)

5 M

IDE value

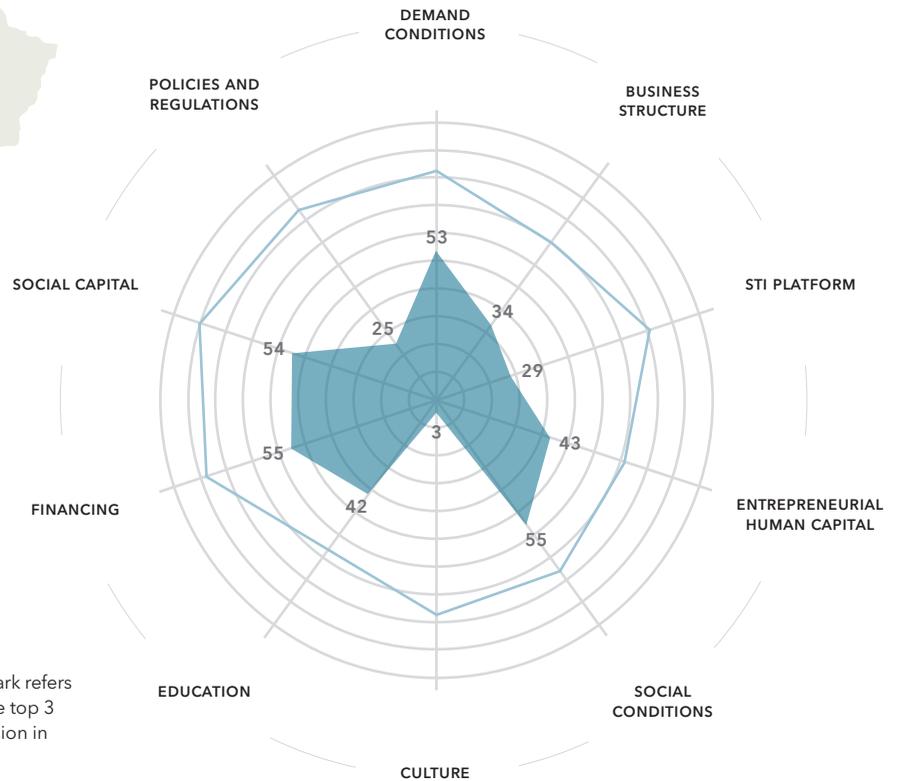
31,55

IDE ranking

45°

- Slovak Republic
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** although they do not constitute strengths, the most important favorable aspects are social capital and financing. Additionally, the social conditions of families facilitate access to opportunities for the development of capacities and for entrepreneurship. Also, price advantages could favor the chances of new businesses to compete on international markets.

✗ **Improvement opportunities:** in a context of high systemic imbalance over the different ranking dimensions, culture is the area that most needs improving, especially in terms of its hierarchical structure and low social value given to entrepreneurs. Next in line in order of importance are the STI platform and the business structure, neither of which contribute to the emergence of ideas for innovative and dynamic enterprises. Lastly, those who wish to found a business face an unfavorable regulatory framework and low proactivity on behalf of the government to implement policies and public support programs.

Strategic actions:

- » Promote spaces that support the outreach and visibility of inspiring entrepreneurs so as to encourage a higher social regard for entrepreneurship.
- » Work in tandem on science and technology policies with entrepreneurial and development policies, advancing towards open innovation platforms where businesses, institutions and entrepreneurs can come together.
- » Grant more importance to entrepreneurship policies on the government agenda, including the removal of regulatory and fiscal barriers as well as the development of support programs for entrepreneurs.

Slovenia

2019

GDP per capita PPP (US\$)

38.674

GDP growth rate 2017/18

4,5 %

Population (Millions habitants)

2 M

IDE value

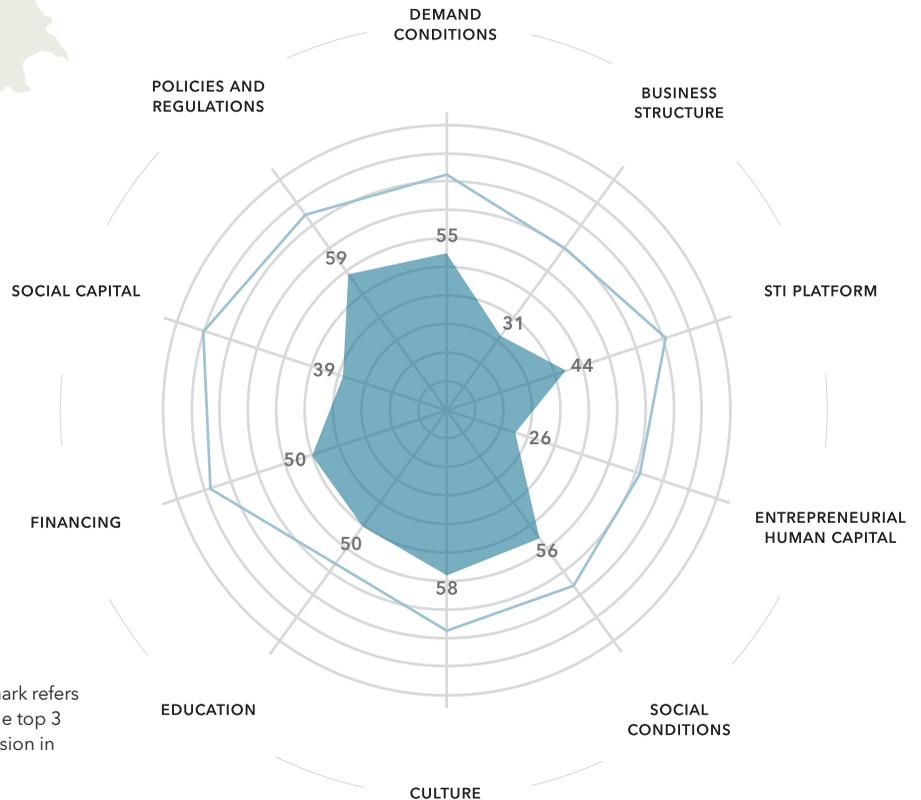
45,41

IDE ranking

25°

■ Slovenia
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** most dimensions are ranked favorably. Such is the case of those that can affect the emergence of entrepreneurs including the social conditions of families, a culture that values entrepreneurs, and media that makes inspiring success cases visible, as well as access to education and advances of entrepreneurial education. The same occurs with financing options, policies and regulations that affect the kick off and development of entrepreneurial projects. Furthermore, the STI platform also contributes to the emergence of innovative ideas and proposals.

✗ **Improvement opportunities:** mainly center on strengthening the entrepreneurial human capital with grow aspirations, on the business structure's capacity to contribute to innovation and entrepreneurship, and on the social capital to build networks.

Strategic actions:

- » Develop a strategy aimed at strengthening the pool of powerful entrepreneurial human capital. Attracting entrepreneurs from other ecosystems, harnessing the STI platform to stimulate science- and technology-based entrepreneurship, stimulating female entrepreneurship, are examples of initiatives followed by different countries to advance in this direction.
- » Promote entrepreneurial competitiveness through open innovation programs and corporate venturing that connect large companies with startups.
- » Implement actions explicitly directed towards strengthening the social capital and granting special importance to contact networks between entrepreneurs, and between entrepreneurs and the ecosystem's organizations.

LATIN AMERICA

Argentina

2019

GDP per capita PPP (US\$)

20.567

GDP growth rate 2017/18

-2.51 %



Population (Millions habitants)

44 M

IDE value

31.56

IDE ranking

44°

■ Argentina
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** entrepreneurship policies and social capital are the highest ranking dimensions, nonetheless, they do not rank high enough to be considered strengths. The high ranking in entrepreneurship policies is due to government efforts to include entrepreneurship in the political agenda and to its entrepreneur support programs. However, the economic crisis has weakened these initiatives and entrepreneurship in general.

✘ **Improvement opportunities:** significant aspects to improve include financing. Despite advances promoted by public policies, there is still insufficient funding options for the different phases of the entrepreneurial process. As well there is room for further improvements in those dimensions that affect the emergence of high-value innovative proposals, such as STI platforms and business structure. In the first place, efforts in science and technology and their connection to the entrepreneurial sector are limited. Low competitiveness and articulation

between companies are also limiting factors for the emergence and circulation of innovative ideas. Additionally, there are few ambitious entrepreneurs willing to take risks, and cultural aspects regarding the social value of entrepreneurship must be addressed.

Strategic actions:

- » Foster advances in science, technology and innovation and combine with entrepreneurship development in order to favor the conversion of research results in companies.
- » Promote innovation and corporate venturing strategies of companies that wish to work with entrepreneurs and science and technology institutions.
- » Stimulate the development of entrepreneurial human capital with growth potential and of the general social value placed on entrepreneurship.
- » Develop a funding chain for the different stages of the entrepreneurship process.

Bolivia

2019

GDP per capita PPP (US\$)

7.859

GDP growth rate 2017/18

4,22 %



Population (Millions habitants)

11 M

IDE value

21,07

IDE ranking

60°

- Bolivia
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



- ✓ **Strengths:** the culture, with a medium to high ranking, which is related to the importance that the media gives entrepreneurship and the high social value placed on entrepreneurs.
- ✗ **Improvement opportunities:** there are many aspects to improve on all levels, but especially those that affect the emergence of innovation and entrepreneurship opportunities. For example, neither the STI platform nor the business structure favor the emergence of high-value innovative proposals with growth prospects. Additionally, there is a shortage of entrepreneurs with the aspiration to grow, in a social environment of high inequality and very low presence of medium-income segments in the population. Furthermore, there is very limited access to social capital for networking purposes and a lack of funding options in the different stages of the entrepreneurship process, which makes it difficult to bring projects to fruition. Finally, the policies and regulations dimension is also a weakness.

Strategic actions:

- » Leverage the value given to entrepreneurship in society to implement an integral systemic strategy that develops conditions for the creation and development of dynamic and innovative businesses.
- » Foster the development of social innovation through dynamic value chains led by teams of entrepreneurs that are capable of enriching, mobilizing and integrating the productive and cultural heritage of urban and rural producers.
- » Develop science and technology policies to create institutional capacities and entrepreneurial innovation with the aim of optimizing conditions for entrepreneurship.
- » Deepen and give more importance to entrepreneurship policies on the agenda.

Brazil

2019

GDP per capita
PPP (US\$)

16.068

GDP growth rate
2017/18

1,12 %



Population
(Millions habitants)

209 M

IDE value

26,25

IDE
ranking

53°

- Brazil
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** the culture and demand conditions. Society values entrepreneurs and the media plays an important role in promoting success cases. Other favorable aspects include the size of the economy and the price advantages it offers to satisfy external markets.

✘ **Improvement opportunities:** the entrepreneurial human capital must improve. The high level of social inequality, and the lack of entrepreneurship subject areas in formal education, especially in primary and secondary levels, do not favor the acquisition of entrepreneurial vocations and competences. Improving the STI platform and the business structure are also important for the emergence of innovative and dynamic businesses. Additionally, those who wish to open a business face complicated regulatory and tax frameworks, and there is low proactiveness in the creation of public policies and programmes to foster entrepreneurship. Furthermore, it is difficult to access social capital to create networks outside the close-knit

circle of entrepreneurs. Access to financing options is also limited, especially during the growth stages of the business.

Strategic actions:

- » Capitalize the social value of entrepreneurship and the large-scale domestic market to implement an integral strategy for the development of regional ecosystems.
- » Lift regulatory and tax restrictions.
- » Widen the opportunity space for the emergence of innovative proposals, for example, by strengthening the STI platform and its articulation with open innovation strategies of large companies.
- » Increase the entrepreneurial human capital, through entrepreneurship education for a mid to long-term impact, and by identifying underrepresented sources of entrepreneurs for their development in the short term.
- » Provide funding options for each stage of the entrepreneurship process.

Chile

2019

GDP per capita
PPP (US\$)

25.284

GDP growth rate
2017/18

4,02 %



Population
(Millions habitants)

19 M

IDE value

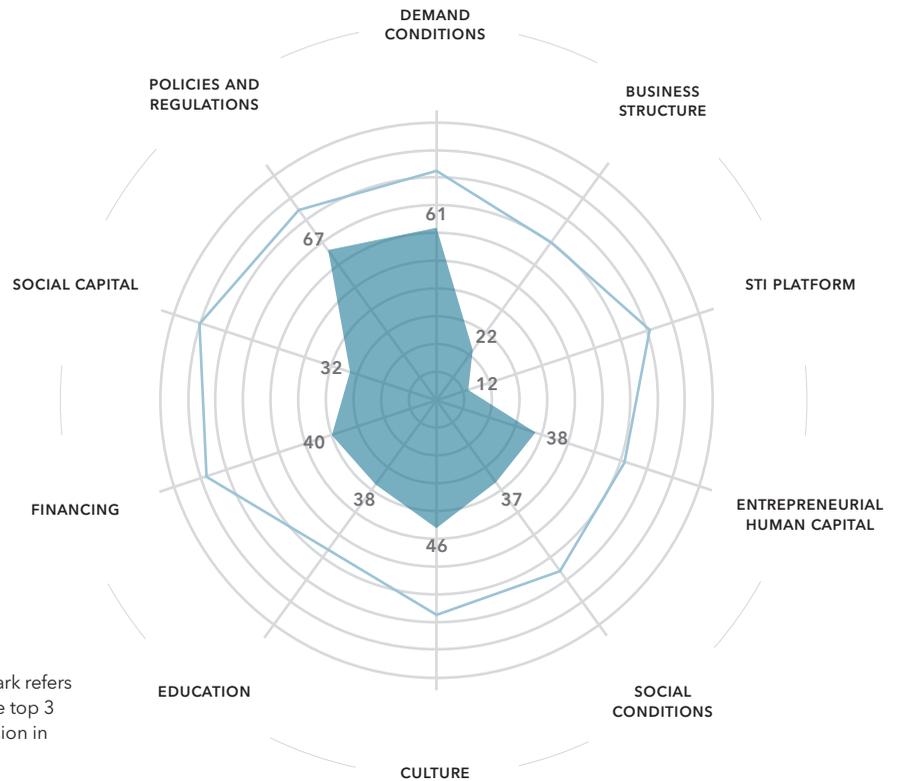
35,62

IDE
ranking

36°

- Chile
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** entrepreneurship policies and regulations stand out as its main strength. The sustained government efforts to support dynamic entrepreneurship were accompanied by the country's favorable regulations for opening businesses and doing business overall. Additionally, favorable demand conditions are strong points, especially due to the level of sophistication and the price advantages it offers to satisfy external markets.

