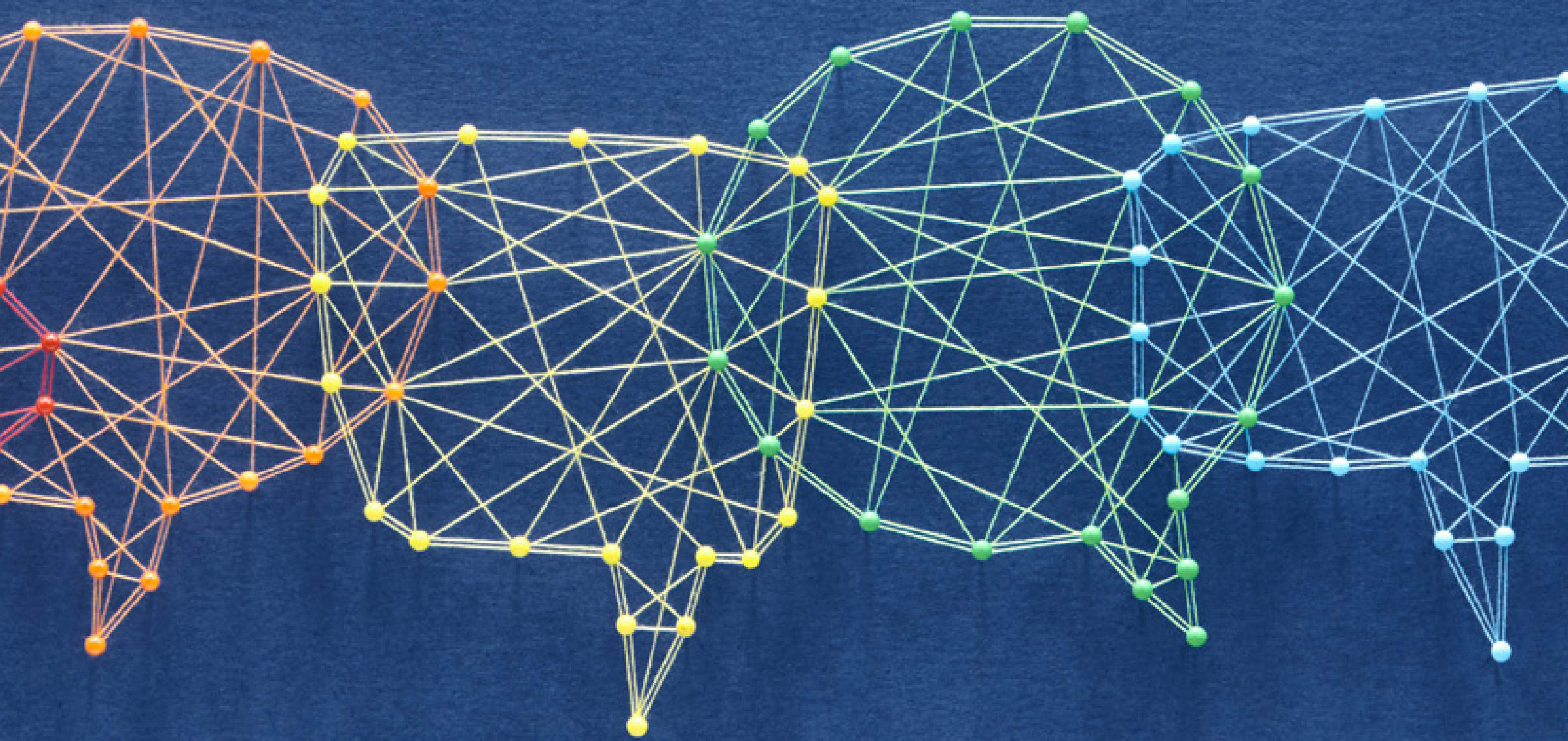
# IDE | Index of Dynamic Entrepreneurship

2023

## Dialogues for a wider approach towards sustainable entrepreneurship



Hugo Kantis
Juan Federico
Sabrina Ibarra García
with the collaboration of
Cristina Fernández

Universidad Nacional de General Sarmiento
Instituto de Industria

Prodem
Investigación, acción, aprendizaje

GEN GLOBAL ENTREPRENEURSHIP NETWORK

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# About the institutions

Prodem
Investigación, acción, aprendizaje

Prodem is a think tank and a do-tank on innovation and entrepreneurship ecosystems in Latin America. With 20 years of experience, Prodem stands out for generating and transferring world-class knowledge in coordination with the actual practice of real-life actors. Prodem conducts research, studies and measurements to get an insight into the status of ecosystems, providing technical assistance and training on entrepreneurship and innovation, both for scholars and professionals. Prodem gives priority to the development of networks and alliances, and works to support governments, international organizations and other institutions of the ecosystem in confronting challenges related to the design and assessment of dynamic entrepreneurship and innovation policies. For its role, Prodem received the 2016 Startup Nations Award for Groundbreaking Policy Thinking granted by the Global Entrepreneurship Network.

For more information about Prodem, please visit:
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GEN GLOBAL ENTREPRENEURSHIP NETWORK

The Global Entrepreneurship Network operates a platform of projects and programs in 180+ countries aimed at making it easier for anyone, anywhere to start and scale a business.
By fostering deeper cross-border collaboration and initiatives between entrepreneurs, investors, researchers, policymakers and entrepreneurial support organizations, GEN works to fuel healthier start and scale ecosystems that create more jobs, educate individuals, accelerate innovation and strengthen economic growth.
GEN's comprehensive global footprint of national operations and global verticals in policy, research and programs ensures 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.

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# About the authors

**Hugo Kantis**
PhD in Entrepreneurship and Small Business Management (Universitat Autonoma de Barcelona- Växjö University) and a BA in Economics and Business Administration (Universidad de Buenos Aires - 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 Jounals 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 (Universidad Nacional de General Sarmiento - 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 Startup Nations Award for Groundbreaking Policy Thinking, granted by the Global Entrepreneurship Network.

**Juan Federico**
PhD in Entrepreneurship and Small Business Management (Universitat Autónoma 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 (Universidad Nacional de Quilmes). 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. of entrepreneurship and quantitative research methods.

# Foreword

Hugo Kantis
Director of Prodem

Ten years ago we launched our first edition of the composite index of systemic conditions for dynamic entrepreneurship, globally communicated since 2018 as the Index of Dynamic Entrepreneurship (IDE). Throuhgout these years we have contributed to create dialogues among ecosystems developers based on sound evidences and a solid conceptual systemic model. As well, this index has helped us to spead the concept of dynamic entrepreneurship globally as a desirable policy tarteg to those organizations that want to promote entrepreneurship as a driver of development.

The successive annual reports of the IDE have illustrated the potential transformative power of entrepreneurs and their firms, looking for solutions for those problems that affect the society as a whole. In particular, since the pandemic this role has become more evident and needed. At the same time, IDE results have revealed the great heterogeneity that exists among ecosystems all over the world, identifying the most positive aspects and the main challenges fo each configuration of systemic conditions. This year we revisited this issue, enlarging the number of identified configurations as long as new countries are included.

This year, we advance on the results of the 2022 IDE Report by identifying a moderator role of the entrepreneurial dynamics in the relationship between systemic conditions and sustainable development. In the same vein, we introduce some 'dialogues' between the IDE and other indicators measuring wider social issues, inaugurating a stream of thouhgt going beyond entreprepeneurship that connects systemic conditions and sustainable development goals.

Finally, as every year, this new edition of the IDE report contains the global ranking, as well as data and analyses for 50 countries. The Index sheds light on the current imbalances and gaps between regions and countries concerning their conditions that affect the emergence and development of dynamic new ventures, that ultimately would be translated into a transformative force of the current social and environmental conditions.

# A message from GEN

Matt Smith
Director for Policy + Research
Global Entrepreneurship Network

The Global Entrepreneurship Network (GEN) is pleased to once again partner with PRODEM to publish the Index of Dynamic Entrepreneurship (IDE). This is the sixth edition that GEN has co-published and our longstanding partnership with Prodem encapsulates our shared commitment to fostering innovation, collaboration, and growth within the global entrepreneurial ecosystem. The IDE plays a critical role in providing substantive analysis of the current state of entrepreneurship worldwide, a mission that is central to our work at GEN.

One of the key messages to come out of this report is the importance of having a strong pipeline of talented individuals. The report demonstrates that this critical factor explains why some developing countries such as Costa Rica and South Africa have higher than expected levels of entrepreneurial success while certain developed countries are falling behind their peers. This reinforces the central mission of Global Entrepreneurship Week in spreading entrepreneurial culture to all communities across the globe. Now in its 16th year, this campaign reaches millions annually to instill pride in entrepreneurial skills, drive and potential.

The report also illustrates that national ecosystems can flourish with the right combination of policymaking and commitment. The impressive result achieved by the Netherlands in this year's report is the culmination of years of sustained effort to implement the right policies and improve their national entrepreneurial environment. This success story offers a roadmap for other countries looking to break into the top tier of entrepreneurial nations.

We are also pleased that the report demonstrates the crucial link between higher levels of entrepreneurial dynamism and sustainable economic development. The message of the report is clear: better conditions for entrepreneurship translate into higher levels of entrepreneurial dynamics, which, in turn, result in better levels of sustainable economic development. Understanding this link is crucial in guiding policymakers to create a supportive environment for entrepreneurs. In particular, it can help them better understand the long-term benefits of innovation weighed against the short-term costs of market disruption.

Lastly, it is worth highlighting that the report sends a note of caution to countries that take their eye off the ball. As was the case in 2022, we have seen several countries go backwards as other economic and geopolitical priorities have taken center stage and distracted policymakers from enacting pro-entrepreneurship reforms. This reaffirms the importance of continuing to bang the drum for entrepreneurship as loudly as possible. We hope that this report will be a useful evidence-based tool to reinforce those arguments and shape policymaking around the world.

# Executive Summary

In continuation of the strategic direction set forth in the 2022 IDE Report, the current edition builds upon the exploration of the interplay between systemic conditions conducive to dynamic entrepreneurship and the imperative of sustainable development. Our analysis reveals a positive correlation between the systemic factors fostering entrepreneurship, the resulting output manifested in entrepreneurial dynamics, and the overall attainment of sustainable development objectives. In this relationship, entrepreneurial dynamics play an intermediary role. Better conditions for entrepreneurship translate into higher levels of entrepreneurial dynamics, which, in turn, result in higher levels of sustainable development.

Given the role of systemic conditions in the context of a wider approach to driving sustainable development through entrepreneurship, an examination of the IDE results for each of the systemic conditions becomes imperative. The main takeaways from the 2023 IDE Ranking are the following:

1. The top-performing countries in terms of providing the best conditions are Sweden, the Netherlands, Finland, and the United States. They all score around 60 points on the overall index. The top 10 list also includes Israel, Ireland, Norway, the United Kingdom, South Korea, Canada, and Germany.