⊗ **Improvement opportunities:** neither the STI platform nor the business structure favors the emergence of innovative companies and the circulation of innovative ideas. Low R+D efforts and a limited scientific and technological production coexist with a business structure focused on traditional sectors, and only weakly oriented towards innovation. On the other hand, when it comes to turning projects into business ventures, social capital is weak, which forces entrepreneurs and support institutions to work harder to build contact networks. In addition, private financing options do not abound. Finally, the entrepreneurial human capital base can also be improved in terms of the level of ambition, global vision and appetite for risk. Being a

pioneer country in attracting entrepreneurs from abroad through Start Up Chile does not exempt the country from the need to obtain greater entrepreneurial support from the education system. To this end, the country can expand the population that has university training and advance entrepreneurial education in schools.

Strategic actions:

- » Strengthen efforts in science and technology, in terms of both investment levels and institutional capacity-building, aiming at solving social and business challenges.
- » Jointly articulate science and technology policies with entrepreneurial and productive development policies, opening ways for open innovation platforms where companies, scientific institutions, academia and entrepreneurs come together.
- Multiply the number of social capital spaces, beyond the work that incubators and accelerators do, so that entrepreneurs have places to meet and build trust more openly.
- Promote entrepreneurial education, especially in the initial and secondary levels.

Colombia

2019

GDP per capita
PPP (US\$)

14.999

GDP growth rate
2017/18

2,66 %



Population
(Millions habitants)

50 M

IDE value

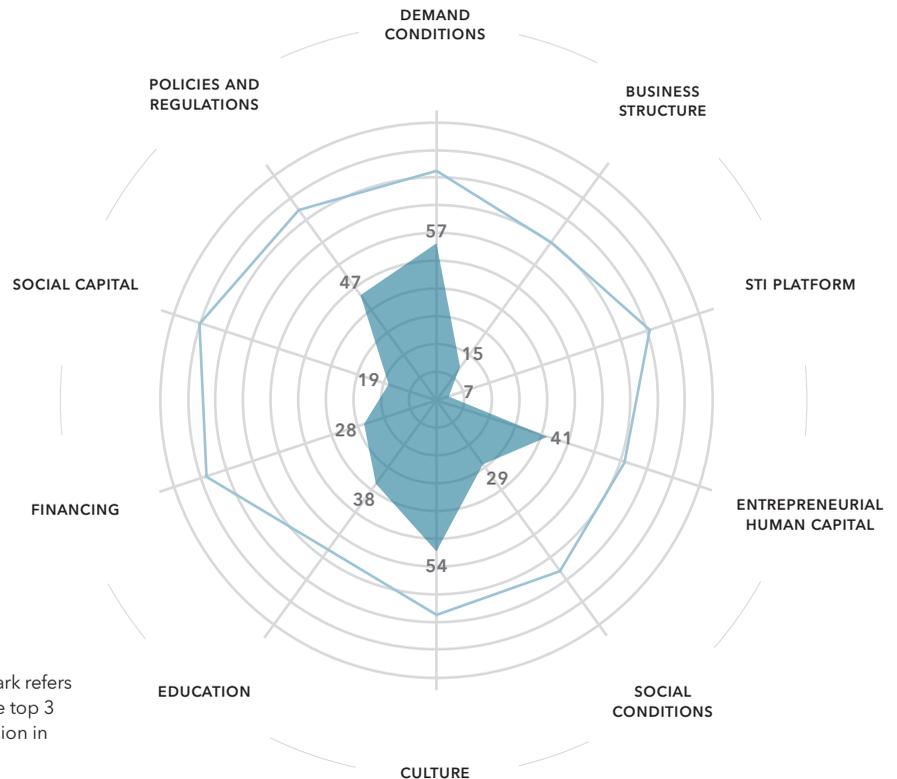
28,67

IDE
ranking

52°

■ Colombia
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions and culture are the dimensions that stand out, although they do not rank high enough to be considered strengths. In the first place, price advantages could be capitalized by entrepreneurs who can satisfy international markets. In second place, the social value placed on entrepreneurs positively contributes to the entrepreneurship culture.

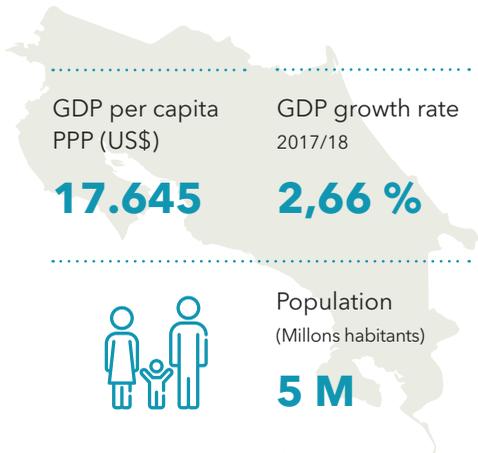
✗ **Improvement opportunities:** The STI platform and the business structure limit the emergence of powerful and innovative ideas and proposals. Furthermore, the lack of social capital to build networks and the shortage of funding are also a setback to put ventures in motion. Additionally, entrepreneurial human capital is conditioned by the fragile social conditions of families, that narrows possibilities for the young population to develop capacities and resources. The low access to higher education and the scarce introduction of entrepreneurship education in primary and secondary levels, also affect the accumulation of entrepreneurial skills among the population.

Strategic actions:

- » Strengthen the educational system, especially by facilitating access to higher education and by fostering entrepreneurship education in primary and secondary levels.
- » Work in tandem on science and technology and entrepreneurship and production development policies, advancing towards open innovation platforms where businesses, and institutions can come together.
- » Strengthen the social capital base, giving special importance to the entrepreneur contact network and to its connection with the ecosystem's organizations. Part of the challenge includes building an institutional platform that can grant stable and comprehensive support.
- » Develop a strategy that allows for long term sustained efforts to create an offer of public-private financing options that can cover the different stages of the entrepreneurship process.

Costa Rica

2019

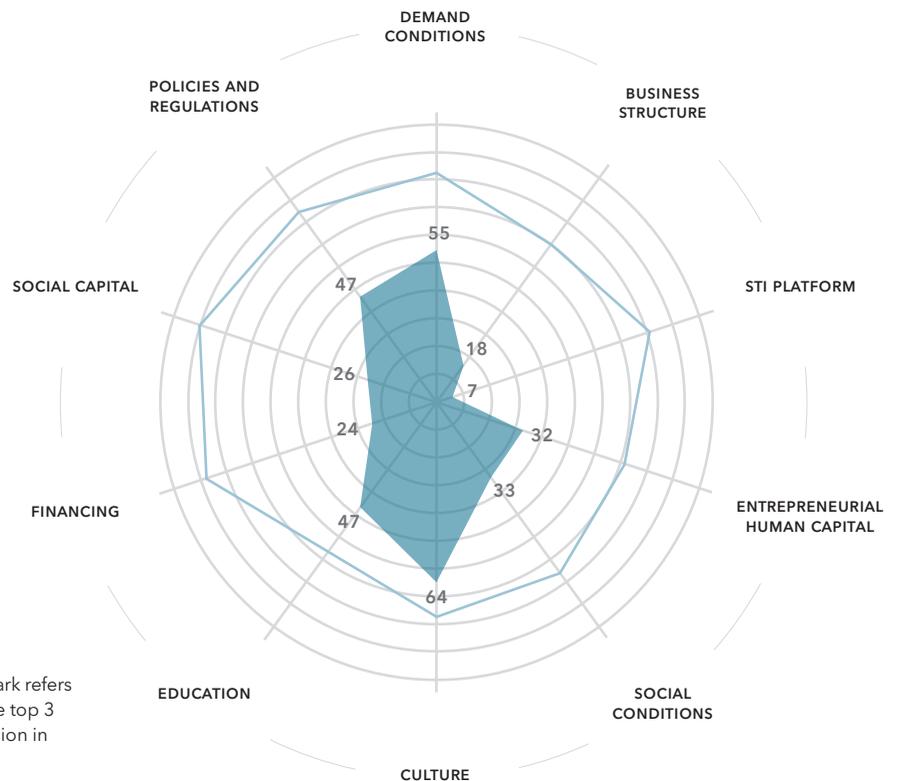


IDE value **30,47**

IDE ranking **46°**

■ Costa Rica
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths and Favorable aspects:** culture constitutes its main strength due to the important role played by the media in the promotion of entrepreneurship by sharing inspiring entrepreneurship cases. Demand conditions are also a favorable aspect, although not high enough to be considered a strong point.

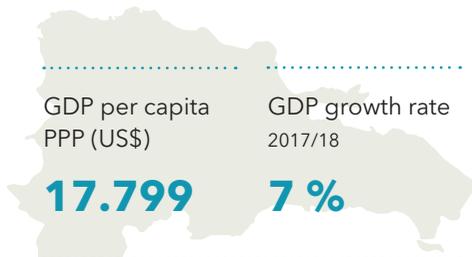
✘ **Improvement opportunities:** the STI platform and the business structure should contribute on a much bigger level to the creation of opportunities for innovative ventures. In particular, R+D efforts among firms and the generation of new knowledge should increase. Furthermore, the business structure is heterogeneous and not sufficiently competitive which also affects the emergence of powerful and innovative ideas. Other weaknesses refer to the social capital, a key factor to build networks, and financing options which are scarce, especially at the initial stages of development. Both dimensions would help more projects to get underway and grow. Finally, entrepreneurial human

capital base should be broadened, particularly for those ambitious entrepreneurs with growth prospects. The social conditions of families limit to a certain extent this entrepreneurial human capital base.

Strategic actions:

- » Foster the development of science and technology skills, in relation to greater research and development efforts on behalf of businesses, including open innovation strategies.
- » Encourage innovative triple impact businesses with a positive effect on social inclusion and productive development.
- » Multiply the social capital channels, as well as strengthen the efforts of incubators and accelerators, so that entrepreneurs can have meeting platforms and a more open trust building environment.
- » Develop programs that strengthen the vision and ambition of entrepreneurship education initiatives.

Dominican Republic



Population (Millions habitants)
11 M

IDE value

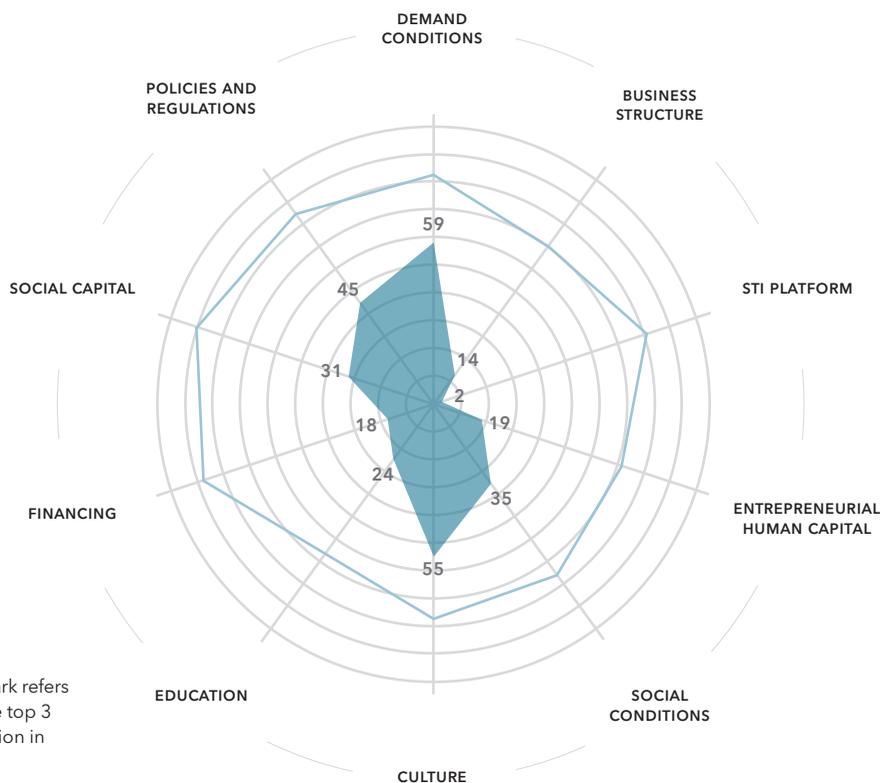
22,22

IDE ranking

58°

- Dominican Republic
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions due to a recent economic boost and the price advantages it offers to satisfy external markets. In terms of culture, the media play an important part in promoting entrepreneurship and contributing to strengthening the positive image of entrepreneurs in society.

✗ **Improvement opportunities:** are many and varied. In terms of those dimensions that affect the emergence of opportunities the STI platform and the business structure do not contribute to the emergence of innovative and dynamic business ideas. Additionally, the entrepreneurial human capital presents some weaknesses, especially the low rate of ambitious entrepreneurs. The social conditions of families and the educational system also contribute to this scenario. In particular the educational system features low expenditure levels as well as low access to higher education and the need to advance on entrepreneurship education in primary and secondary levels. Furthermore, the lack of funding options for the different stages of entrepreneurship and the narrow

social capital limit the possibilities of turning projects into new business ventures.

Strategic actions:

- » Given the generalized nature of the improvement opportunities, long term investment efforts from an integral and systemic perspective are required to promote the development of dynamic entrepreneurship.
- » In the short term, new venture creation could be made easier by favoring the development of specific financing for entrepreneurs, combined with technical backing and the development of a contact network on both a national and international level.
- » Investing significant efforts to expand the entrepreneurial human capital pool and strengthening its growth perspectives is a must. A long term focus on education and a short term focus on attracting entrepreneurs and fostering entrepreneurship in underrepresented segments should be implemented to these effects.

Ecuador

2019

GDP per capita PPP (US\$)

11.714

GDP growth rate 2017/18

1,38 %



Population (Millions habitants)

17 M

IDE value

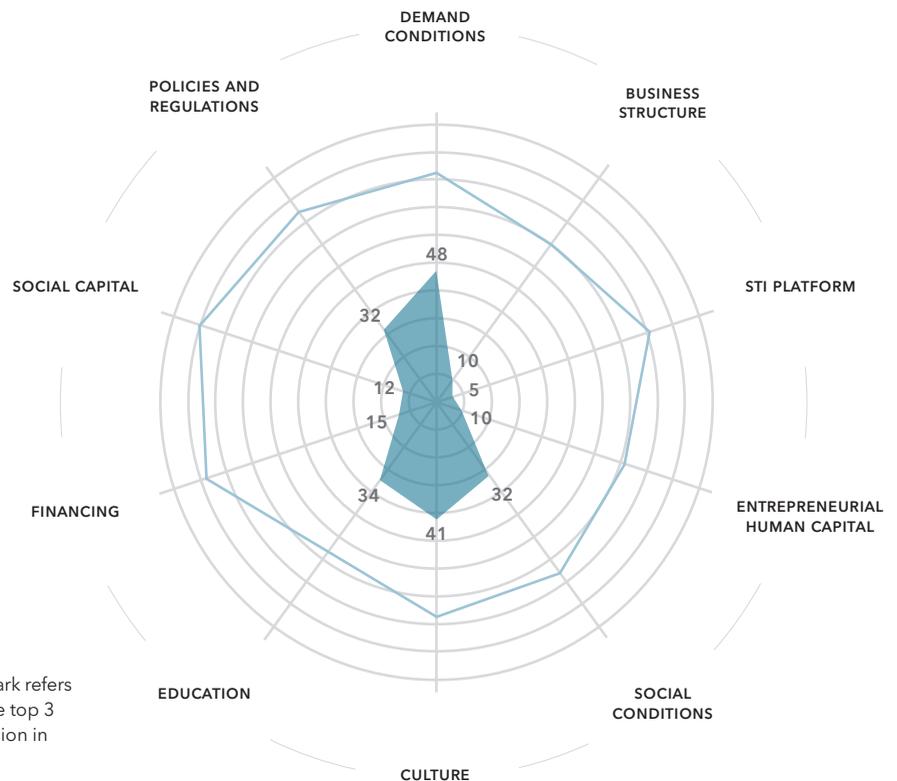
19,06

IDE ranking

61°

■ Ecuador
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions and culture are the dimensions that stand out most, although they do not rank high enough to be considered strengths. In the first case, price advantages could be capitalized by entrepreneurs to satisfy international markets. In second place, the media positively contributes to the entrepreneurial culture.

⊗ **Improvement opportunities:** are many and diverse. First, the business structure and the STI platform should contribute to the emergence of innovative proposals with growth potential. Additionally, social capital should contribute to the conversion of projects into businesses, but because of their limitations, networks are confined to entrepreneurs' close-knit circles. This hinders access to advice and resources in an environment that is also characterized by the limited development of financing options for the different entrepreneurial stages, and of the policies and regulations that favor entrepreneurship. The entrepreneurial human capital also shows weaknesses, and

features a low rate of entrepreneurs with growth prospects and ambitions. The social conditions of families and the educational system do not contribute to this scenario.

Strategic actions:

- » Given the generalized nature of the improvement opportunities, a stronger commitment on behalf of the government is required to foster long term policies that promote entrepreneurship with an integral and systemic approach.
- » In the short term, policies are needed to make entrepreneurship easier by favoring the development of specific financing for entrepreneurs, combined with technical backing and the development of a contact network on both a national and international level.
- » Boost science and technology efforts, both on an investment level as well as in terms of building institutional capacity, based on an agenda that focuses on solving social and business problems.

El Salvador

2019



Population (Millions habitants)
6 M

IDE value

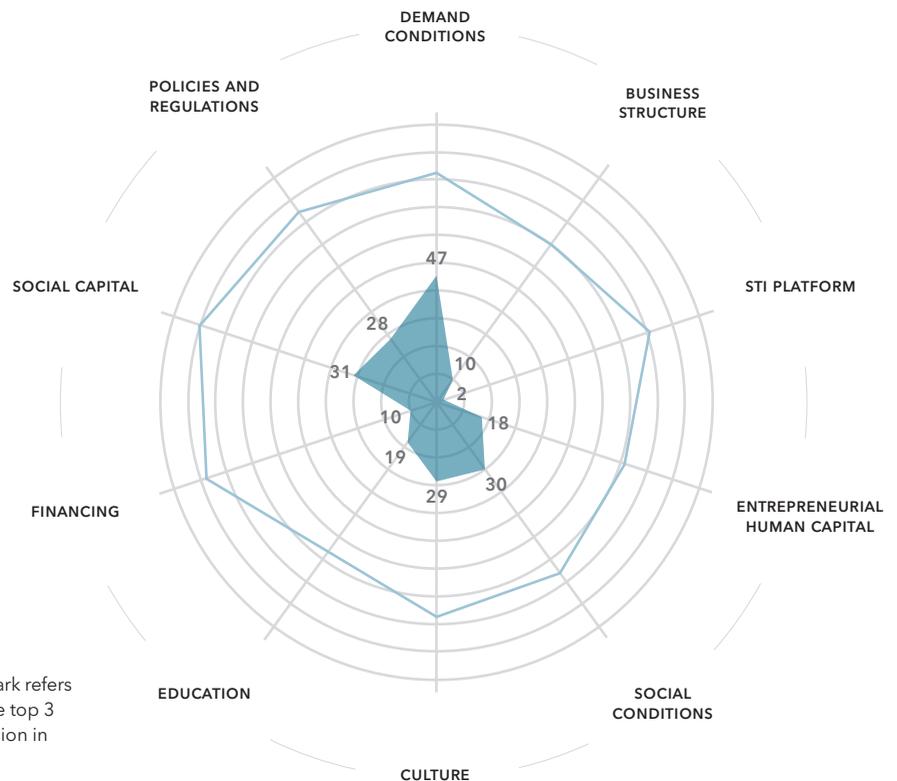
IDE ranking

17,58

62°

■ El Salvador
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** the country's price advantages could be leveraged by entrepreneurs to satisfy external markets.

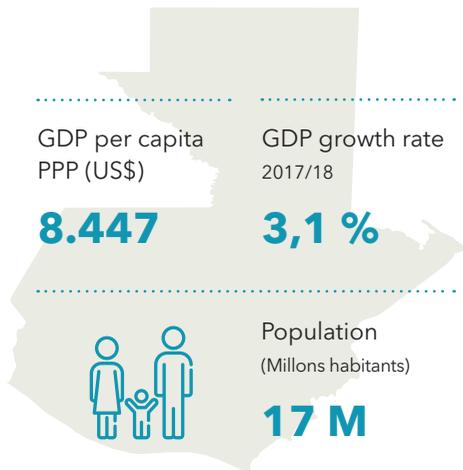
⊗ **Improvement opportunities:** are many and varied. In the first place, the level of development of the STI platform and the business structure profile do not create a conducive environment for the emergence of opportunities for innovative ventures. Additionally, the entrepreneurial human capital is very limited and its formative aspects, such as education, culture and social conditions of families, do not favor the emergence of new dynamic entrepreneurs. Finally, those that wish to turn their projects into businesses face many difficulties. Given the weak social capital conditions, they face obstacles to access valuable contacts outside of their close-knit circle, and financing options are limited. Policies and regulations have received insufficient attention to date.

Strategic actions:

- » Given the generalized nature of the improvement opportunities, significant and long term efforts must be made to implement an integral and systemic plan to foster dynamic entrepreneurship.
- » In the short term, it would be very convenient to make entrepreneurship easier by favoring the development of specific financing for entrepreneurs combined with technical backing and the development of a contact network on both a national and international level. Additionally, strengthening the entrepreneurial human capital pool with growth prospects is an urgent task.

Guatemala

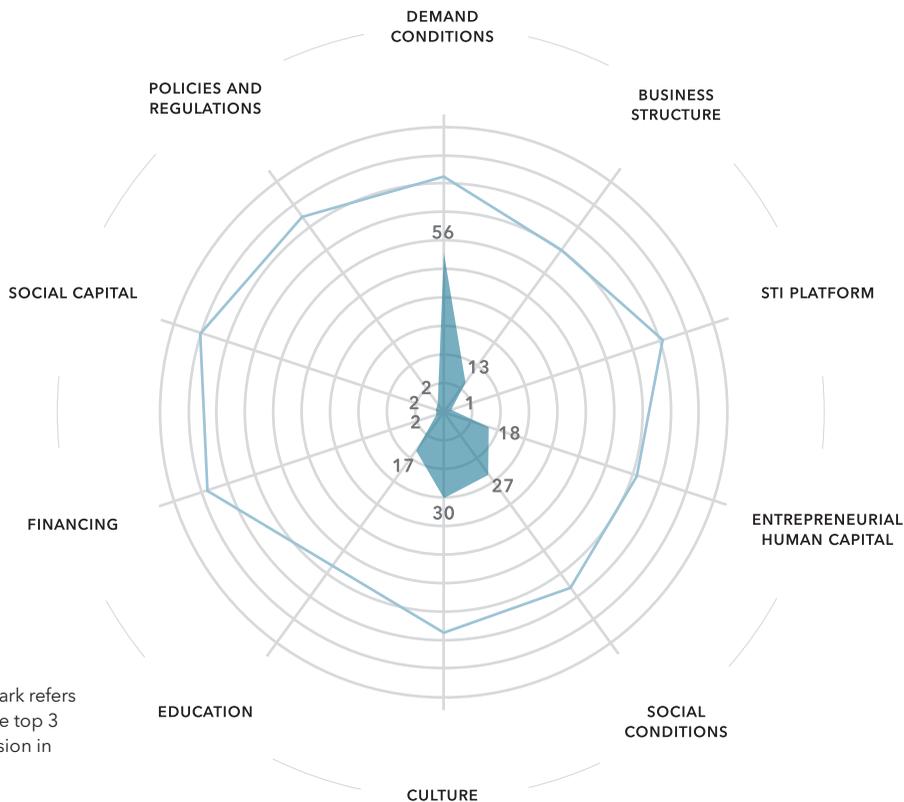
2019



IDE value	IDE ranking
1,98	64°

■ Guatemala
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



⊗ **Improvement opportunities:** practically all of the index dimensions require improvement. The main weaknesses are related to aspects that foster the consolidation of projects into new venture, such as the social capital to build networks, financing, and policies and regulations related to entrepreneurship. Additionally, dimensions that have an impact on the number of opportunities for dynamic and innovative opportunities, such as the STI platform and business structure are also at a disadvantage. In this context, the very small pool of existing entrepreneurs face very adverse conditions to carry out their projects.

existing entrepreneurs, that foster the development of specific funding options for them, and that combine with technical support as well as with the development of contact networks on both a national and international scale.

Strategic actions:

- » Due to the generalized nature of the improvement opportunities, a long term strategy that operates on an integral and systemic level is needed.
- » To begin, in the short term, the country requires policies that can make entrepreneurship easier for

Mexico

2019

GDP per capita
PPP (US\$)

19.969

GDP growth rate
2017/18

2 %



Population
(Millions habitants)

126 M

IDE value

32,01

IDE
ranking

42°

- Mexico
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** include demand conditions and policies and regulations. In the first case, they are explained by the size of the market and the price advantages Mexico offers to satisfy external markets. In addition, the government has been proactive in developing entrepreneurship support programs and defining a regulatory framework that encourages business.

⊗ **Improvement opportunities:** the entrepreneurial human capital shows weaknesses, mainly due to a low rate of ambitious entrepreneurs and a low tolerance to risk in society. There are also limitations in terms of culture, especially due to the low social value of entrepreneurs added to the limited visibility that the media give to role models. The educational system is also lagging, and entrepreneurship education is not sufficiently present in the primary and secondary levels. Also, weaknesses in the STI platform and business structure do not serve to create a fertile environment to

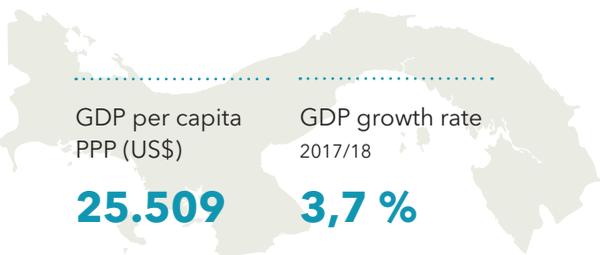
identify opportunities and develop high-value, high-potential innovative proposals.

Strategic actions:

- » Invest significant efforts in strengthening the entrepreneurial human capital, with a long-term focus on education and culture and a short-term focus on bringing in entrepreneurs from other ecosystems and encouraging youth entrepreneurship.
- » Promote spaces that support the outreach and visibility of inspiring entrepreneurs to encourage a higher social regard for entrepreneurship.
- » Work in tandem on science and technology policies with entrepreneurial and productive development policies, advancing towards open innovation platforms where businesses, institutions and entrepreneurs can come together.

Panama

2019



GDP per capita PPP (US\$)

25.509

GDP growth rate 2017/18

3,7 %



Population (Millions habitants)

4 M

IDE value

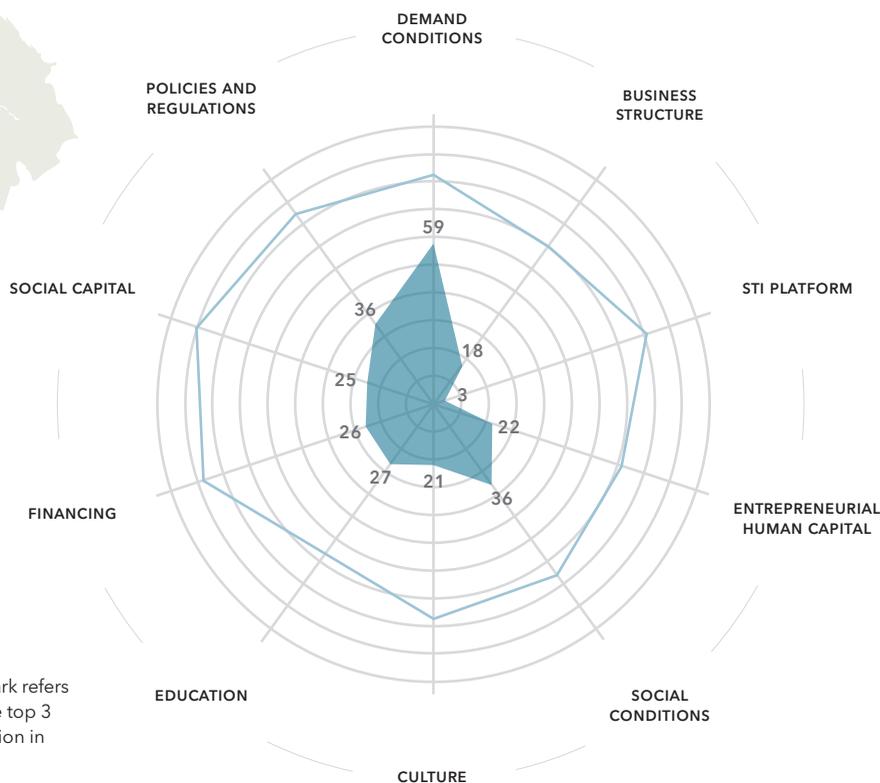
22,85

IDE ranking

57°

- Panama
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions, which are especially favorable in terms of international demands due to the competitive prices of the goods produced in the country.