2. In terms of regions, some countries in Southeast Asia and the MENA region have moderately high values. Following with moderate levels are countries in Mediterranean Europe, Eastern Europe, and the most advanced ones of Latin America. The lowest-ranking countries, with scores for conditions below 30 points, are in Latin America, Asia, and Africa.

3. The top 10 countries stand out significantly from the rest of the studied nations, particularly in terms of entrepreneurial human capital, the Science, Technology, and Innovation (STI) platform, social capital, and financing.

4. Over the past decade, the majority of the current top 10 countries have consistently maintained their positions, indicating a degree of stability. At the same time, notable exceptions like Norway and the Netherlands have demonstrated remarkable progress in the last five years, propelling them into the ranks of the top-performing countries today.

5. A closer look at the diversity of ecosystems reveals seven distinct configurations of systemic conditions, each yielding different outcomes in terms of entrepreneurial activity and development levels. These configurations are: advanced entrepreneurship ecosystems; advanced ecosystems with underutilized advantages; unbalanced emerging ecosystems; active unbalanced emerging ecosystems; ecosystems with moderate development and underutilized opportunities; lagging ecosystems with incipient development; and ecosystems with low systemic development.

The collective findings from the 2023 IDE, along with the detailed profiles of individual countries presented in this report, provide a solid foundation for examining the state of systemic conditions for dynamic entrepreneurship. This analysis is particularly important as dynamic entrepreneurship is identified as a pivotal force driving the transformative efforts toward attaining sustainable development goals.

# Introduction

In 2014 Prodem launched for the first time a composite indicator measuring the conditions for the emergence of dynamic entrepreneurship, taking stock of more than 10 years of research in the Latin American context. In 2018, this indicator became globally communicated as the Index of Dynamic Entrepreneurship (IDE) due to the collaboration between Prodem and GEN. Since then, the IDE has been utilized as a diagnosis tool for policy makers and other ecosystems' developers encouraging key conversations based on common evidence and a systemic approach to dynamic entrepreneurship.

Ten years after the first appearance of the index, this year's report introduces two noticeable extensions on the usual ranking and analyses. On the one hand, a novel composite indicator capturing the entrepreneurial dynamic of the ecosystem is introduced. This will make it possible to complement previous analyses of systemic conditions - the inputs of an ecosystem - with an estimation of their relationship with a measure of output. As well, it enables other conversations with relevant outcomes for the entrepreneurial activity, such as the level of SDG commitments.

In this vein, the second innovation of the 2023 Report is a new section where the IDE dialogues with other indexes reflecting wider socio-economic issues. Going beyond entrepreneurship, this section examines the relationship between systemic conditions for entrepreneurship – measured by the IDE –with broader social issues like gender inequalities or social openness and tolerance, offering some hypotheses for further research.

The key message of this year's report is that if entrepreneurship wants to be conceived as a driver of socio-economic change, more insights and research should be done on the relationship between the antecedents of entrepreneurship and their translation into more general features and outcomes at the social and environmental level. The new dialogues included in this report are just a first effort in this direction.

The structure of this report is as follows. First, we describe the conceptual model and some basic definitions. Then, we move to the presentation of the main results for this year's IDE. In this section, we introduce the novel estimations about the output, i.e. the entrepreneurial dynamic, and its relationships with the IDE, capturing the contrasts between different configurations of systemic conditions. Finally, we present the 'IDE dialogues' as a first effort to connect entrepreneurship with other wider social dimensions.

# Conceptual framework & methodology

# Dynamic and sustainable entrepreneurship

The concept of dynamic entrepreneurship encompasses entrepreneurial projects with growth potential and young firms that have overcome the early phase characterized by higher mortality rates and have evolved into (at least) a competitive Small and Medium Enterprise (SME) with the potential and determination to keep expanding.

Dynamic companies are typically established by teams characterized by enthusiasm, aspirations, and competencies geared toward growth. They can leverage valuable networks as they pursue value propositions based on differentiation, innovation, and/or business opportunities to capitalize on dynamic and scalable economic trends.

This concept shares similarities with the idea of productive and transformational entrepreneurship, and it is certainly broader than other definitions that classify firms solely based on their rate of growth. As such, dynamic entrepreneurship encompasses gazelles and high-impact firms, but it also includes companies that increase the pool of competitive SMEs even when they do not follow linear and continuous high-growth patterns.

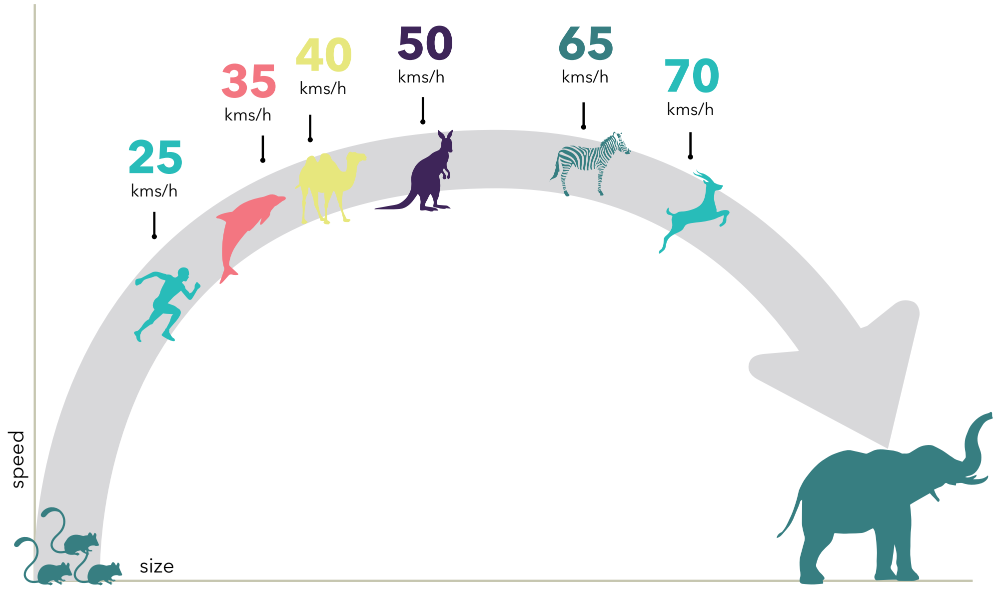
The trajectories taken by dynamic companies are varied and diverse. Hence, Birch's (1979) pioneering metaphor, which included gazelles, elephants, and mice, should be expanded to encompass other animal species that may not match the speed of gazelles but are valuable nonetheless, like kangaroos, dolphins, and certainly, even human beings.

More recently, camels and zebras have been included into this metaphor. Camels were Camels gained attention during the pandemic, for their capacity to navigate challenging environments and maintain a long-term focus. Zebras in turn were introduced due to their dual nature: they operate for profit and for a purpose. These zebra startups are the type of companies that are most inclined to seek to contribute to Sustainable Development Goals (SDGs).

The concept of dynamic entrepreneurship opens a broader spectrum of enterprise types to promote, rather than imposing strict rules from the outset. This concept is particularly well-suited for developing countries, where the gazelle phenomenon is less prevalent from a quantitative perspective. Furthermore, it allows for the inclusion of various forms of dynamic entrepreneurial activities beyond new business creation per se, such as corporate ventures led by intra-entrepreneurs, often in collaboration with startups, or driven by new generations within family businesses. However, in these cases, the conceptual framework must consider additional factors and more complex organizational phenomena compared to independent entrepreneurship.

Figure 1.

**A revisited safari into dynamic enterpreneurship**




The reality of the new dynamic companies covers diverse and heterogeneous situations. Birch's (1979) ground-breaking metaphor, which included gazelles, elephants and mice, should be expanded to incorporate, for instance, kangaroos, camels, zebras, dolphins and certainly human beings, into his world of dynamic business "species".

When assessing the role of entrepreneurial activities in achieving Sustainable Development Goals (SDGs), dynamic social enterprises and dynamic cooperatives often stand out as typical examples of ventures that address the needs of both society and the planet. We also find cases of institutional entrepreneurship and inclusive supply chains, where external dynamic entrepreneurs collaborate with local producers and resources, usually establishing fair pricing mechanisms, which enhance the income and market participation of these local producers.

In essence, the concept of dynamic entrepreneurial activity captures the above examples and provides a framework for various initiatives, whether they are institutional or business-oriented, individual or collective. This framework aims to identify, stimulate, direct, enhance, and transform local productive capacities and resources into innovative projects that contribute to economic and social development. As demonstrated in this report, dynamic and sustainable entrepreneurship are strongly correlated.

# A systemic approach to understand the emergence of dynamic entrepreneurship

Dynamic entrepreneurship results from a process that, as it progresses through its different stages and milestones, is influenced by a range of social, cultural, political, and economic factors. Consequently, the Index of Dynamic Entrepreneurship (IDE) adopts a systemic and eclectic approach supported by international literature.

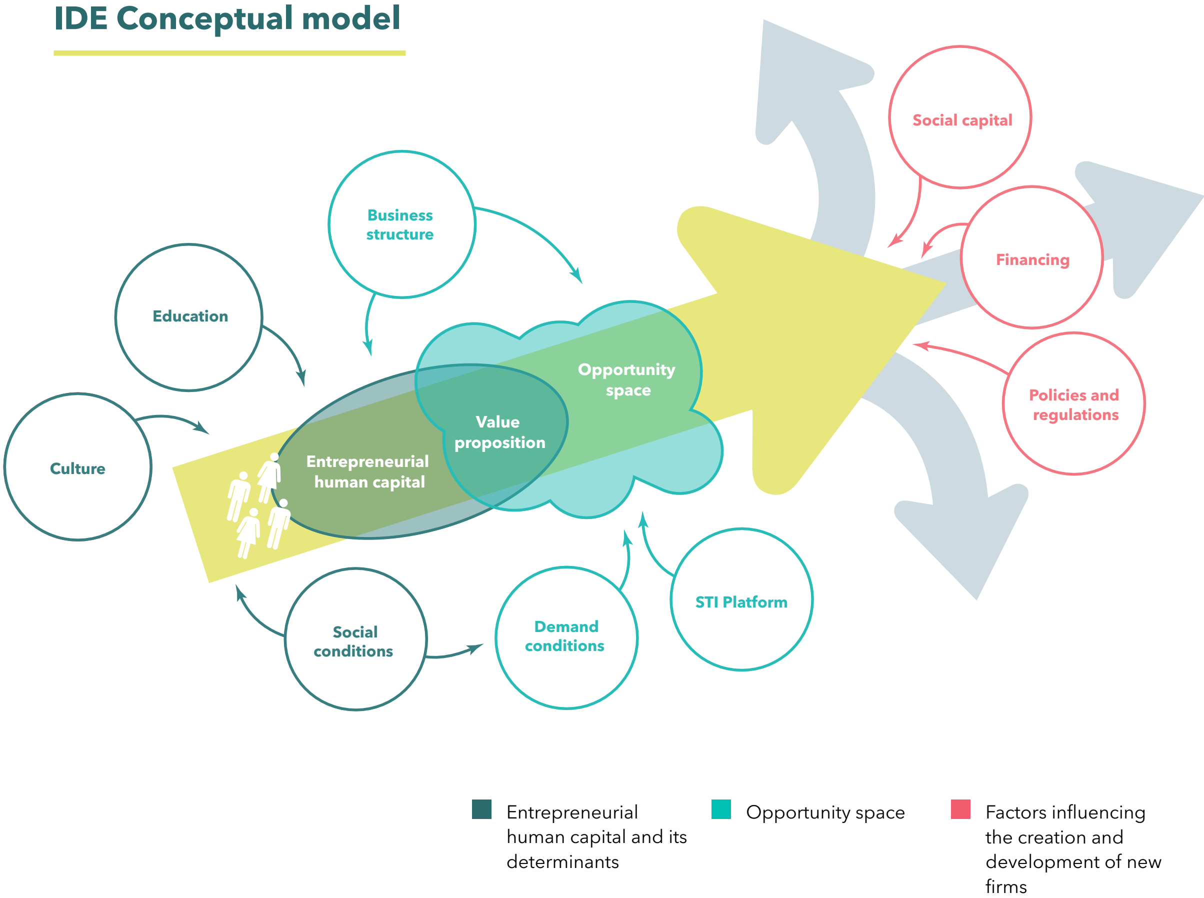
The Index is structured around 10 key dimensions that influence both the quantity and quality of emerging companies. These 10 dimensions are organized into three overarching axes.