⊗ **Opportunities for improvement:** all dimensions show room for improvement, especially those that affect the opportunity space. The STI platform and business structure are not playing a positive role for high-value innovative proposals to emerge, and there is also a lack of entrepreneurial human capital able to create high-value ambitious proposals with a global perspective. This occurs within a cultural context that does not give value to entrepreneurs in society, and that features little media coverage on related topics. Furthermore, the business ventures that do emerge are set back due to the small social capital for networking, the lack of funding, and the regulatory framework. Although the government has implemented some specific programs to tackle some of the deficiencies, these initiatives do not have a significant

presence on the political agenda, and they do not cover the breadth of the challenges that must be faced.

Strategic actions:

- » Advance towards the implementation of an integral systemic strategy for the development of dynamic and innovative entrepreneurship.
- » Capitalize on the privileged position and role that Panama has on a logistic level and on the entrepreneurship opportunities that can arise from it by fostering an open collaboration between large companies, startups and academic institutions.
- » Invest in a science, technology and education strategy that can develop institutional and human capacities that are favorable for entrepreneurship and innovation.

Peru

2019

GDP per capita
PPP (US\$)

14.393

GDP growth rate
2017/18

4 %



Population
(Millions habitants)

32 M

IDE value

26,23

IDE
ranking

55°

■ Peru
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** demand conditions stand out, as well as culture, and to a lesser degree, policies and regulations. In the first place, the combination of favorable aspects in its economy with price advantages to serve external demands brings about positive results. Culture, especially in terms of the media and the outreach of entrepreneurship role models, plays an important part. Finally, the government has been proactive in the development of entrepreneurship support programs and in defining a regulatory framework that favors business.

⊗ **Improvement opportunities:** are present in many of the dimensions. The most important are in the STI platform and the business structure, which are not favoring the emergence of high-value, innovative proposals with high growth prospects. Added to this, the entrepreneurial human capital shows weaknesses due to its low number of ambitious entrepreneurs. The social conditions and the educational system do not favor the emergence of this motivated, growth-oriented entrepreneurial human capital. Lastly, weaknesses in social capital limit the

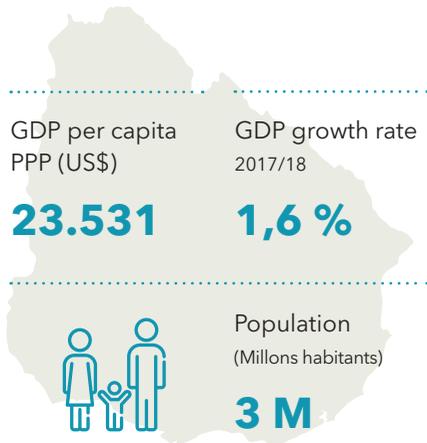
development of networks to access advice and resources. This is highlighted when it comes to access financing options, given the limited offer especially of specific sources of funding for businesses in their initial phases.

Strategic actions:

- » Strengthen science and technology efforts, both in terms of investment as in building institutional capacities, with an outline of challenges designed to resolve social and business problems.
- » Work in tandem on science and technology policies with entrepreneurial and productive development policies, advancing towards open innovation platforms where businesses, institutions and entrepreneurs can come together.
- » Strengthen the active entrepreneurial human capital, with a long-term focus on education and a short-term focus on bringing in entrepreneurs from other ecosystems and encouraging youth entrepreneurship.
- » Develop a financing chain that covers all the different entrepreneurship stages.

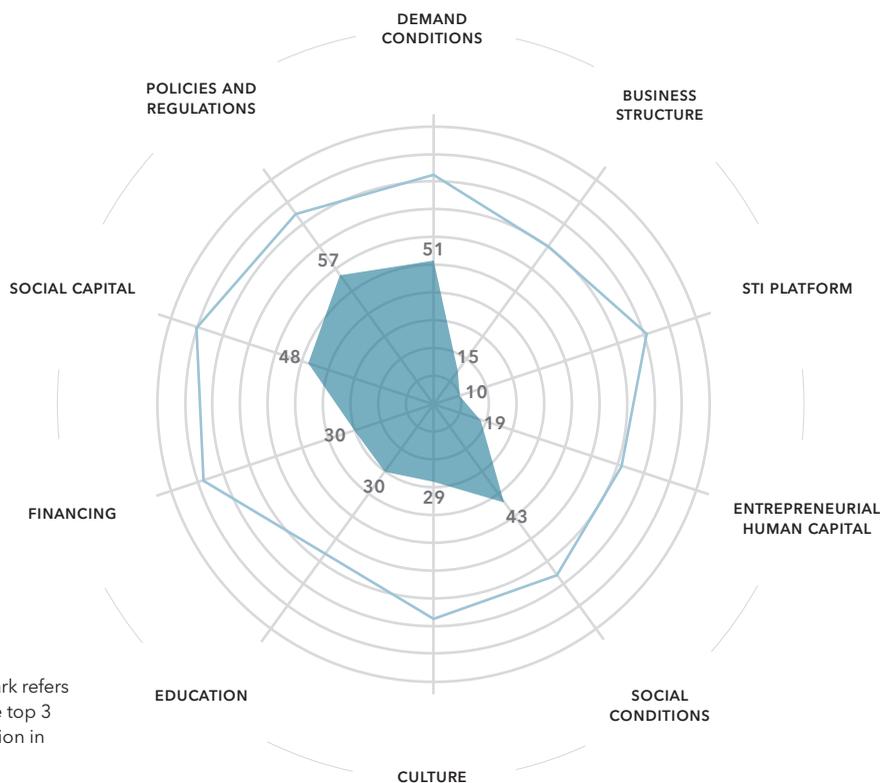
Uruguay

2019



■ Uruguay
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** policies and regulations stand out, with scores that are slightly below those required to be considered a strength. The regulatory framework facilitates business and the government has been very proactive in the development of entrepreneurship support programs.

✗ **Improvement opportunities:** the most important areas to work on are those that influence the emergence of opportunities and high-value, innovative proposals, such as the STI platform and the business structure. The R+D efforts are limited, as are the bridges between the academic sector and businesses that in turn, are lacking in innovation and competitiveness. The same applies to the entrepreneurial human capital, which is characterized by its low growth orientation. The advancement of entrepreneurship education in primary and secondary levels, and a cultural change that elevates the social value of entrepreneurs would help to broaden the entrepreneurial human capital in the future. Finally,

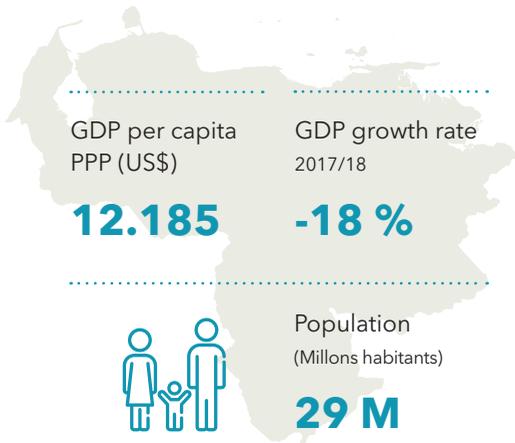
there is also a long path ahead in terms of developing financing options for entrepreneurs.

Strategic actions:

- » Strengthen science, technology and innovation policies that foster institutional capacity-building, increase R+D efforts related to social and business needs and challenges, and encourage ventures that serve this purpose.
- » Increase entrepreneurial vocations by stimulating the social value of company founders and by implementing entrepreneurship education at primary and secondary levels.
- » Develop programs designed to increase vision and ambition and include them in entrepreneurial education initiatives as a complement to the efforts invested in strengthening the entrepreneurial human capital.
- » Develop a financing chain that covers the different phases of the entrepreneurial process through local initiatives and alliances with regional players.

Venezuela, RB

2019



IDE value	IDE ranking
11,66	63°

■ Venezuela, RB
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



⊗ **Improvement opportunities:** there are a great number of areas that require significant advances to modify the current systemic conditions for entrepreneurship. The STI platform and the business structure define an environment that is not sufficiently fertile for the emergence of opportunities that could pave the way for dynamic and innovative businesses. Other aspects to improve include those that limit the conversion of projects into new businesses, such as the social capital to create networks, financing, and entrepreneurship policies and regulations. Finally, there are also significant weaknesses in the entrepreneurial human capital with growth prospects. Social conditions of families do not favor the access that youth have to the opportunities that develop growth-oriented entrepreneurship vocations and competences.

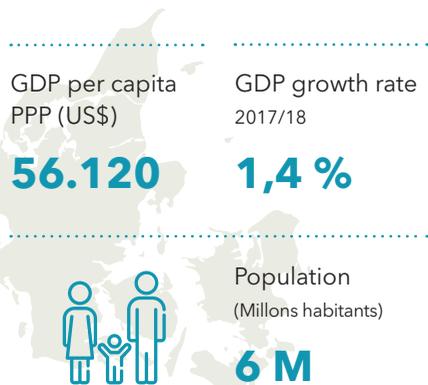
Strategic actions:

- » Given the generalized nature of the improvement opportunities, a long term, comprehensive and systemic strategy must be implemented.
- » With that in mind, the implementation of policies and regulations that support entrepreneurship and entrepreneurial development must be especially attended to, and must also be articulated with science, technology and industrial development policies.
- » In that context, financial and technical support for those who have promising entrepreneurship projects is key, as are the initiatives to broaden and retain the country's pool of entrepreneurs.

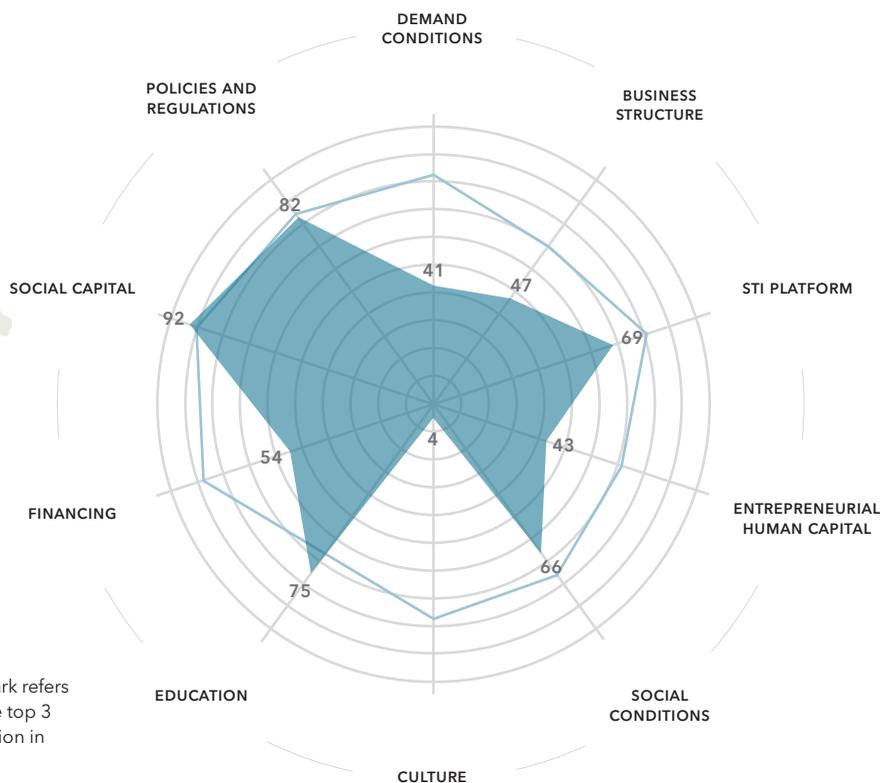
NORDIC COUNTRIES

Denmark

2019



The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



Strengths and favorable aspects: In terms of setting ventures into motion, social capital favors the development of networks outside the close-knit circle of entrepreneurs, granting access to advice and resources. Additionally, regulations and policies, as well as entrepreneurship support programs rank very high, while financing, though not high enough to be considered a strength, can be considered a favorable aspect. The STI platform contributes to the emergence of high-value, innovative proposals due to the significant public and private investment in R+D, and to the strong relationship between the scientific and entrepreneurial sectors. Furthermore, the social conditions of families, access to a high quality educational system, and advancements in entrepreneurship education define very favorable conditions for the emergence of dynamic ventures, although this does not express itself in the entrepreneurial human capital to the degree that it can be considered a strength.

Improvement opportunities: Denmark could grow significantly and belong to the ranking's top 20 countries

if it achieved a greater systemic balance, with a special emphasis on the strengthening of the entrepreneurial culture and of the entrepreneurial human capital. For example, the media could play a more active role in promoting success cases that are motivating and improve the social value of entrepreneurs. Furthermore, it is necessary to implement strategies that develop and strengthen the growth perspectives of entrepreneurs. Finally, it is important to increase efforts to develop financing options, and to consider that competing on an international level could be limited by the high price of locally produced goods.

Strategic actions:

- » Capitalize on the favorable social conditions of families and the educational system to develop strategies to strengthen the growth perspectives of entrepreneurs.
- » Foster a more active role in the media and in social spaces that promote entrepreneurial success cases.
- » Strengthen public initiatives to facilitate access to funding, especially to venture capital.

Finland

2019

GDP per capita
PPP (US\$)

48.636

GDP growth rate
2017/18

2,3 %



Population
(Millions habitants)

6 M

IDE value

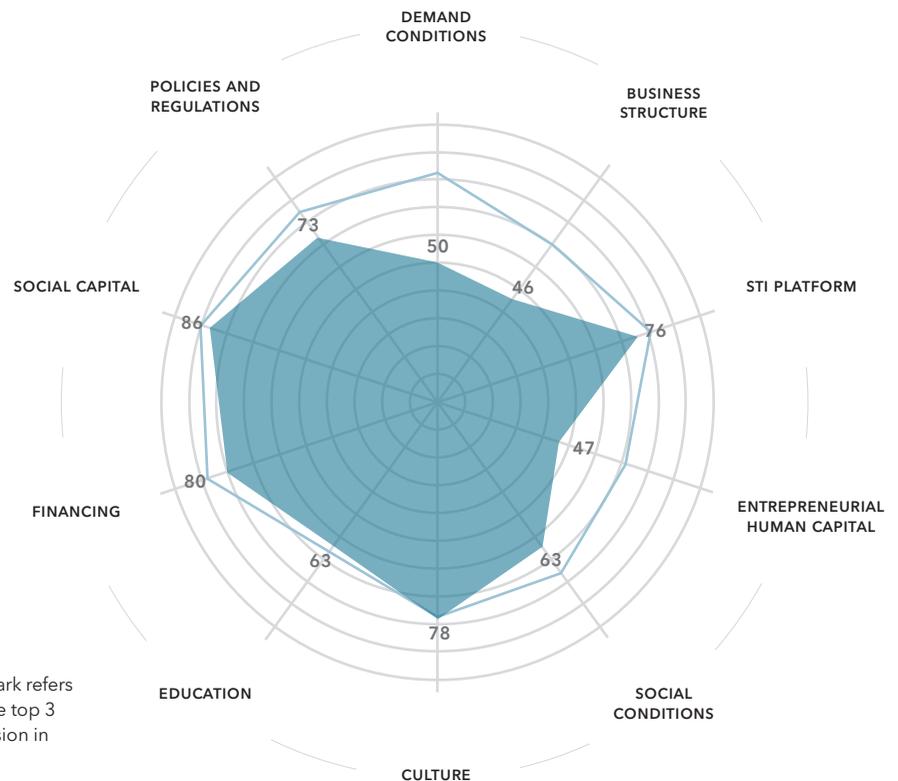
64,60

IDE
ranking

2°

■ Finland
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** featuring a high systemic balance, Finland shows strengths in most of the dimensions. Those that most stand out include financing and social capital. Additionally, the regulatory environment is friendly and the government plays an active role in entrepreneurship support programs. Furthermore, some entrepreneurial human capital formative aspects, that is to say social conditions, the educational system and culture, are also strong. The STI platform also stands out, and R+D efforts, the generation of knowledge, and the dialogue between the scientific and business sectors pave favorable conditions for the creation of businesses based on science and technology.

⊗ **Improvement opportunities:** In order to continue growing and consolidating its position in the ranking, it is necessary to understand why there is not a stronger entrepreneurial human capital despite the important role of education and culture. Aspects that should be worked

on to this regard include the level of ambition and the tolerance of uncertainty. On the other hand, the business structure displays limitations in its competitiveness, despite showing strengths in terms of clusters and articulation. It could be strengthened by fostering the circulation and emergence of high-value, innovative ideas and proposals.

Strategic actions:

- » Capitalize on the favorable conditions observed in the dimensions of education and culture to foster the development of ambitious entrepreneurs with a global outlook and capacity to tolerate uncertainty.
- » Promote entrepreneurial competitiveness through open innovation programs and corporate venturing that connect large companies with startups.

Norway

2019

GDP per capita PPP (US\$)

63.756

GDP growth rate 2017/18

1,45 %



Population (Millions habitants)

5 M

IDE value

52,86

IDE ranking

17°

- Norway
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** are especially observed in the country's social conditions, culture and, to a lesser degree, in education. The income levels of families grant the population access to opportunities for development and participation in entrepreneurship activities. Added to this, the vast resources assigned to education explains the high educational level. Furthermore, motivation is favored by a culture that encourages the outreach of entrepreneurial role models and the high value placed on entrepreneurship. Although they do not rank high enough to be considered strengths, other dimensions that stand out include social capital, which grants access to networks for advice and resources, and financing options, especially loans.

✘ **Improvement opportunities:** mostly center on demand conditions, which is a result of the momentum of its market, and of the price disadvantages of its products in the face of foreign demand. There are also improvement opportunities in the business structure

and, to a lesser degree, in the entrepreneurial human capital, especially in the number of ambitious ventures.

Strategic actions:

- » Capitalize on the favorable aspects observed in the education and culture dimensions to foster the formative aspects of ambitious entrepreneurs with global outlook and networking abilities.
- » Strengthen the export incentives of young businesses and encourage activities to promote internationalization so as to broaden the opportunity space.

Sweden

2019

GDP per capita
PPP (US\$)

53.120

GDP growth rate
2017/18

2,4 %



Population
(Millions habitants)

10 M

IDE value

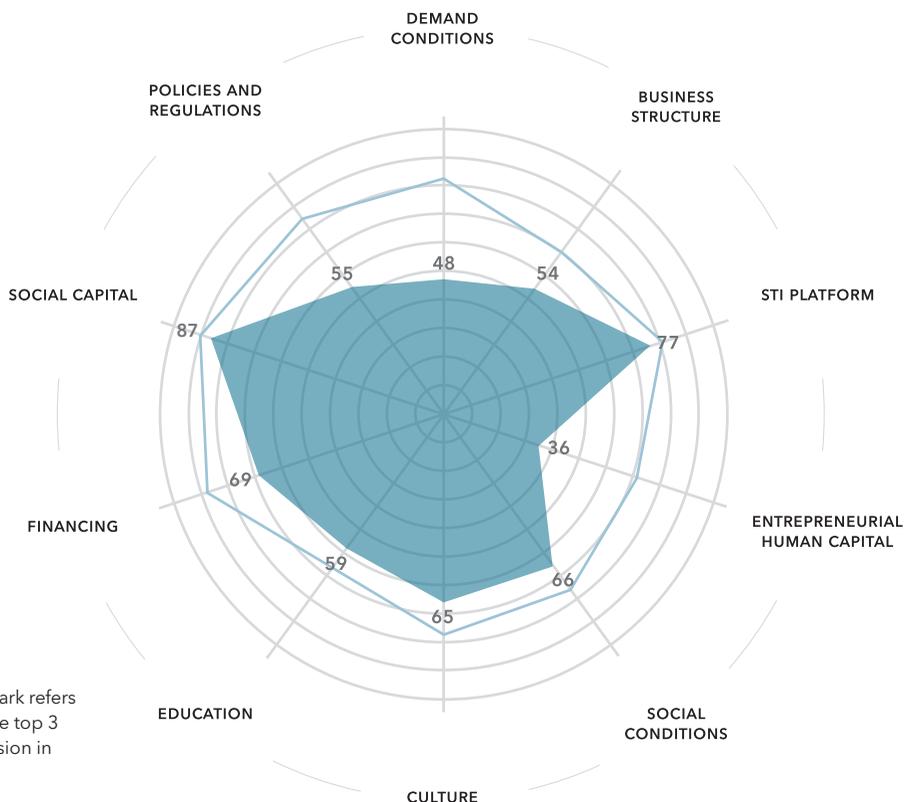
59,99

IDE
ranking

6°

- Sweden
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



- ✓ **Strengths:** presenting a high level of systemic balance, most of the dimensions constitute strong points. The two most important are social capital, which grants access to valuable contact networks, and financing options. Additionally, the STI platform shows significant R+D efforts, a high generation of knowledge, and a strong dialogue between the academic and the business sectors, which define potentially favorable conditions for scientific entrepreneurship. Lastly, aspects that promote the emergence of entrepreneurs, such as social conditions and culture, also stand out.

Improvement opportunities: the previously detailed conditions could be further capitalized through the strengthening of the entrepreneurial human capital, in which the level of ambition is an aspect to continue working on. Additionally, there is also room for improvement in terms of entrepreneurship education within the educational system. Also, price disadvantages

in relation to its competitors affect international insertion and therefore, the demand conditions.

Strategic actions:

- » Strengthen the entrepreneurial human capital both by improving the capacities of potential and existing entrepreneurs, as well as by leveraging Sweden's appeal to attract entrepreneurs from other latitudes.
- » Develop programs designed to increase vision and ambition and include them in entrepreneurial education initiatives as a complement to the efforts invested in strengthening the entrepreneurial human capital.

NORTH AMERICA

Canada

2019

GDP per capita
PPP (US\$)

47.871

GDP growth rate
2017/18

1,9 %



Population
(Millions habitants)

37 M

IDE value

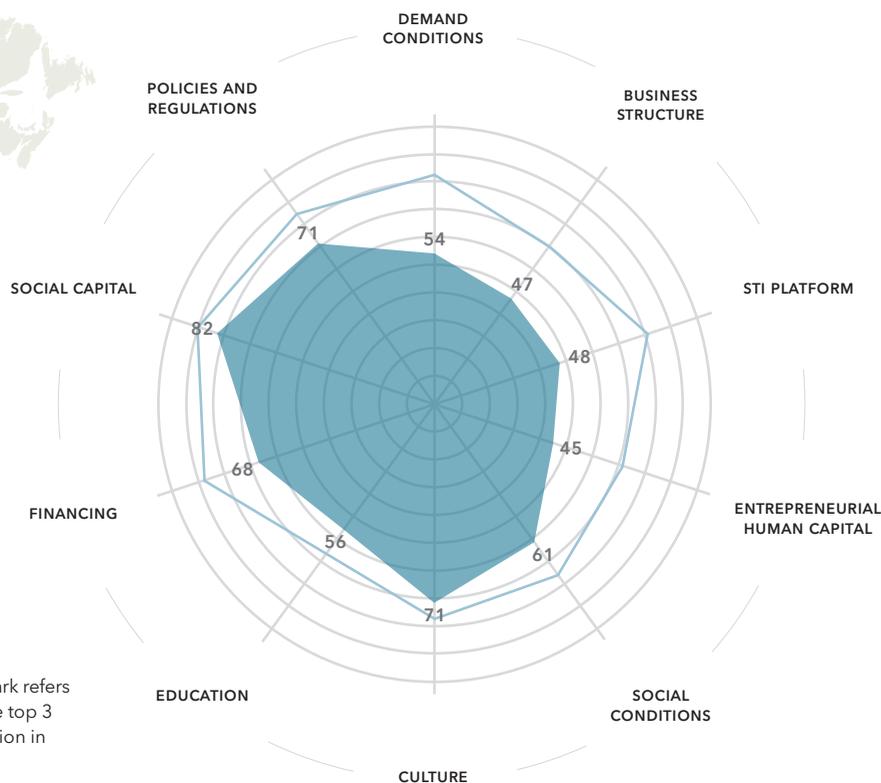
59,26

IDE
ranking

9°

- Canada
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** with a high systemic balance over the different index dimensions, those that stand out include aspects that foster consolidation of projects, and the emergence of entrepreneurs. The social capital favors support networks to access resources and advice, in a context of horizontality and social equality. Additionally, there are funding options available for the different stages of the entrepreneurship process. Also, the government contributes to a positive entrepreneurship environment with a favorable regulatory framework and a set of support programs. Furthermore, the development of entrepreneurs is favored by the social positive conditions of families who can offer their offspring access to a good education and the opportunity to progress. Finally, the culture promotes inspiring success cases and the media play an active role to these effects.

✘ **Improvement opportunities:** In order for Canada to compete with countries that are higher up on the ranking, businesses and the STI platform should make a greater

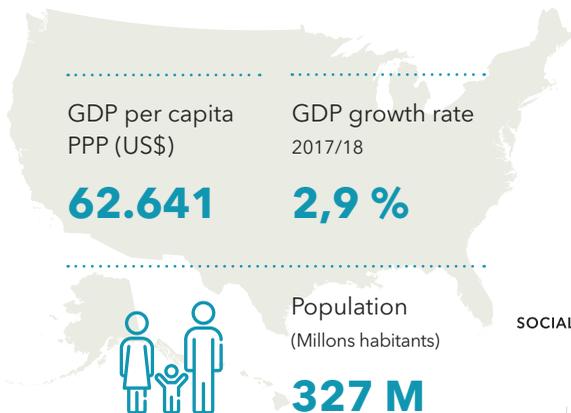
contribution to the emergence of innovative opportunities and there should be a broader active entrepreneurial human capital to leverage these opportunities.

Strategic actions:

- » Strengthen the R+D efforts of businesses, including open innovation strategies that capitalize on the good existing relations between businesses and academic institutions.
- » Double the efforts to broaden the active entrepreneurial human capital. Canada could capitalize on the lessons of its entrepreneurship education and attracting talent programs given that it is a pioneering country in both fields.

United States

2019



IDE value	IDE ranking
66,77	1°

■ United States
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** displaying a high systemic balance, most of the dimensions constitute strong points. The two most important are social capital, which allows access to networks with valuable contacts, and financing options, which favors the transit through each of the phases of the entrepreneurial process. Additionally, the STI platform and the business structure contribute to the emergence and circulation of ideas and proposals with innovative value. Finally, the culture encourages entrepreneurship due to the high social value given to entrepreneurs and the media's promotion of inspiring figures.

✘ **Improvement opportunities:** in order to sustain its leadership position, the United States should pay special attention to those dimensions in which it ranks lower than those countries that come immediately after it on the index, Finland and the Netherlands. Both of these countries are more active in terms of their entrepreneurship policies and support programs,

and give them a more important place in their list of priorities. They also invest more in the educational system, and the Netherlands shows the highest investment in entrepreneurship education on all levels. On the other hand, to a lesser degree, there is room to strengthen the entrepreneurial human capital, particularly the presence of ambitious entrepreneurs.

Strategic actions:

- » The United States has been a pioneer in terms of entrepreneurship education and entrepreneurship policies and programs. Reviewing and understanding the current situation regarding both aspects and assigning them a greater strategic role in the public policy agenda appears to be a recommendable path to follow.
- » Grant more importance to entrepreneurship policies on the government agenda.