The primary and most significant axis is the presence of **entrepreneurial human capital**, which refers to the actual entrepreneurs capable of conceiving powerful value propositions. The emergence of this entrepreneurial human capital is influenced by several factors, including the values and beliefs that shape the *culture*, the *social conditions* of the families in which individuals are born and raised, and the contribution of the *educational system* in nurturing entrepreneurial competencies. As individuals progress, the companies they work for will either enhance or hinder the development of entrepreneurial competencies.

The second conceptual axis in this systemic approach considers the factors that impact the availability of **business opportunities**. This axis encompasses *demand conditions* associated with the size and dynamism of the economy, as well as the profile of the companies comprising the *business structure*. The demands of existing companies for solutions create business opportunities with high dynamic potential, which are often seized by new and young companies. Large companies' initiatives to collaborate with startups to boost innovation reflect this reality.

Another factor that shapes opportunities for creating new dynamic ventures is the strength of the *science, technology, and innovation (STI) platform*. The higher the rate of knowledge creation and transfer, the greater the potential for generating opportunities for new entrepreneurial initiatives with dynamic potential. This results in various forms of entrepreneurial activity, from science and technology-based spin-offs to corporate ventures within the framework of open innovation processes, to more traditional linkage mechanisms. Hence, the intensity of innovation efforts, the quality of science and technology institutions, and their capacity to engage with entrepreneurs and industry are very relevant factors.

Figure 2.
## IDE Conceptual model




The final conceptual axis of this systemic perspective encompasses those factors that influence the actual materialization of business projects, i.e. **factors that influence the creation of development of new firms**. In this regard, access to an adequate supply of *financing* for entrepreneurs is of utmost importance.

Another significant factor is the presence of *social capital*. For instance, an environment characterized by trust empowers entrepreneurs to establish connections and network with key stakeholders, including other entrepreneurs and institutions, and facilitates access to resources that support the creation and growth of start-ups.

Lastly, this process is influenced by *policies and regulations*. Governments set forth regulations (such as licenses, permits, taxes, and foreign trade restrictions), which can either support or hinder dynamic entrepreneurship. Additionally, government policies, whether through action or inaction, have an impact on companies. Entrepreneurship policies, in particular, aim to create a more favorable environment for the emergence of dynamic entrepreneurs and the promotion of more and better new firms that can successfully take off and achieve substantial growth.

The set of structural variables and dimensions in this systemic approach, such as social conditions, business structure, social capital, or STI platform, holds particular significance for regions in development, like Latin America, and is closely linked to the Sustainable Development Goals (SDGs). In fact, as demonstrated in this report, there is a positive correlation between this systemic approach, the dimensions of the IDE, and the SDGs.

# Methodology

The methodology employed to develop the Index of Dynamic Entrepreneurship (IDE) adhered to the guidelines provided by the Organization for Economic Cooperation and Development (OECD) for constructing indexes. The 10 dimensions that form the IDE are based on the normalization of more than 40 variables obtained from different internationally-recognized secondary information databases, such as World Bank Group data, the Global Competitive Index, the Global Entrepreneurship Monitor, the World Value Survey, and UNESCO data.

In line with recommendations from specialized literature, the final value of the Index is computed using the geometric mean. This method is consistent with the systemic approach, as it assigns greater weight to the weaker dimensions, making them more influential in determining the overall IDE value compared to the stronger dimensions. As such, the weaker dimensions may be considered as constraints affecting the start-up process. Further information on the variables analyzed, data sources, and the IDE construction process, can be found at **https://prodem.ungs.edu.ar**.

# IDE 2023
# Main results

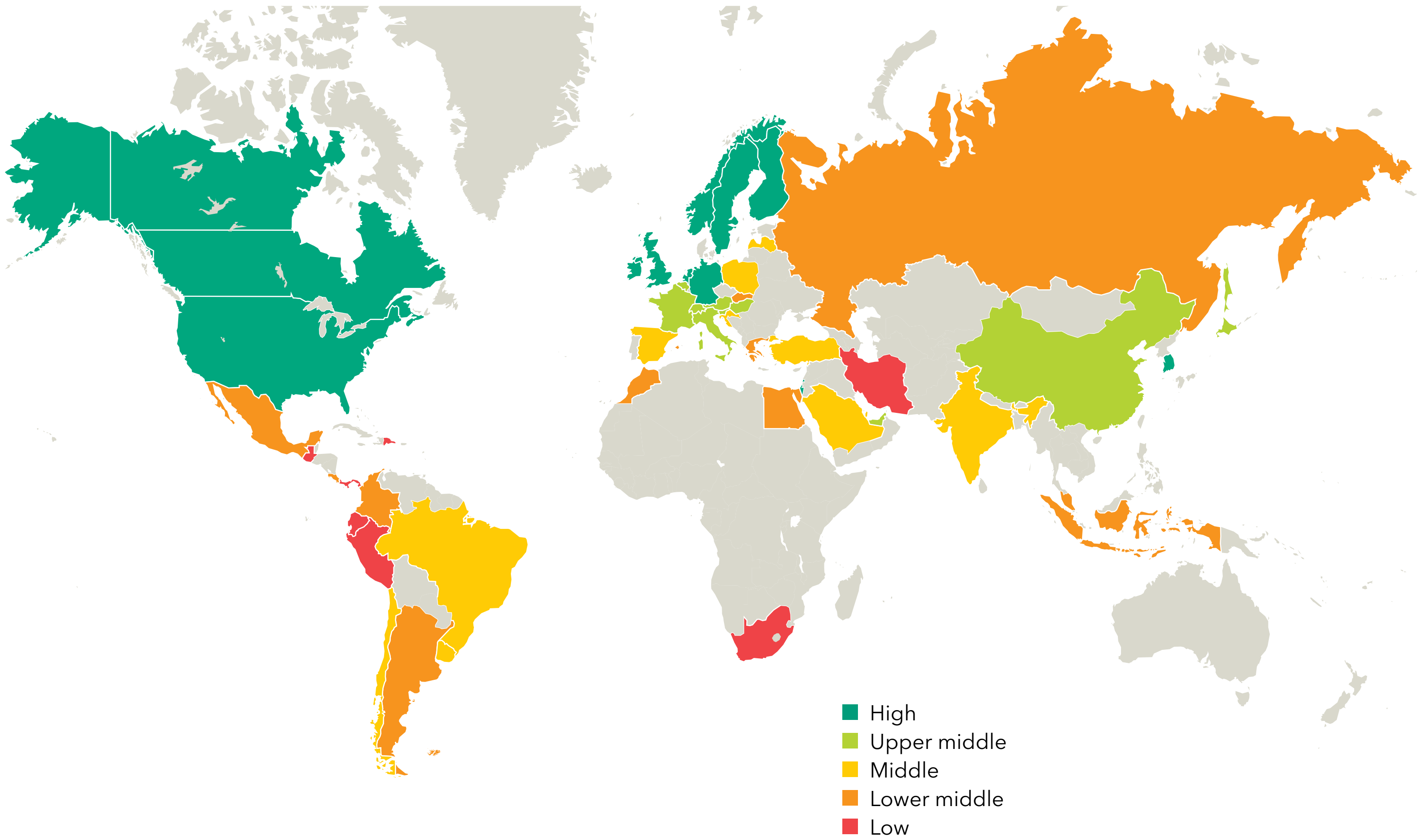
# Global overview

The emergence of dynamic entrepreneurship relies on the presence of favorable systemic conditions for it to occur. The following map provides an initial global and regional overview of the entrepreneurial context in different countries. North America, as well as northern and central Europe, exhibit the most favorable conditions, depicted in darker shades of green. Following closely with moderately high values, shown in lighter shades of green, are some countries in Southeast Asia and the MENA region.

Ecosystems with moderate levels include countries from Mediterranean Europe, Eastern Europe, and the most advanced ones in Latin America. The lowest positions in this ranking are occupied by the rest of the countries in Latin America, Asia, and Africa, all with values below 30 points.

Figure 3.

**Systemic conditions for entrepreneurship at a glance**



The leading countries are Sweden, the Netherlands, Finland, and the United States, with values close to 60 points on the aggregate index. Just below them is a second group composed of Israel, Ireland, Norway, and the United Kingdom, with scores around 55 points. South Korea, Canada, and Germany, with 52 points, complete the top 10 countries with the most favorable conditions.

Figure 4.
## Global Ranking

- High
- Upper middle
- Middle
- Lower middle
- Low

| | | | | | |
|---|---|---|---|---|---|
| 1. | Sweden | 63 | 26. | India | 35 |
| 2. | Netherlands | 61 | 27. | Turkey | 35 |
| 3. | Finland | 60 | 28. | Spain | 34 |
| 4. | United States | 59 | 29. | Chile | 31 |
| 5. | Israel | 57 | 30. | Uruguay | 30 |
| 6. | Ireland | 56 | 31. | Brazil | 30 |
| 7. | Norway | 56 | 32. | Qatar | 29 |
| 8. | United Kingdom | 55 | 33. | Indonesia | 29 |
| 9. | South Korea | 53 | 34. | Argentina | 29 |
| 10. | Canada | 53 | 35. | Colombia | 27 |
| 11. | Germany | 53 | 36. | Malaysia | 27 |
| 12. | Austria | 50 | 37. | Russia | 26 |
| 13. | Switzerland | 49 | 38. | Greece | 25 |
| 14. | Luxembourg | 48 | 39. | Slovak Republic | 25 |
| 15. | France | 47 | 40. | Egypt | 25 |
| 16. | United Arab Emirates | 47 | 41. | Mexico | 24 |
| 17. | China | 41 | 42. | Morocco | 24 |
| 18. | Latvia | 40 | 43. | Costa Rica | 24 |
| 19. | Hungary | 40 | 44. | South Africa | 23 |
| 20. | Japan | 39 | 45. | Peru | 22 |
| 21. | Slovenia | 39 | 46. | Panama | 21 |
| 22. | Italy | 39 | 47. | Iran | 19 |
| 23. | Saudi Arabia | 37 | 48. | Ecuador | 18 |
| 24. | Croatia | 36 | 49. | Dominican Republic | 13 |
| 25. | Poland | 36 | 50. | Guatemala | 8 |

Some methodological changes were introduced this year because of the discontinuation of some secondary sources and/or the presence of outdated data. Although these changes implied a downward trend in the absolute values for all the countries, their relative position in the ranking remains unaltered. Hence, the comparison with previous versions of the IDE should be done only in relative terms based on the ranking rather on the values.