WESTERN EUROPE

Austria

2019



Population (Millions habitants)
9 M

IDE value

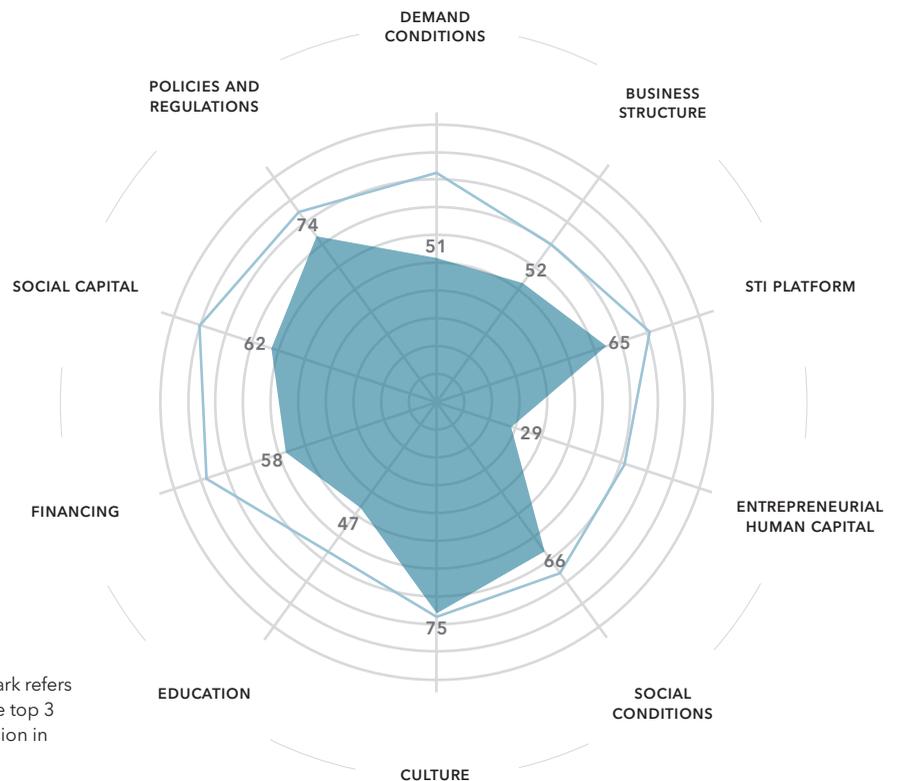
IDE ranking

56,08

11°

- Austria
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Strengths:** STI initiatives and the articulation between R+D institutions and companies create a favorable environment for the unfolding of innovative ideas. Additionally, social and cultural conditions are positive for the emergence of entrepreneurs. For example, income levels of families and social equality encourage access of the population to entrepreneurship possibilities. The media also contributes to the creation of entrepreneurial culture by promoting inspiring success cases. Additionally, government programs to support entrepreneurs and regulatory framework to open and do business facilitate the creation of new ventures, horizontality favors networking, and, to a lesser degree, funding for new businesses is a favorable aspect, although not sufficiently developed in terms of venture capital.

⊗ **Improvement opportunities:** are mainly centered on increasing the strength of the entrepreneurial human capital. The favorable social and cultural conditions are still

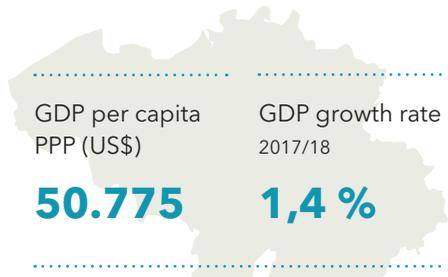
insufficient to ensure that entrepreneurs can ambitiously pursue the full potential of the scenario described above. One aspect to address is the educational system which is not playing the role it is meant to in terms of fostering entrepreneurial vocations and competences.

Strategic actions:

- » Develop a strategy to strengthen the foundations of the entrepreneurial human capital. Attracting entrepreneurs from other ecosystems, stimulating science and technology- based entrepreneurship from the existing STI platform, and promoting female entrepreneurship are some examples that can be taken in this direction.
- » Fostering entrepreneurship education, especially in primary and secondary levels.
- » Giving new and young businesses better access to venture capital.

Belgium

2019



GDP per capita PPP (US\$)

50.775

GDP growth rate 2017/18

1,4 %



Population (Millions habitants)

11 M

IDE value

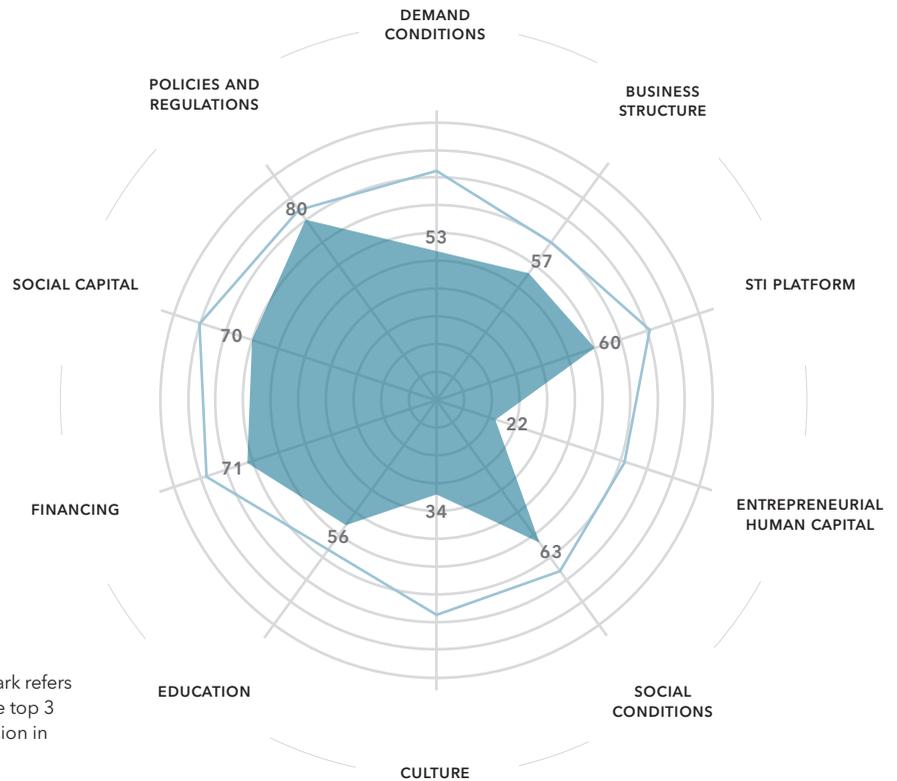
53,50

IDE ranking

14°

- Belgium
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



Strengths: The role of the government and the importance assigned to programs that support entrepreneurship stand out, as well as the existence of very favorable regulations to create companies and do business. Moreover, the social capital encourages networking outside the close circle of entrepreneurs and therefore allows access to advice and resources. Additionally, there are some funding platforms available for startup and scale up phases. In terms of opportunities for the emergence of innovative ideas, the STI platform features significant private and public resources destined to R+D investment and a strong connection between the scientific and entrepreneurship sector. Finally, the level and distribution of income generates favorable social conditions for the emergence of entrepreneurs.

Improvement opportunities: the limited pool of strong entrepreneurial human capital inhibits the possibility of capitalizing on the above mentioned entrepreneurship conditions. The main cause seems to be cultural, as there

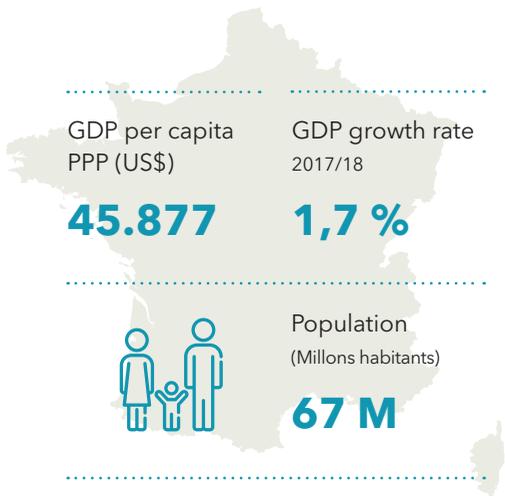
is a low social appreciation of entrepreneurs and the media are not active in promoting entrepreneurship.

Strategic actions:

- » Increase and strengthen the entrepreneurial human capital of Belgians while also capitalizing on Belgium’s position in the European Union to attract entrepreneurs from different countries.
- » Foster the emergence of different entrepreneurial types such as scientific-technological, women, and corporate, to broaden the entrepreneurial human capital spectrum.
- » Promote cultural change to foster a more stimulating entrepreneurship environment.

France

2019



IDE value

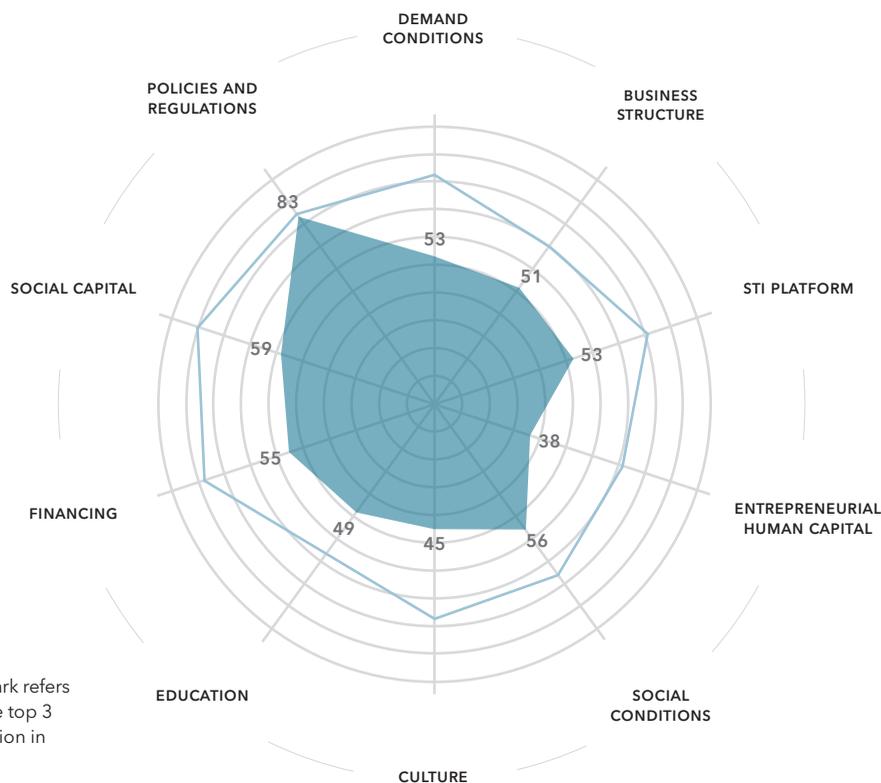
53,21

IDE ranking

16°

- France
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** the most important aspects are related to the public initiatives and programs that support entrepreneurship and a regulatory framework that facilitates business. Although they do not rank high enough to be considered strengths, social capital, which grants access to valuable contact networks, and financing, which helps to go through the different entrepreneurship stages, are also dimensions that stand out.

⊗ **Improvement opportunities:** the biggest limitations are found in the entrepreneurial human capital, especially, due to the absence of ambitious entrepreneurs and the population's negative perception of risk. Both aspects are related to weaknesses found in the promotion of entrepreneurship culture and the scant presence of entrepreneurship education, especially in primary and secondary levels.

Strategic actions:

- » Invest significant efforts to increase the pool of active entrepreneurial human capital, with a long-term focus on entrepreneurship education in primary and secondary levels, and a short-term focus on bringing in European entrepreneurs and encouraging youth entrepreneurship.
- » Promote an increased awareness and outreach of inspiring entrepreneurial cases that serve to encourage a better social consideration of entrepreneurs.

Germany

2019

GDP per capita
PPP (US\$)

54,327

GDP growth rate
2017/18

1,4 %



Population
(Millions habitants)

83 M

IDE value

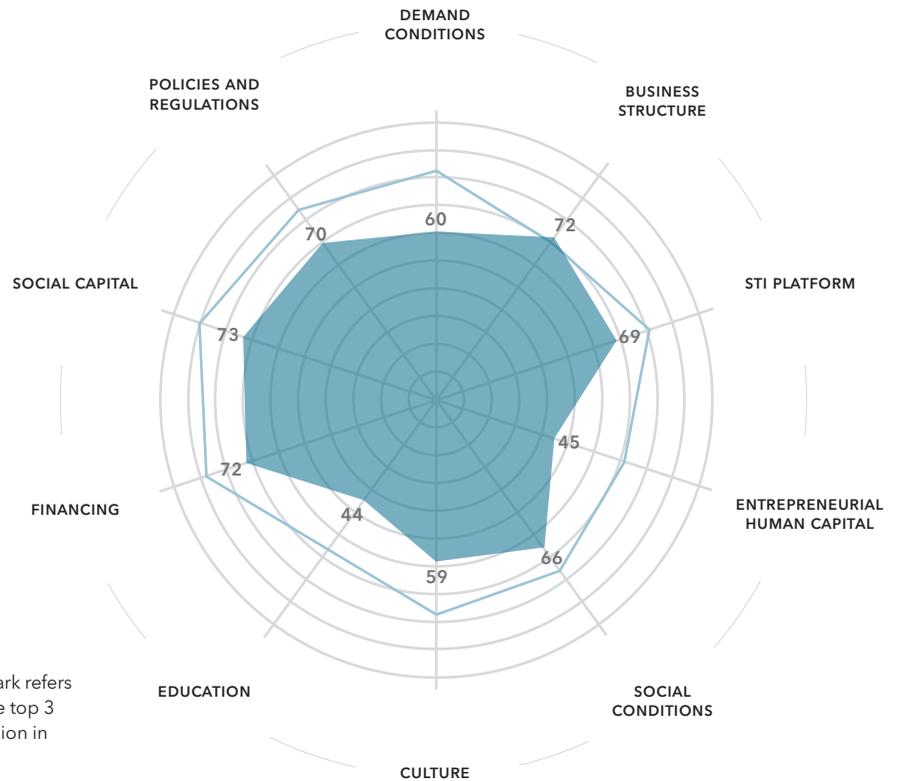
62,08

IDE
ranking

5°

- Germany
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ Strengths: displays a high systemic balance and stands out in dimensions related to the emergence of new opportunities and to project conversion in new dynamic ventures. In terms of new opportunities, Germany scored high on business structure and STI platform. The high competitiveness and corporate articulation of the country's entrepreneurship ecosystem creates a fertile environment for the circulation of ideas and for high-value innovative proposals to arise. This is complemented by R+D efforts, the generation of knowledge and the open dialogue between the scientific sector and entrepreneurs foster the emergence of science and technology business ventures. Additionally, entrepreneurs face favorable conditions in terms of funding and social capital to create networks. Finally, the regulatory environment is friendly and the government plays an active role in supporting entrepreneurship initiatives.

✗ Improvement opportunities: These conditions could be capitalized further by strengthening the entrepreneurial human capital as there is a limited presence of ambitious entrepreneurs. Additionally, there is room for entrepreneurship education to grow, especially in the initial educational stages.

Strategic actions:

- » Develop programs to improve the vision and ambition of entrepreneurship education initiatives.
- » Foster entrepreneurship education on different levels of the educational system placing special attention to improving existing lags on primary and secondary levels.