# Zooming in on the top 10

## Significant disparities between the leaders and the rest

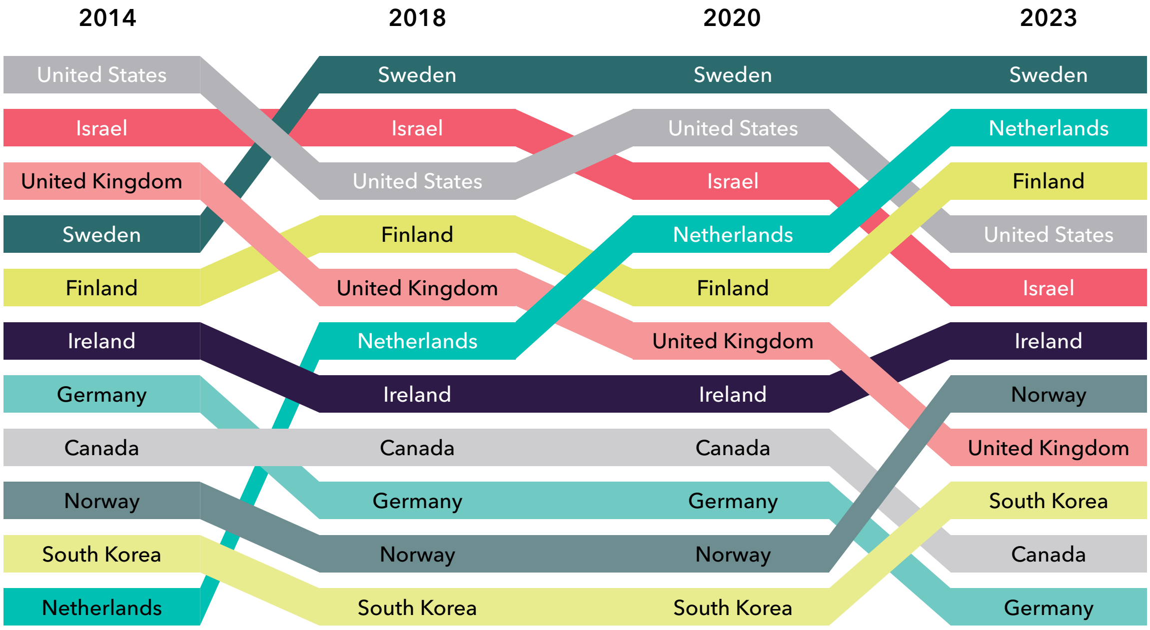
One initial result of the comparison between the countries in the top 10 and the rest of the countries is the existence of **significant disparities** between these two groups in the majority of dimensions. The most significant disparities are observed in **entrepreneurial human capital, STI platforms, social capital,** and **financing**. In other words, the leadership of the top countries is explained by advantages in all three axes that make up the index: the presence of entrepreneurs, the emergence of opportunities, and the factors that facilitate the effective creation and growth of companies.

Figure 5.
**Gaps between Top 10 and the rest of the countries**

## Stability and change in leading ecosystems

The second noteworthy result pertains to the **stability** observed in the composition of the leading group over the past decade[1]. In fact, countries like the United States, Finland, or Sweden have consistently remained within the top three positions during these 10 years.

Figure 6.
### Top 10 countries over the years




However, it is worth mentioning some interesting **changes**, particularly the ascent of the Netherlands, which moved from the 7th to the 2nd position based on sustained progress over the years. Also, Norway, after an initial decline, climbed from the 10th place in 2018 to the 5th in 2023. In the first case, the Netherlands demonstrated a widespread improvement in their conditions over the past decade, with notable growth in entrepreneurial human capital, demand conditions, access to financing, and to a lesser extent, regulations and policies. In the case of Norway, improvements mainly occurred in the opportunities axis (demand conditions) and enabling factors (financing and policies and regulations).

1. For this estimation, the index was recalculated in its current form using historical data from 2012 up to the present to ensure a comparable index for all years. Furthermore, in the normalization of variables, the values were benchmarked against those from 2023 to prevent considering advancements or setbacks resulting from changes in the maximum or minimum values of the variables in different years. As a result, it is possible that the ranking reported in this exercise may differ from what was previously published since all values for variables and dimensions have been re-expressed in terms of 2023 values.

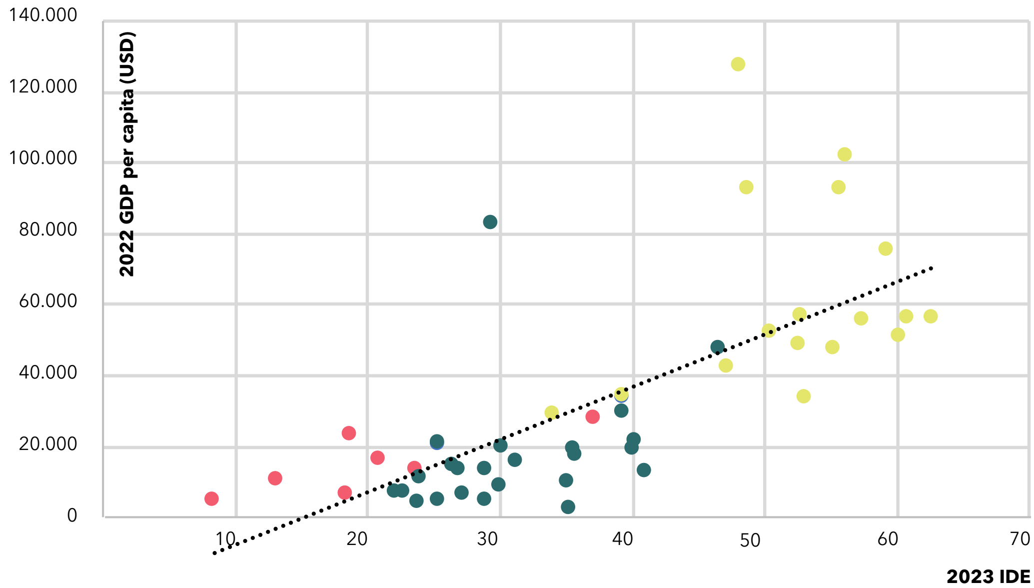
# Sustainable Development, Inputs, and Outputs of Entrepreneurship

## Conditions for entrepreneurship and sustainable development

The conditions for entrepreneurship have a positive correlation with a country's level of development. This relationship is evident in the following graph, where the more advanced countries (with higher GDP per capita) also exhibit higher levels of the IDE and are positioned in the upper-right quadrant of the graph. Conversely, countries with lower levels of development tend to have less favorable conditions for entrepreneurship.

Figure 7.

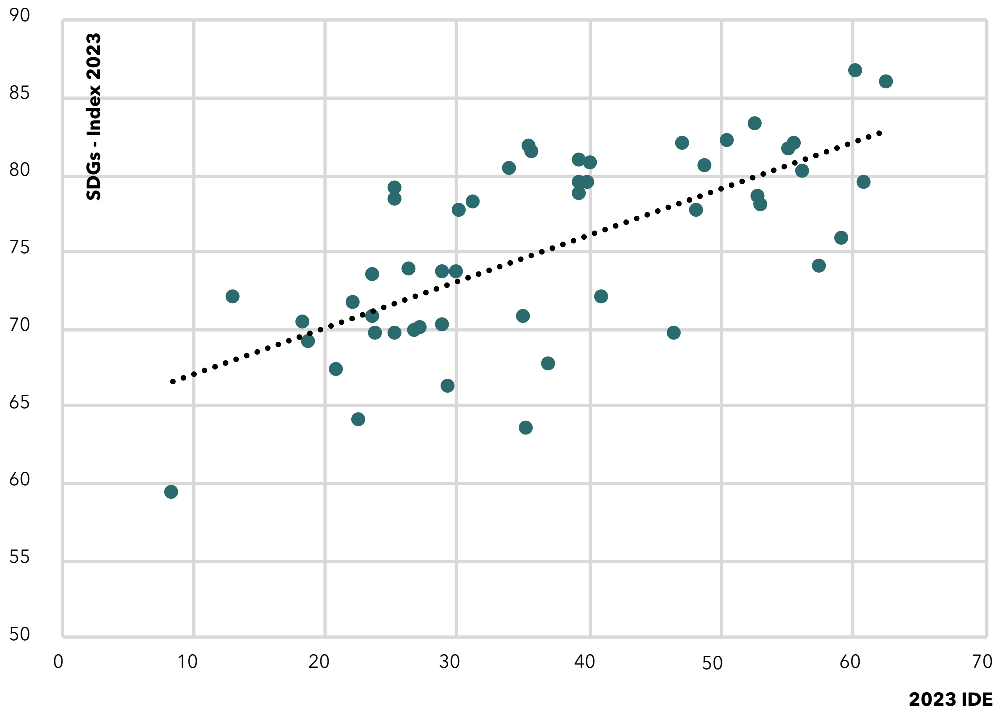
**IDE & Development levels**




Source: Prodem and World Bank

In addition to being linked to economic development, conditions for entrepreneurship are also positively and significantly associated with the achievement of Sustainable Development Goals (SDGs). Therefore, it can be stated that policies and initiatives within ecosystems that help improve the conditions for the emergence of dynamic new companies also have a positive impact on sustainable and inclusive development.

Figure 8.
## IDE & SDG levels




Source: Prodem and SGI Index.

### Conditions for entrepreneurship and output

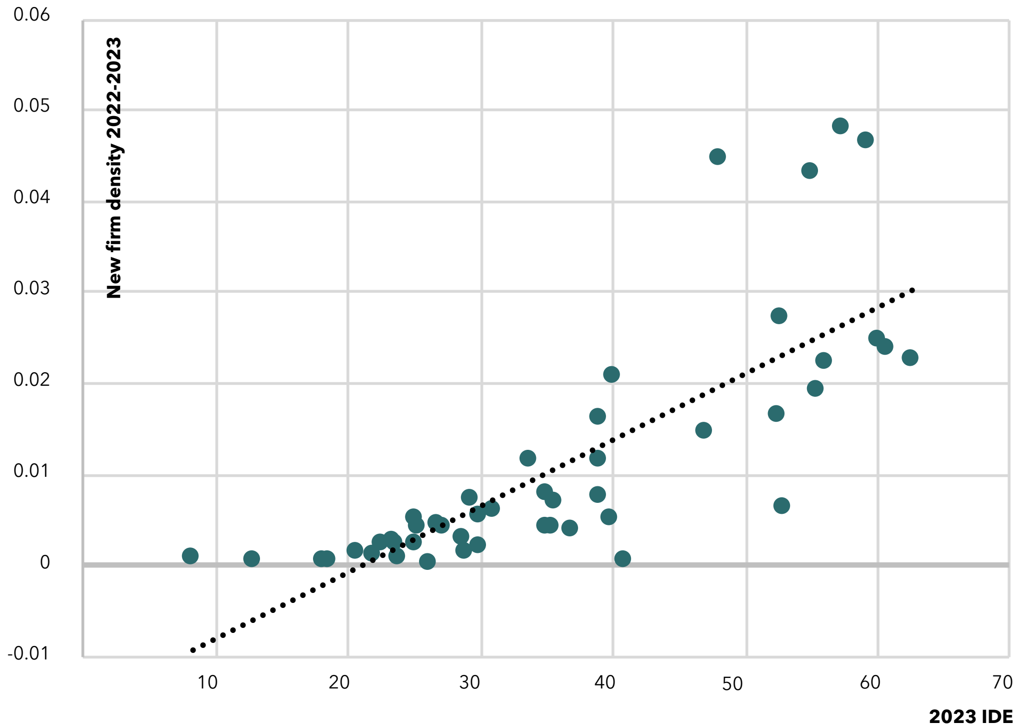
The previously analyzed conditions are potential factors, and for them to influence levels of sustainable development, they must translate into the creation and growth of new companies. Indeed, it is the entrepreneurs and their ventures that drive this transformative role.

In this context, countries that have the most favorable conditions for entrepreneurship also demonstrate a higher entrepreneurial density, defined as the number of new and young[2] companies per 1,000 people in the working-age population. The following graph illustrates the association between the level of conditions for entrepreneurship between 2019-2021 and the creation of companies during 2022-2023.

2. To define new and young companies, businesses with ages ranging from 0 to 15 years were considered.

Figure 9.

## IDE & New firm density




Source: Prodem and Crunchbase

The same result is confirmed when using a composite index that allows for a broader consideration of entrepreneurial dynamics[3], reflecting five variables: business density; the density rate of young companies (defined as those aged between 4 and 15 years); the ratio between companies aged three years or less and companies up to 15 years old; business density rate; the rate of entrepreneurial activity.

The following table shows the presence of a group of countries that combine favorable conditions for entrepreneurship with high entrepreneurial dynamics (the composite index described above). This group includes some of the most developed countries such as Germany, Canada, the United States, Finland, France, Ireland, Israel, Norway, the Netherlands, the United Kingdom, Sweden, and Switzerland.

On the other end of the spectrum are countries with low entrepreneurial dynamics and less favorable conditions for entrepreneurship, such as Colombia, Ecuador, Egypt, Guatemala, Indonesia, Iran, Morocco, Mexico, Peru, the Dominican Republic, and Russia.

3. This composite entrepreneurship dynamics index combines five variables. The first variable is the 2022 and 2023 business density, based on Crunchbase data as cited above. The second variable is the density rate of young companies (defined as those aged between 4 and 15 years), also based on Crunchbase data. The third variable is the ratio between companies aged 3 years or less and companies up to 15 years old, which serves as a measure of the significance of new companies within the younger ones. The fourth variable is the business density rate measured by the World Bank. Finally, the fifth variable considered is the Entrepreneurial Activity Rate calculated by the Global Entrepreneurship Monitor (GEM).

Figure 10.

## Relationship between the output and the 2023 IDE

| | | Categorical Value of the 2023 IDE | | |
|---|---|---|---|---|
| | | LOW | MEDIUM | HIGH |
| Categorical value of the output index | LOW | **11 countries**<br>Colombia, Ecuador, Egypt, Guatemala, Indonesia, Iran, Morocco, Mexico, Peru, Dominican Rep., Russia | **6 countries**<br>Saudi Arabia, Argentina, China, India, Japan, Poland | |
| | MEDIUM | **6 countries**<br>Costa Rica, South Africa, Slovakia, Malaysia, Panama. | **8 countries**<br>Brazil, Chile, Croatia, Hungary, Italy, Qatar, Turkey, Uruguay. | **2 countries**<br>Austria, South Korea |
| | HIGH | | **2 countries**<br>Slovenia, Spain | **15 countries**<br>Germany, Canada, United Arab Emirates, United States, Finland, France, Ireland, Israel, Latvia, Luxembourg, Norway, Netherlands, United Kingdom, Sweden, Switzerland |

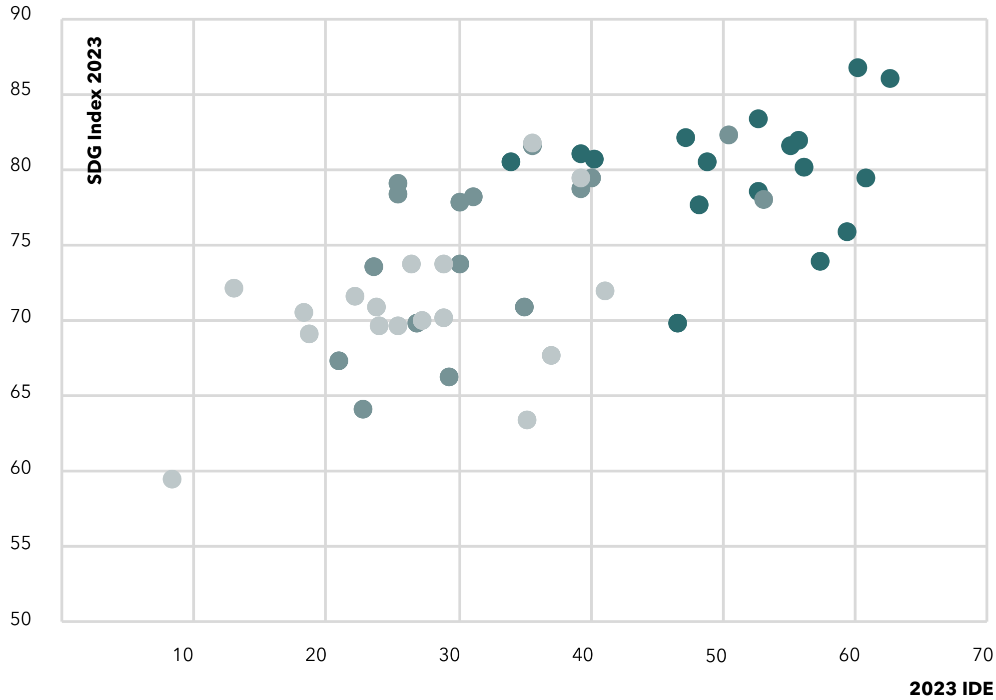
Nevertheless, there are some exceptions that deserve to be commented on. On one hand, Austria and South Korea struggle to translate highly favorable entrepreneurship conditions into high levels of entrepreneurial dynamics. Both cases share weaknesses in entrepreneurial human capital, which could help explain this situation. After all, entrepreneurs are the driving force behind entrepreneurship.

Entrepreneurial human capital also helps explain why some developing countries exhibit higher entrepreneurial dynamics than one might expect based on their conditions for entrepreneurship. This group includes Costa Rica, South Africa, Slovakia, Malaysia, and Panama, all of which also have higher levels of entrepreneurial human capital than countries with low levels of both entrepreneurial input and output.

In summary, there is a positive association between conditions for entrepreneurship and levels of sustainable development. This association is mediated by entrepreneurial dynamics. In fact, it was observed that countries with more favorable conditions for entrepreneurship generally exhibit higher levels of entrepreneurial dynamics. Therefore, better conditions for entrepreneurship translate into higher levels of entrepreneurial dynamics, which, in turn, result in better levels of sustainable development, as illustrated in the following graph.

Figure 11.

## IDE Level, Sustainable Development, and Entrepreneurial Dynamics




NOTE: The shade of the circles indicates the level of entrepreneurial dynamics (darker shades represents higher entrepreneurial dynamics).

# A deep dive into ecosystems heterogeneity

The preceding sections clearly illustrated the significant heterogeneity among ecosystems concerning their levels of conditions for entrepreneurship, as well as the relationship between these conditions and entrepreneurial dynamics. Finally, the association of the latter with the level of (sustainable) development was highlighted. To delve deeper into this issue of heterogeneity, an exercise was conducted using cluster analysis. This technique allows for an analysis of how different ecosystems can be grouped together based on both their input conditions (conditions for entrepreneurship) and output (entrepreneurial dynamics)[4].

At first glance, three major groups of systemic configurations can be identified, each associated with a different level of economic development[5]. Within each of these groups, various situations displaying different configurations can be observed.

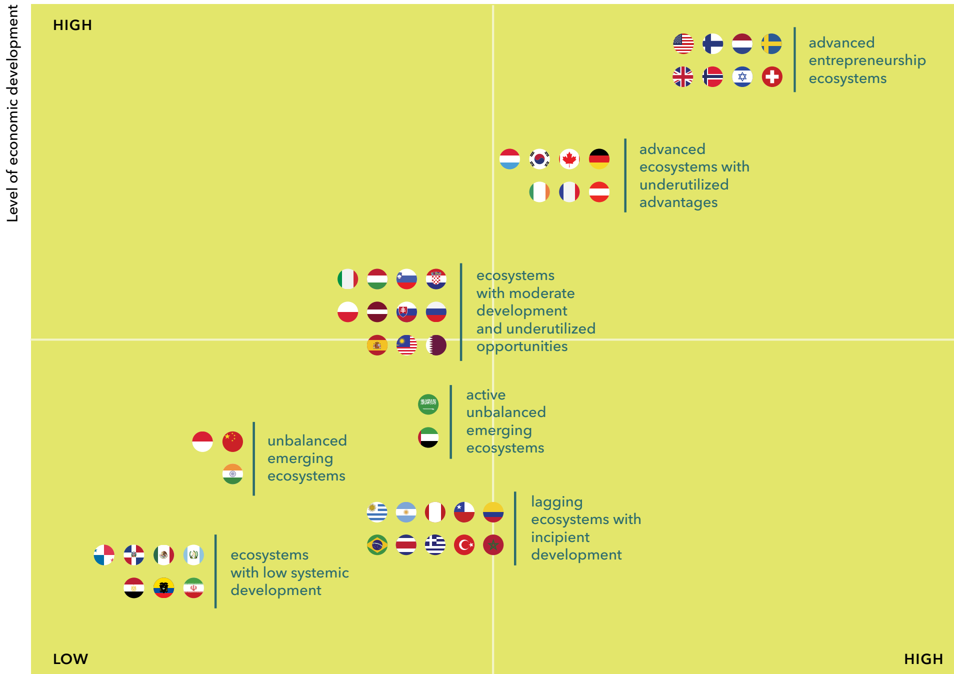
The first group includes countries with higher levels of economic development, and within this group, two different configurations can be observed: "advanced entrepreneurship ecosystems" and "advanced ecosystems with underutilized advantages."