Ireland

2019

GDP per capita
PPP (US\$)

84.069

GDP growth rate
2017/18

6,7 %



Population
(Millions habitants)

5 M

IDE value

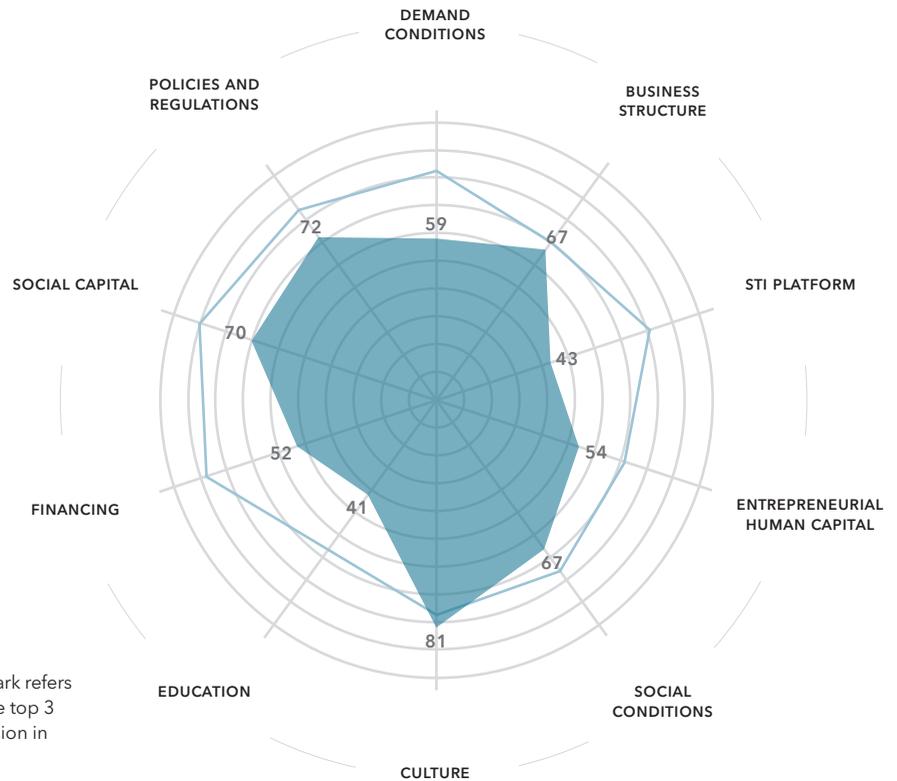
59,29

IDE
ranking

8°

- Ireland
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** with a high systemic balance across the different dimensions, its strengths lie in the culture, that promotes inspiring success cases and in which the media plays an active role resulting in the high social value of entrepreneurs. Next in line, social conditions allow families to offer their children access to opportunities for education and progress. Additionally, the business structure presents high competitiveness, productivity and articulation, which favors the circulation of ideas and the emergence of innovative proposals. Furthermore, the launch of these proposals is facilitated by the social capital base which encourages the extension of networks outside of close-knit circles, and by a proactive government in terms of promoting entrepreneurship and defining a favorable regulatory framework.

⊗ **Improvement opportunities:** present themselves especially in terms of the gap with those countries that are leaders regarding STI platform, education and to

a lesser degree, entrepreneurial human capital and financing. Strengthening these aspects would allow Ireland to compete for the top positions in the ranking. In order of importance, improvement opportunities are greatest in terms of R+D efforts, especially among businesses. Another aspect to close the gap with the ranking leaders is related to increasing the resources destined to education, and especially to strengthening the presence of entrepreneurship education, most notably in primary levels.

Strategic actions:

- » Strengthen the efforts in R+D and in the generation of knowledge taking advantage of the existing connection between advanced knowledge institutions and businesses.
- » Foster entrepreneurship education in the different stages of the educational system.

Italy

2019

GDP per capita
PPP (US\$)

42.080

GDP growth rate
2017/18

0,9 %



Population
(Millions habitants)

60 M

IDE value

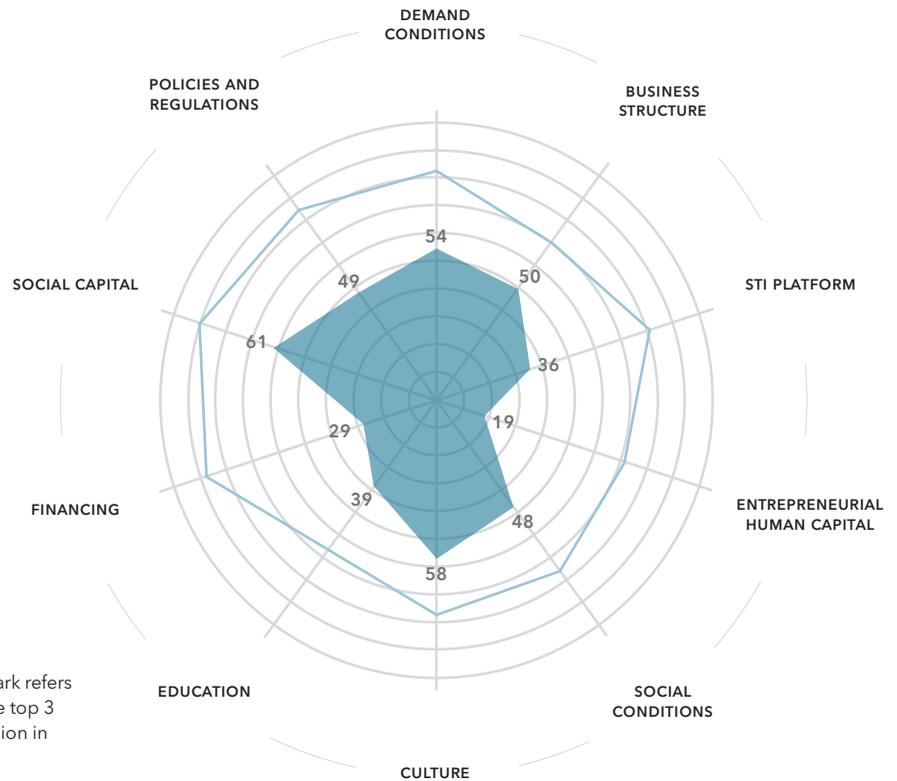
41,92

IDE
ranking

31°

■ Italy
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** social capital, and, to a lesser degree, entrepreneurial culture are the most positive aspects. On one hand, access to advice and resources is favored by the open nature of networks which span beyond close-knit circles. On the other hand, the media play an active role in the promotion of inspiring role models that contribute to increasing the social value of entrepreneurs.

⊗ **Improvement opportunities:** the most important are entrepreneurial human capital and access to financing. In the first case, the limitation is fundamentally expressed in the low presence of ambitious, growth-oriented entrepreneurs. In terms of financing, weaknesses are related to access to specific funding, for example, through venture capital. Other improvement opportunities -less pressing than those previously mentioned- are related to the educational system, especially with regards to the rate of university graduates and the scope of entrepreneurial education, mostly at the primary level. Added to this, the

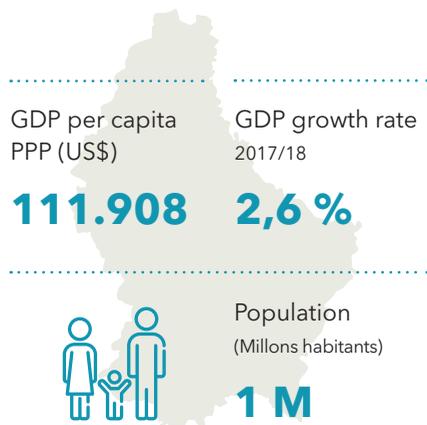
R+D efforts are deficient, mainly on behalf of businesses, as are the human resources applied to research, which creates an environment that is not altogether fertile for the emergence of scientific enterprises.

Strategic actions:

- » Increase the pool of entrepreneurial human capital, with a long-term focus on education, and a short-term focus on bringing in entrepreneurs from European countries and encouraging youth entrepreneurship.
- » Improve the access that startups and young businesses have to venture capital.
- » Strengthen science, technology and innovation efforts and articulate them with the promotion of entrepreneurship to favor the conversion of research results in businesses.

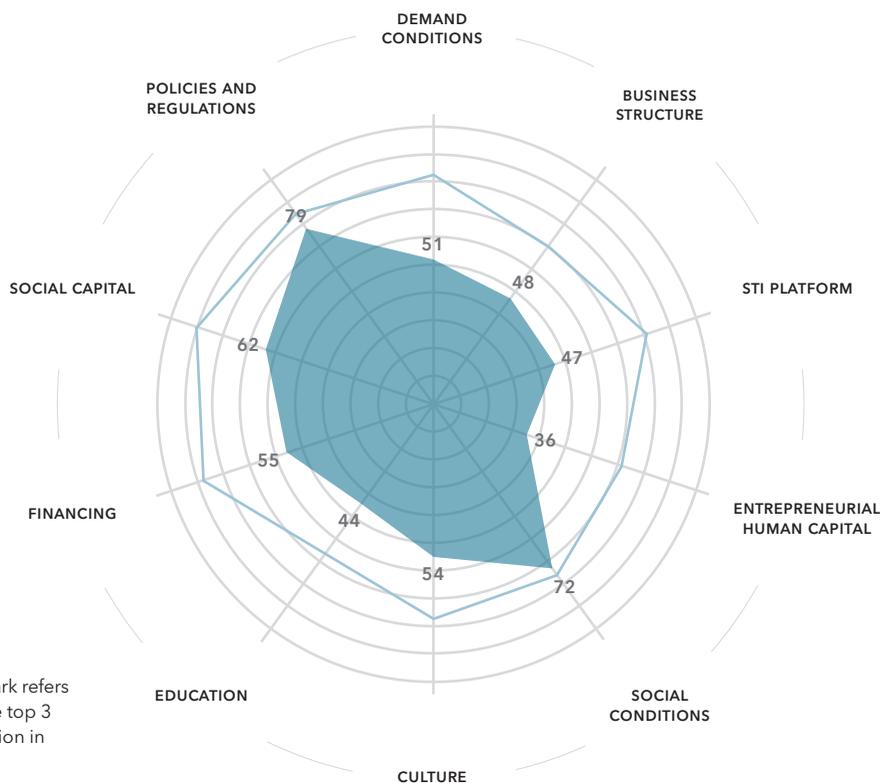
Luxembourg

2019



■ Luxembourg
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** presenting a high systemic balance, standout dimensions include social conditions, social capital and policies and regulations. The high-income level and its distribution allow a broad number of families to offer their offspring access to education and opportunities for progress. Additionally, social equity and interpersonal trust favor open networks that extend outside close-knit circles, which results in better access to advice and resources. Likewise, there is a favorable regulatory framework to do business, as well as entrepreneurship support policies and programs.

⊗ **Improvement opportunities:** present themselves mainly in the entrepreneurial human capital, especially due to the low rate of growth-oriented entrepreneurs and a certain degree of aversion to risk on behalf of society. Both issues are largely related to the overall competencies of the population, which are affected by some weaknesses in the educational system, especially in terms of the incorporation

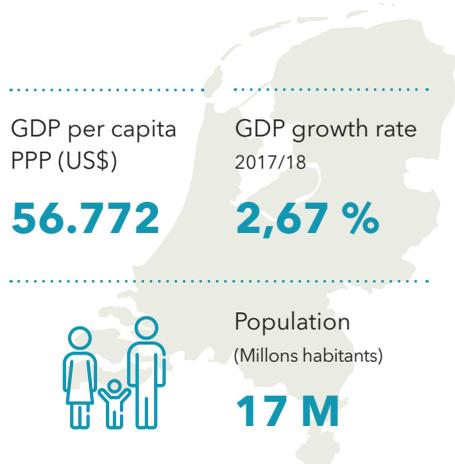
of entrepreneurship education in primary levels. There is also room for improvement in terms of the STI platform and the business structure, and their capacity to contribute to the emergence of innovative and scalable ideas.

Strategic actions:

- » Develop a strategy aimed at strengthening the base of powerful entrepreneurial human capital. Attracting entrepreneurs from other ecosystems, harnessing the STI platform to stimulate scientific-technological entrepreneurship, stimulating female entrepreneurship are examples of initiatives followed by different countries to advance in this direction.
- » Strengthen both public and private R+D efforts, including open innovation strategies that can encourage the creation of new opportunities for entrepreneurs.
- » Foster entrepreneurship education in primary and secondary levels.

Netherlands

2019

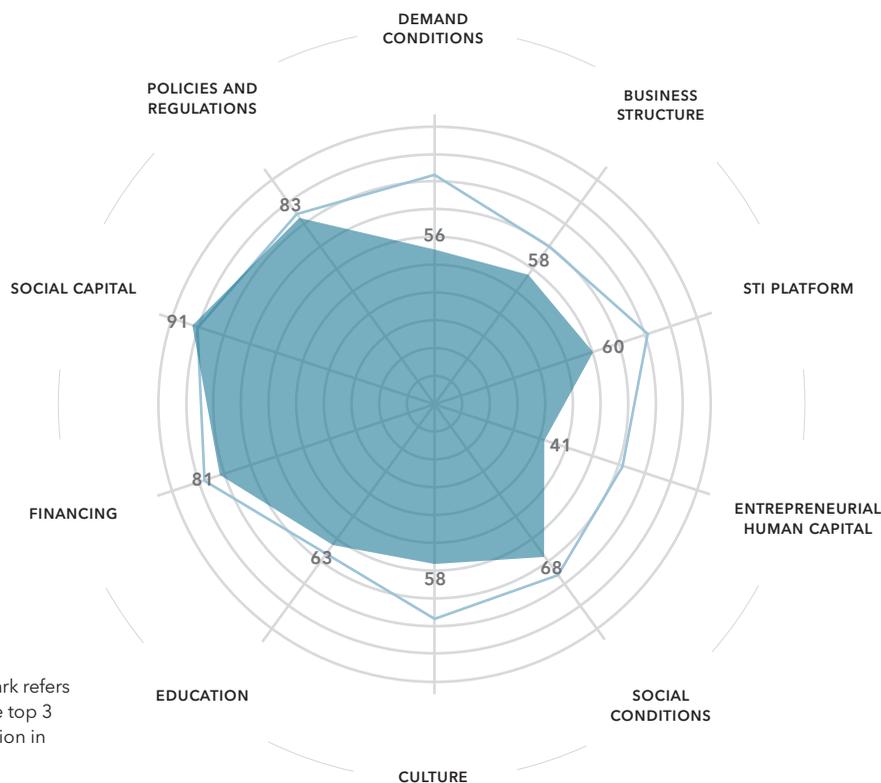


IDE value **64,35**

IDE ranking **3°**

■ Netherlands
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** presenting a high systemic balance, most of the dimensions show up as strong points. Those that stand out include aspects that favor the conversion of projects into businesses like access to financing and social capital to build contact networks. Additionally, the regulatory framework is friendly, and the government plays an active role in entrepreneurship support programs. In second place are those dimensions that contribute to the emergence of entrepreneurs, that is to say, the social conditions and the educational system. The STI platform also stands out. R+D efforts, especially by the government and universities, the generation of knowledge and the dialogue between scientific and business sectors create potentially favorable conditions for the creation of science and technology-based businesses.