Both types of ecosystems share higher IDE levels compared to the rest, with averages around 50 points. In this sense, they have the most favorable systemic conditions for dynamic entrepreneurship. In particular, the countries in these two configurations outperform the rest in terms of their business structures and STI platforms, which are the most structural components of the opportunity space.

4. This exercise builds upon previous work included in the 2018 IDE Report and an academic article published in the Journal of Socio-Economic Planning Science. Since five years have passed since that estimation and with the pandemic as a factor, it is interesting to revisit this exercise, including now more countries and an output variable that was not present in the previous version.

5. Methodological note: To identify these profiles, the SPAD statistical package was used, which allows for cluster analysis to create heterogeneous groups. A mixed clustering method was employed, which combines hierarchical clustering and k-means clustering. The explanatory variables used for clustering were the dimensions and sub-dimensions of the IDE.

Figure 12.
## Configurations of ecosystems around the world



IDE 2023

However, there are also differences between these configurations. The first of these systemic configurations also exhibits higher values of entrepreneurial human capital and its formative factors, as well as more favorable conditions for social capital and access to financing. This, in turn, contributes to a higher level of output. Based on these characteristics, this configuration could be referred to as **advanced entrepreneurship ecosystems** and would include the following countries: United States, Finland, Netherlands, Sweden, United Kingdom, Norway, Israel, and Switzerland.

Among the developed countries, there are those that have similar advantages in terms of opportunities and enabling factors but exhibit lower levels of entrepreneurial human capital and entrepreneurial dynamics. This is a configuration of **advanced ecosystems with underutilized advantages** and includes Germany, Austria, Canada, France, South Korea, Ireland, and Luxembourg.

Then there are countries with intermediate index levels, among which there are two configurations. One configuration shows significant advancements in certain dimensions such as entrepreneurial education or entrepreneurship policies and regulations. However, unfavorable conditions in entrepreneurial human capital, the STI platform, and business structure coexist. These are emerging countries, which is why they are identified as **unbalanced emerging ecosystems**, precisely because of their level of systemic imbalance. China, India, and Indonesia belong to this group.

Saudi Arabia and the United Arab Emirates form another configuration that shares similar characteristics to the previous ones in terms of advancements and unfavorable conditions. However, they have significantly higher levels of per capita income and entrepreneurial dynamics. Therefore, they would be considered more **active unbalanced emerging ecosystems**.

Among countries with intermediate systemic conditions, another configuration emerges. These countries, despite having advantages in the opportunity space, lack significant levels of entrepreneurial human capital to exploit them, despite their efforts in entrepreneurial education. Additionally, their governments have yet to prioritize policies that promote dynamic entrepreneurship. These are **ecosystems with moderate development and underutilized opportunities**, including Central and Mediterranean European countries (Italy, Hungary, Slovenia, Croatia, Poland, Latvia, Slovakia, Russia, Spain) and other Asian countries such as Japan, Malaysia, and Qatar.

Finally, there are countries with less favorable systemic conditions. Within this group, there are two types of configurations. On one hand, there are **lagging ecosystems with incipient development** characterized by higher values, compared to other countries in this latter group, in certain structural aspects in both the opportunity space and factors forming entrepreneurial human capital. Uruguay, Argentina, Peru, Chile, Colombia, Brazil, Costa Rica, Greece, Turkey, and Morocco display this configuration. The last configuration corresponds to **ecosystems with low systemic development**, which includes Panama, the Dominican Republic, Mexico, Guatemala, Egypt, Ecuador, and Iran.

This typology of systemic configurations enables countries to compare themselves to other groups and obtain relevant information about the predominant characteristics within their group. It also provides information about the advantages and disadvantages of these characteristics in their group and helps in identifying areas that need improvement.

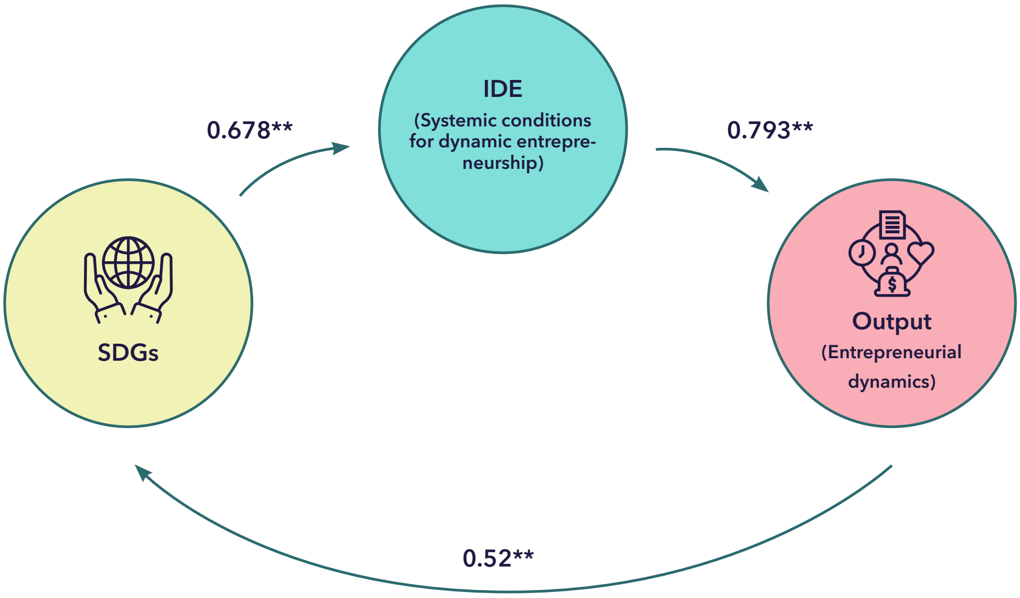
# IDE Dialogues: Conditions for entrepreneurship and other socio-economic indicators

The 2022 IDE report shows that there is a virtuous circle between systemic conditions for dynamic entrepreneurship, business creation, and the Sustainable Development Goals. The following graph showing data as of 2023, illustrates how conditions for entrepreneurship and actual levels of sustainable development tend to go hand-in-hand. Additionally, better systemic conditions for entrepreneurship are positively and significantly related to entrepreneurial dynamics– the composite output indicator presented in the previous section[6].

This increased entrepreneurial dynamism, when translated into new businesses, ends up positively contributing to achieving various aspects of sustainable development, such as inclusion, climate change mitigation, or addressing other societal issues. The virtuous circle closes as better levels of sustainable development are positively associated with favorable conditions for entrepreneurship.

Figure 13.

**A virtuous circle between IDE, Sustainable Development, and Entrepreneurial Dynamics**




In this year's report, we delve into further analyses, initiating a series of possible dialogues between the IDE and indicators of other aspects that account for overall social development and that of their ecosystems and their stakeholders.

6. Remember that this composite entrepreneurship dynamics index combines five variables. The first variable is the 2022 and 2023 business density, based on Crunchbase data as cited above. The second variable is the density rate of young companies (defined as those aged between 4 and 15 years), also based on Crunchbase data. The third variable is the ratio between companies aged 3 years or less and companies up to 15 years old, which serves as a measure of the significance of new companies within the younger ones. The fourth variable is the business density rate measured by the World Bank. Finally, the fifth variable considered is the Entrepreneurial Activity Rate calculated by the Global Entrepreneurship Monitor (GEM).

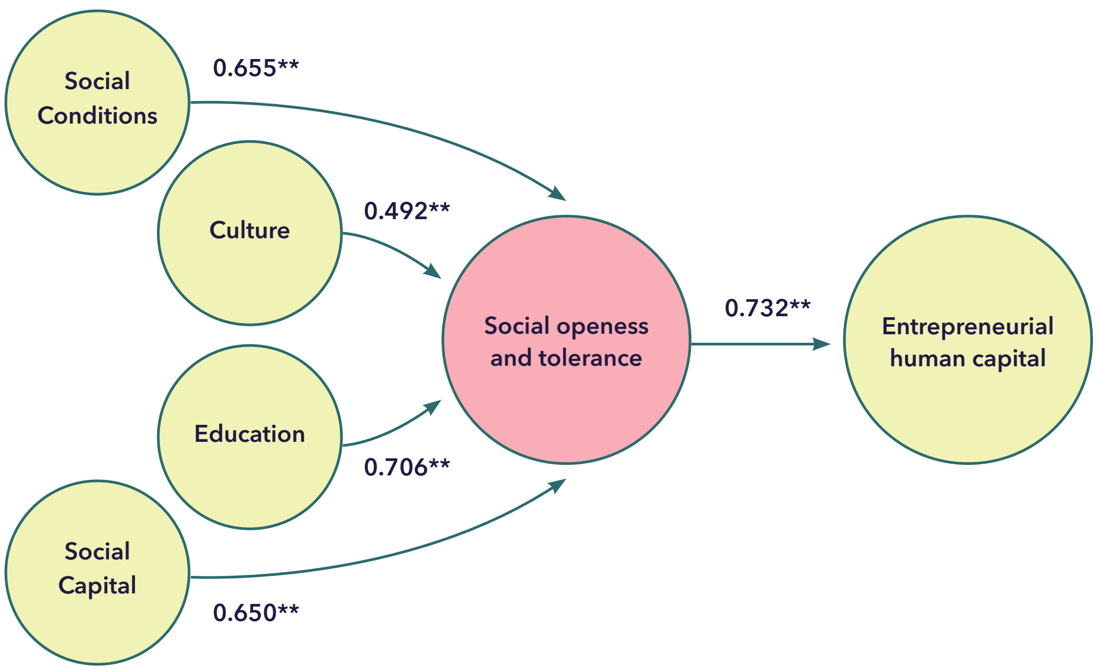
# Dialogue 1. Tolerance, diversity, and entrepreneurship

Empirical evidence shows that places with greater cultural diversity (where different ethnicities and nationalities coexist) and greater tolerance for differences have a more conducive environment for innovation, creativity, and entrepreneurship (Lee et al., 2004).

In fact, there is an association reaching 70% between the IDE and a sub-index of the *Global Talent Competitiveness Index* (INSEAD), which measures aspects such as tolerance for minorities and immigrants, social mobility, and the conditions of women in society. Particularly, there is a positive and significant relationship between this sub-index of openness and tolerance and the entrepreneurial human capital dimension of the IDE, reflecting, as R. Florida (2010) argues, that more open, tolerant, and diverse societies promote the development of a more diverse set of skills and a greater propensity to take risks and innovate.