⊗ **Improvement opportunities:** in order to rank at the top of the index, consolidating the country's strong points in some of the dimensions is a possible alternative. On one hand,

the level of ambition is one aspect to continue working on in terms of the entrepreneurial human capital. Related to this, in the culture dimension there is also room for improvement regarding the social value of entrepreneurs. Besides that, the business structure shows some limitations in terms of its productivity, which could be resolved by leveraging favorable aspects related to clusters and articulation.

Strategic actions:

- » Capitalize on the favorable aspects observed in the education and culture dimensions to foster the formative aspects of ambitious entrepreneurs with global outlook and networking abilities.
- » Promote spaces that support the outreach and visibility of inspiring entrepreneurs to encourage a higher social regard for entrepreneurship.
- » Promote open innovation programs and corporate venturing that connect large companies with startups with the aim of improving their productivity.

Portugal

2019

GDP per capita PPP (US\$)

34.065

GDP growth rate 2017/18

2,1 %



Population (Millions habitants)

10 M

IDE value

43,71

IDE ranking

27°

- Portugal
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



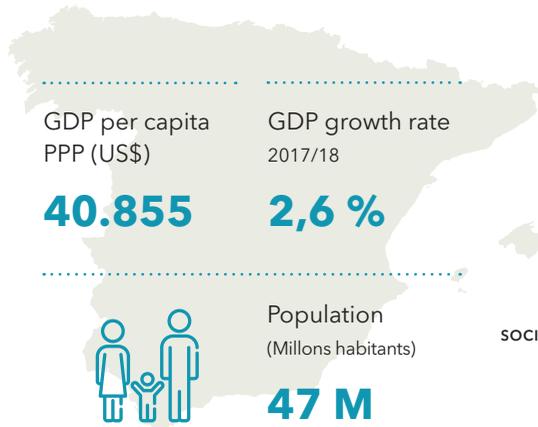
- ✓ **Favorable aspects:** policies and regulations stand out and constitute its main strength. Furthermore, it ranks favorably in terms of financing, especially at the initial stages. Other favorable aspects include demand conditions, mainly because of its competitive prices to serve international demands.
- ✗ **Improvement opportunities:** are mostly centered on the STI platform and the business structure. The indicators of knowledge generation and R+D efforts on behalf of businesses are low, while the levels of productivity and competitiveness in the industrial sector are also limited. All of these aspects serve to define an environment that is not altogether fertile for the emergence of high-value, innovative proposals with high potential. Additionally, the entrepreneurial human capital also presents weaknesses, especially in terms of the low number of ambitious entrepreneurs and society's low tolerance to risk.

Strategic actions:

- » Strengthen business efforts in R+D, including open innovation strategies that capitalize on the good existing relationship between businesses and academic institutions.
- » Develop programs for competitiveness and innovation, for example, by promoting digital startups that provide solutions to increase productivity and favor the integration of value chains.
- » Carry out targeted actions to strengthen the entrepreneurial human capital. Attracting entrepreneurs from other European countries, and stimulating female and youth entrepreneurship, are some examples of initiatives taken by different countries to move in this direction.

Spain

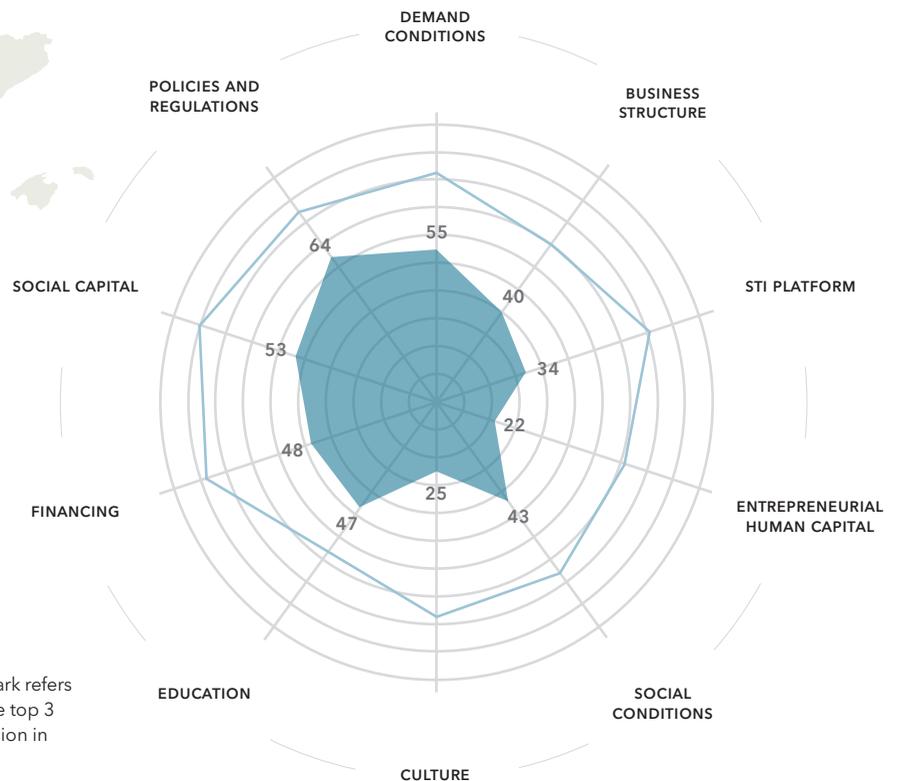
2019



IDE value	IDE ranking
41,03	33°

■ Spain
□ International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✓ **Favorable aspects:** lie in the policies and regulations dimension, which is the country's strong point, especially due to the importance given to public programs for the support of entrepreneurship and to the favorable regulatory framework. The social capital also stands out, due to the wide contact network which extends outside of the close-knit circles of entrepreneurs, as do the demand conditions which are powered by the size of its market.

⊗ **Improvement opportunities:** the biggest limitations lie in the entrepreneurial human capital, especially, due to the low presence of ambitious entrepreneurs and the population's negative perception of risk. Both aspects are also amplified by weaknesses in the entrepreneurial culture, derived from the low social status of entrepreneurs. This is combined with weakness both in the STI platform, which is characterized by a low investment rate in R+D in businesses, and by an business structure with low levels of collaboration between and within firms.

Strategic actions:

- » Invest significant efforts in increasing the pool of powerful entrepreneurial human capital with a short term focus on attracting entrepreneurs from other countries, and a longer term focus on promoting awareness and visibility of entrepreneurs so as to foster a better social consideration of them.
- » Strengthen science, technology and innovation efforts and combine them with the promotion of entrepreneurship to favor the conversion of the results of research carried out in businesses.
- » Promote entrepreneurial articulation through open innovation and corporate venture programs that connect the demands of large companies with SMEs and startups.

Switzerland

2019



Population (Millions habitants): **9 M**

IDE value

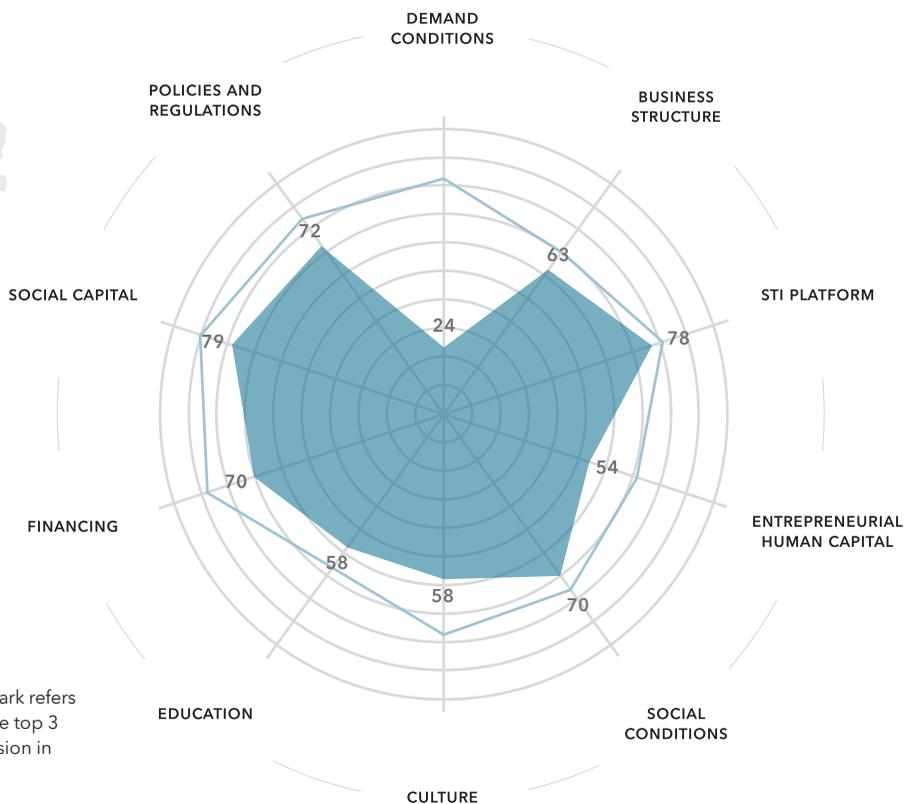
59,98

IDE ranking

7°

- Switzerland
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** presenting a high level of systemic balance, most of the dimensions constitute strong points. In the first place, dimensions that stand out include the social capital which facilitates the development of contact networks to access resources and advice, and over which the social conditions have a positive impact. Other strong points include the financing options available for the different phases of the entrepreneurial process, and a government that contributes positively with a favorable regulatory framework and a set of programs to support entrepreneurship. Finally, the STI platform and the business structure also play a favorable role in that they foster the emergence and circulation of ideas and high-value innovative proposals.

⊗ **Improvement opportunities:** are mostly appreciated in the demand conditions, a result of the price disadvantages to satisfy external demands. Additionally, it would be positive to close the gap with the leaders

of the ranking in the entrepreneurial human capital and its formative aspects: culture and education, especially by advancing further in teaching entrepreneurial competencies at the initial levels.

Strategic actions:

- » Increase the export incentives of young businesses and encourage activities to promote internationalization so as to broaden the scope of opportunity.
- » Strengthen the entrepreneurial human capital by improving the capacities of potential and existing entrepreneurs, as well as by leveraging Switzerland's appeal to attract entrepreneurs from other latitudes.

United Kingdom

2019

GDP per capita PPP (US\$)

46.240

GDP growth rate 2017/18

1,4 %



Population (Millions habitants)

66 M

IDE value

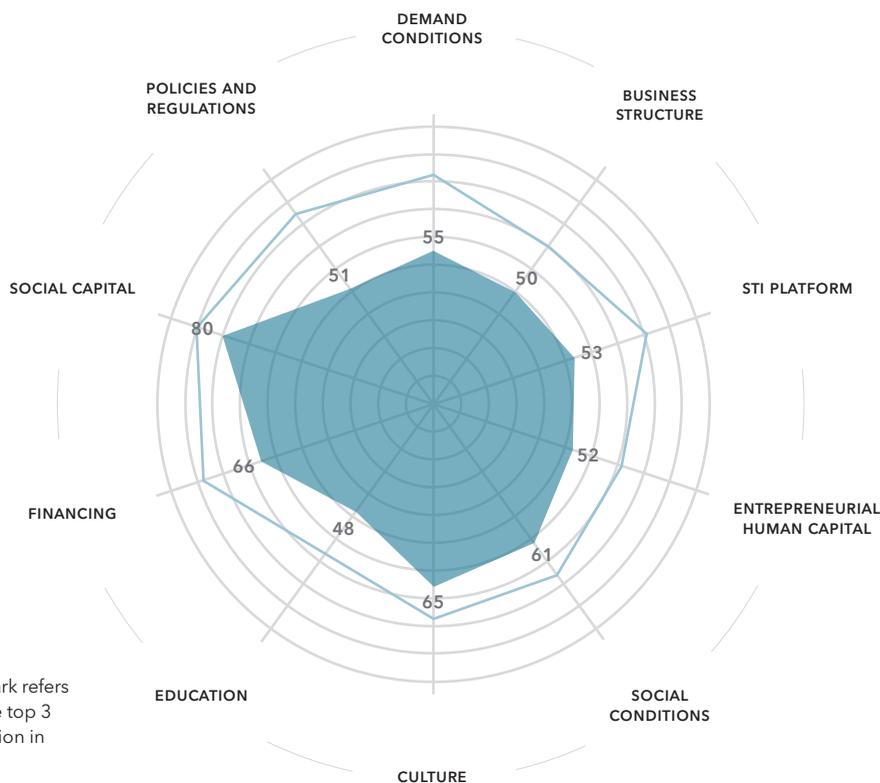
57,24

IDE ranking

10°

- United Kingdom
- International benchmark

The international benchmark refers to the average value of the top 3 countries for each dimension in the overall ranking.



✔ **Strengths:** with a high systemic balance across the different dimensions, the main strengths are the social capital for building networks and the supply of funding at the different stages of the entrepreneurial process. The country also stands out for exhibiting positive social and cultural conditions for the emergence of entrepreneurs, although their values are not high enough to be considered as a strength.

⊗ **Improvement opportunities:** To sustain its position among the top 10 of the ranking and move towards more advanced positions among global leaders, it could benefit from improving and strengthening entrepreneurial education at all the different levels, as well as from expanding the pool of entrepreneurial human capital, especially those with growth prospects and ambitions. Likewise giving greater importance to entrepreneurship policies in the government's agenda and strengthening support programs for entrepreneurs would also help to close the gap with respect to global leaders. Finally, some efforts could be also made to increase the contribution of the STI platform and business structure to the emergence of opportunities for innovative ventures. For

example, by promoting R+D especially inside companies, and taking advantage of the existing linkages between them and the academic world.

Strategic actions:

- » Promote greater progress in entrepreneurial education, especially at the initial and middle levels, capitalizing on lessons learned from existing experiences.
- » Boost entrepreneurial human capital by strengthening the capacities of potential and current entrepreneurs, as well as by leveraging the appeal of the United Kingdom to foreign entrepreneurs, neutralizing the eventual impact of the current situation vis-a-vis the European Union.
- » Capitalize on the experiences of the United Kingdom in programs to promote scientific-technological entrepreneurship, evaluate the initiatives underway in the field of digital entrepreneurship, and strengthen open innovation platforms that include large companies, startups and knowledge institutions.
- » Strengthen the strategic nature of entrepreneurship and innovation in the government's agenda.

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prodem@campus.ungs.edu.ar
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