This positive association also extends to the factors that shape this entrepreneurial human capital. While the scope and data of this exercise do not allow for discussions about the direction of causality or mediating effects, one could hypothesize that countries with more favorable social conditions, better access to quality education, more horizontal and entrepreneurial cultures, and higher levels of social capital will have a higher level of openness and tolerance. This, in turn, could lead to higher levels of entrepreneurial human capital. In other words, the relationship between these dimensions and entrepreneurial human capital could be mediated by the openness and tolerance of their societies.

Figure 14.
**An intermediate role of tolerance and openness**



# Dialogue 2. Gender gaps & systemic conditions for entrepreneurship

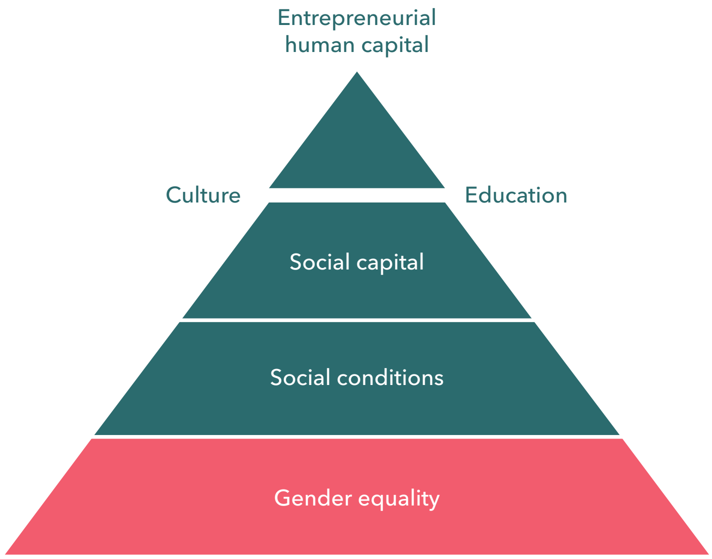
The 2022 Global Gender Gap Index developed by the World Economic Forum (WEF) shows that the most developed countries have more gender-equal societies, and vice versa. A correlation analysis reveals a positive and significant association between these two variables (0.60). The same can be said for the conditions for entrepreneurship measured by the IDE, where the relationship is also positive and significant (0.47). In other words, higher levels of development correspond to better conditions for entrepreneurship, and both situations are associated with greater gender equality[7].

Digging deeper into the IDE dimensions, there is a positive and significant association between entrepreneurial human capital and gender equality (0.54). One hypothesis is that gender-equal societies have greater female participation in the pool of entrepreneurs with the motivation and skills to create and grow their businesses. This hypothesis is supported by the fact that the formative aspects of entrepreneurial human capital (social conditions, education, and culture) are also positively associated with greater gender equality.

Furthermore, IDE's social capital dimension shows a positive and significant association with the gender equality indicator (0.51), reflecting that horizontal societies enable greater access to resources and opportunities beyond gender conditions. In summary, greater gender equality in society is associated with several IDE dimensions, as seen in the following figure.

Figure 15.

## Gender equality and conditions for entrepreneurship




7. This description does not imply that causality cannot go in the other direction.

While the association between the IDE and gender equality is positive and significant, the role of women in dynamic and innovative entrepreneurship is still low. This should not be overlooked. In fact, the above-mentioned WEF report (2022) indicates that only 21% of technology companies are led by women.

A similar correlation exercise between GEM's female/male TEA ratio (Total early-stage Entrepreneurial Activity) is negatively and significantly associated with conditions for dynamic entrepreneurship (-0.331), suggesting that a significant portion of female entrepreneurship is driven more by necessity than opportunity and dynamism.

In sum, evidence collected in this exercise demonstrates the channels through which greater gender equality could translate into better conditions for dynamic entrepreneurship and vice versa.

# Concluding remarks

In conclusion, the 2023 IDE Report offers a comprehensive global overview of the systemic conditions influencing dynamic entrepreneurship. The detailed analysis of the top ten countries reveals a consistent leadership driven by advantages associated with effectively transforming projects into scalable companies, supported by favorable social and economic structures. Notably, these leading countries have demonstrated remarkable stability in their positions over the past decade, emphasizing the enduring nature of their conditions for entrepreneurship.

Moreover, the report introduces novel insights into entrepreneurial dynamics, highlighting a positive link between conditions for entrepreneurship, resulting entrepreneurial dynamics, and sustainable development levels. The intermediary role played by entrepreneurial dynamics underscores that countries with better conditions for entrepreneurship tend to exhibit higher levels of entrepreneurial activity, contributing to superior sustainable development outcomes.

In addition, the report also delves into the interconnectedness of systemic entrepreneurship conditions with broader socio-economic factors, introducing ‘dialogues’ between these. A positive correlation was identified between systemic conditions and societal openness and tolerance. Social conditions, education, social capital, and culture are shown to positively influence openness and tolerance, which, in turn, correlates with entrepreneurial human capital. Similar results are found in the analyses of the relationships between gender equality and systemic conditions for entrepreneurship, and also between the latter and the level of skilled and talented individuals in a society.

In sum, this year's report underscores the far-reaching impact of efforts dedicated to enhancing systemic conditions for dynamic entrepreneurship. Beyond the realm of new business creation, these efforts influence various relevant social variables, reinforcing the interconnected nature of entrepreneurship and broader societal development.

# A closer look at the country level

## IDE 2023

# Argentina

IDE ranking

**34**

IDE value

**28.9**

Population
(Millon habitants)

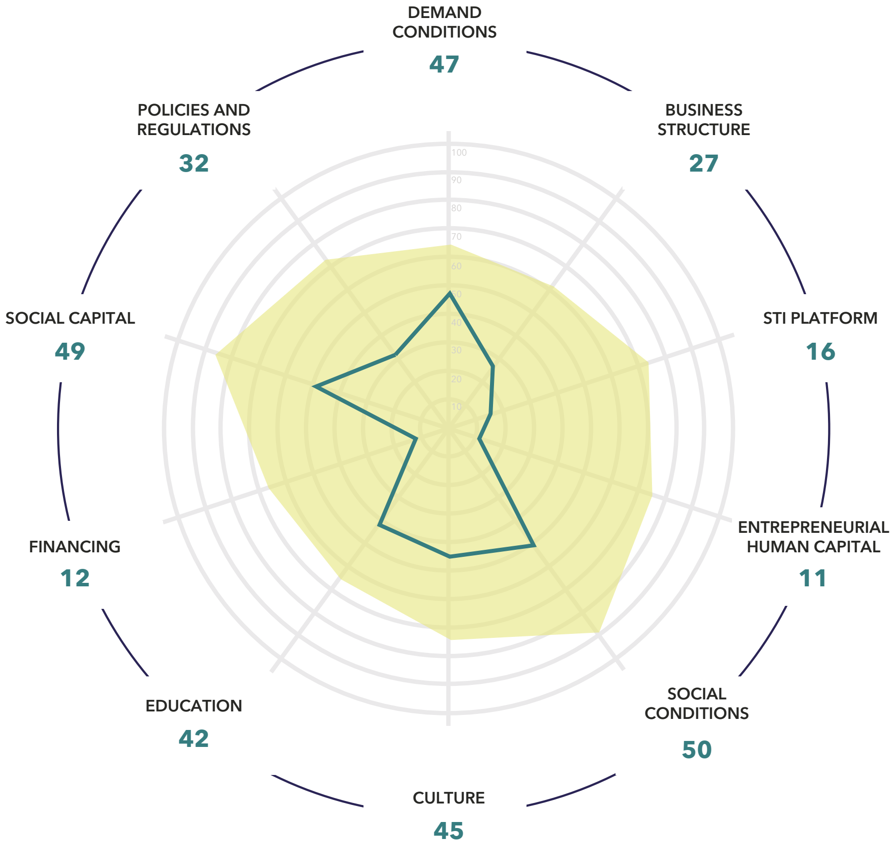
**46 M**

GDP per capita (USD)

**13,622**

GDP growth rate

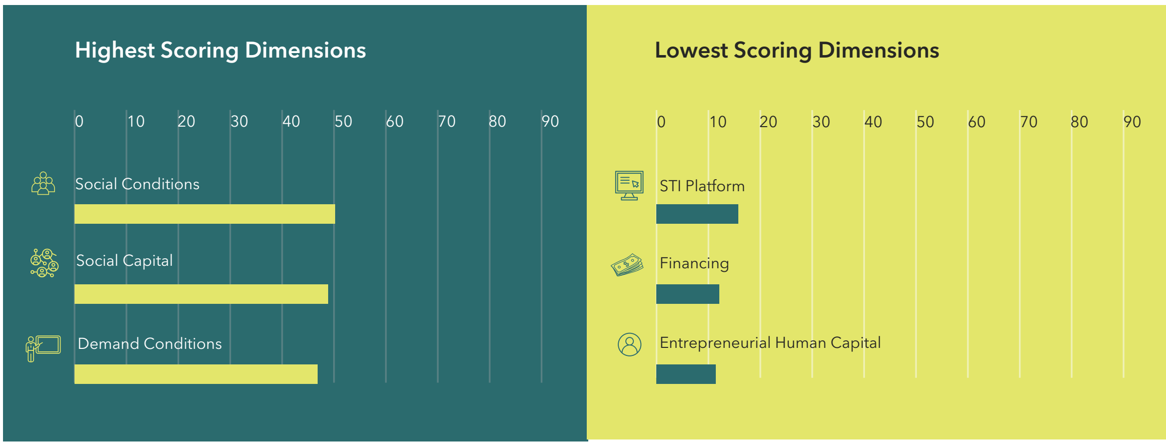
**5.24%**




Argentina

International benchmark

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



## IDE 2023

# Austria

IDE ranking

**12**

IDE value

**50.5**

Population (Millon habitants)

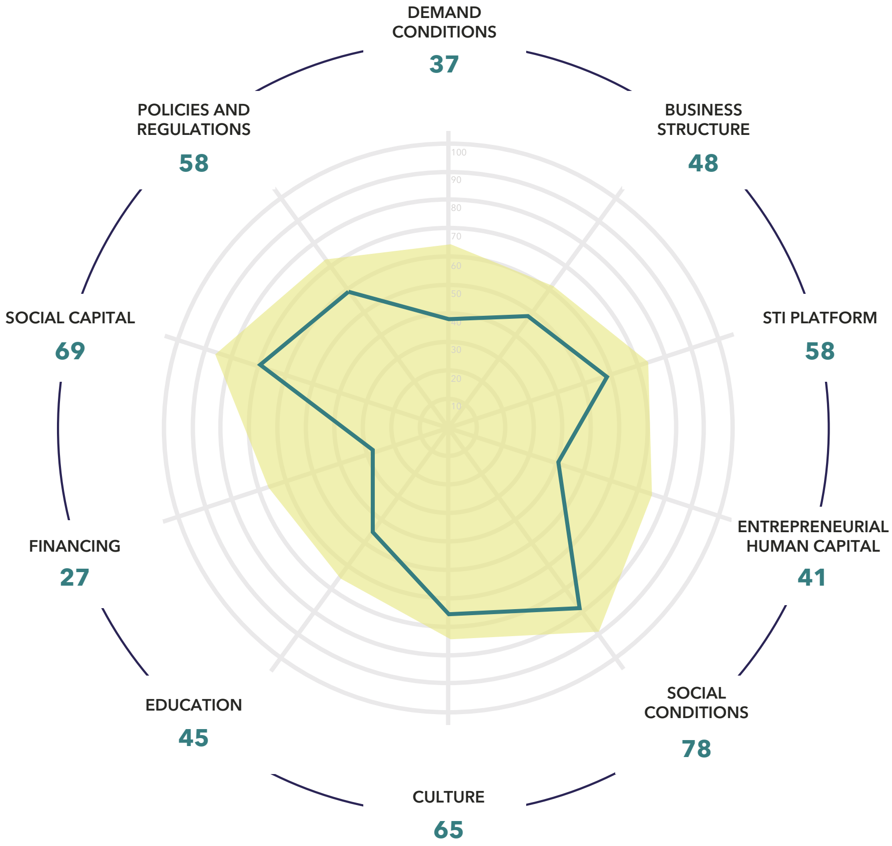
**9 M**

GDP per capita (USD)

**52,062**

GDP growth rate

**5%**

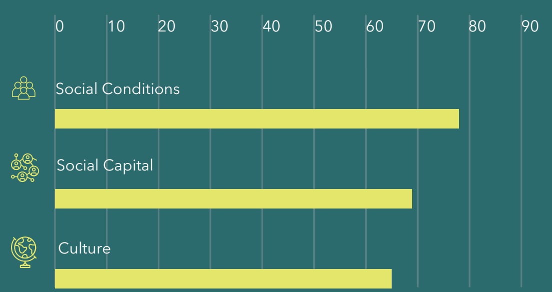



Austria

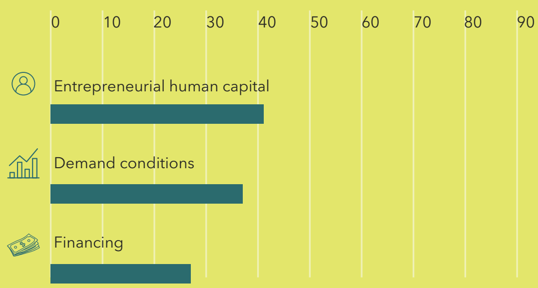
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



# IDE 2023

# Brazil

IDE ranking

**31**

IDE value

**30.0**

Population (Millon habitants)

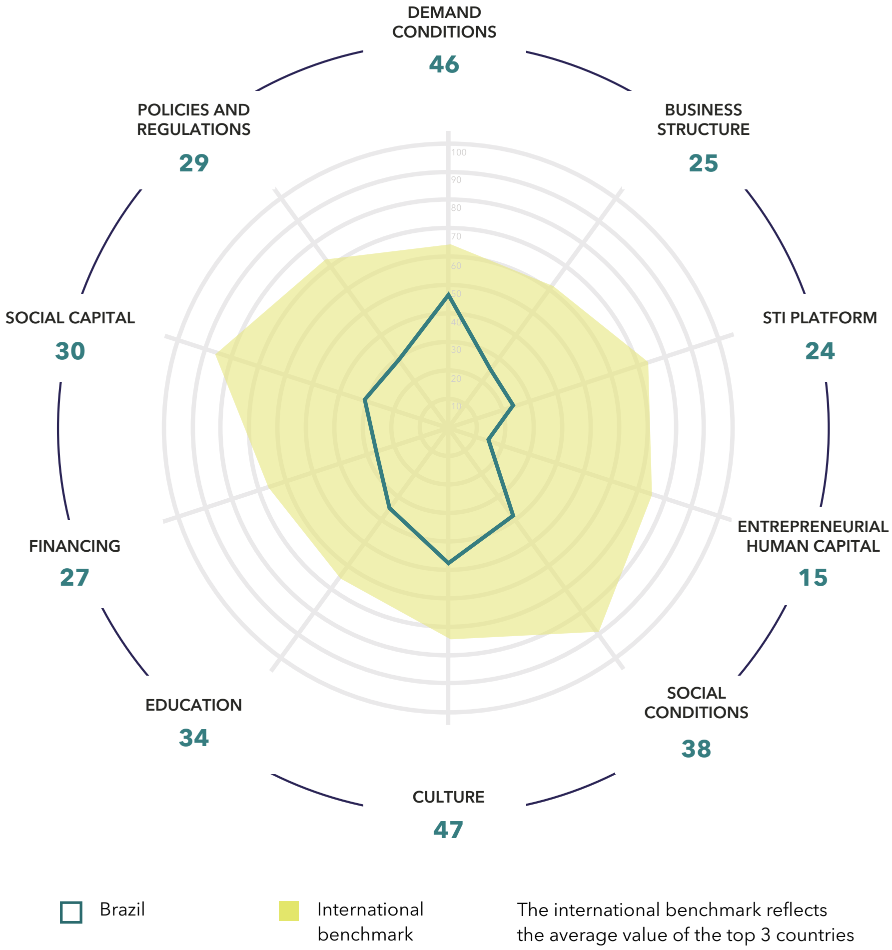
**214 M**

GDP per capita (USD)

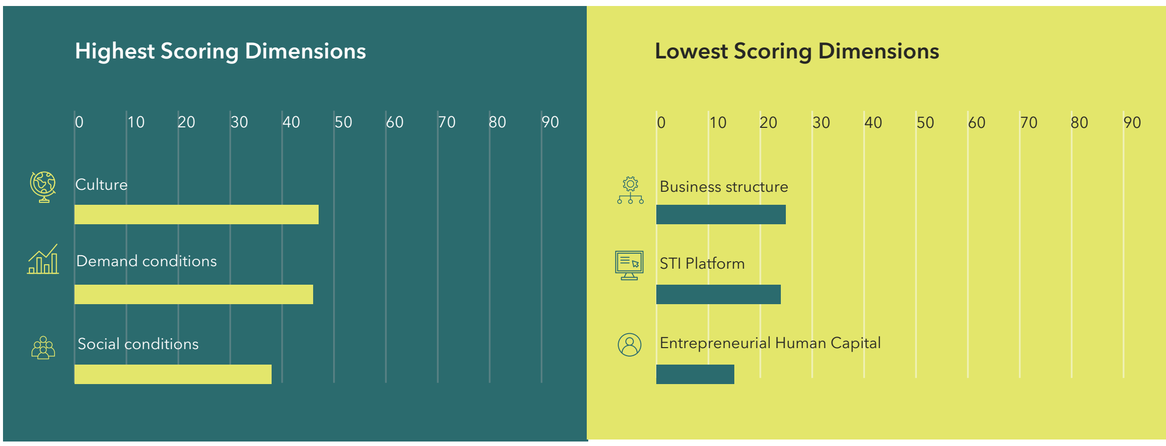
**8,857**

GDP growth rate

**2.90%**




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



## IDE 2023

# Canada

IDE ranking

**10**

IDE value

**52.8**

Population
(Millon habitants)

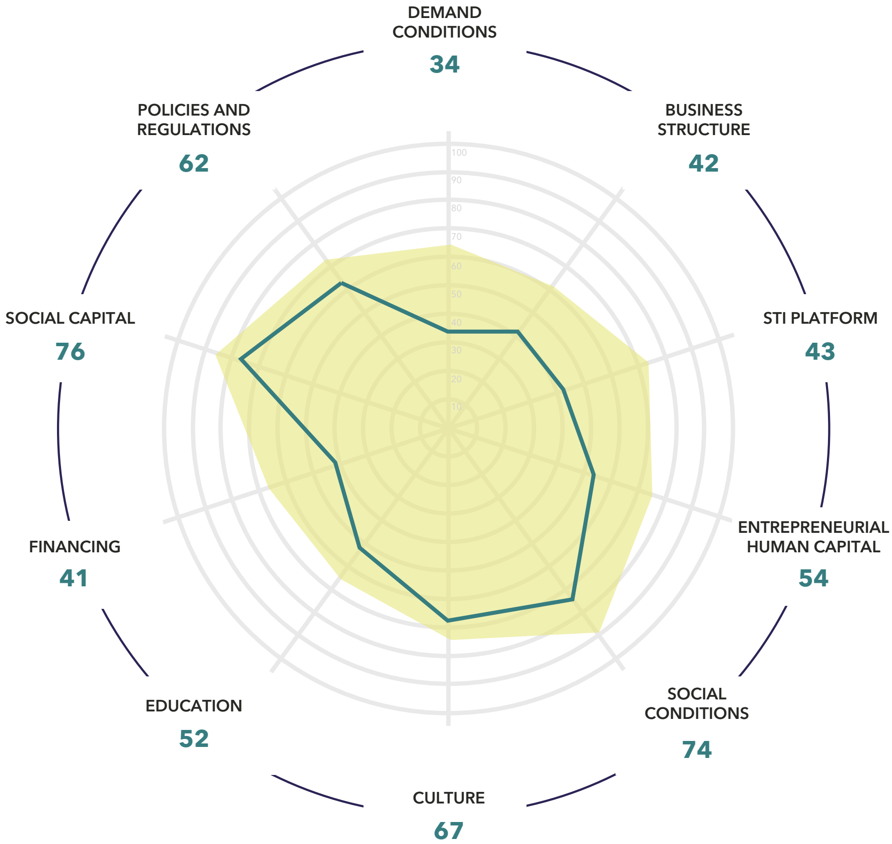
**39 M**

GDP per capita (USD)

**56,794**

GDP growth rate

**3.4%**

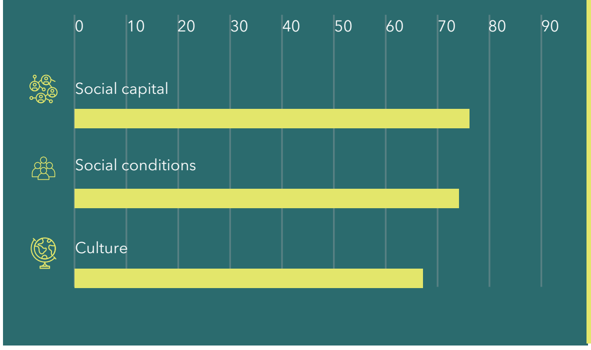



Canada

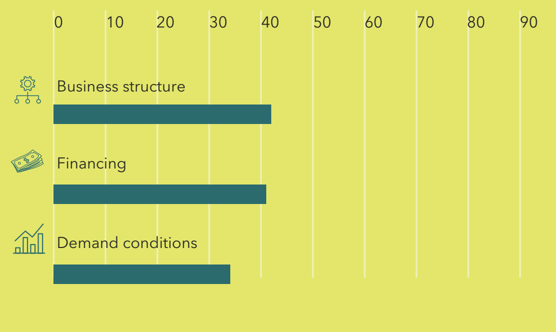
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



# IDE 2023

# Chile

IDE ranking

**29**

IDE value

**31.2**

Population
(Millon habitants)

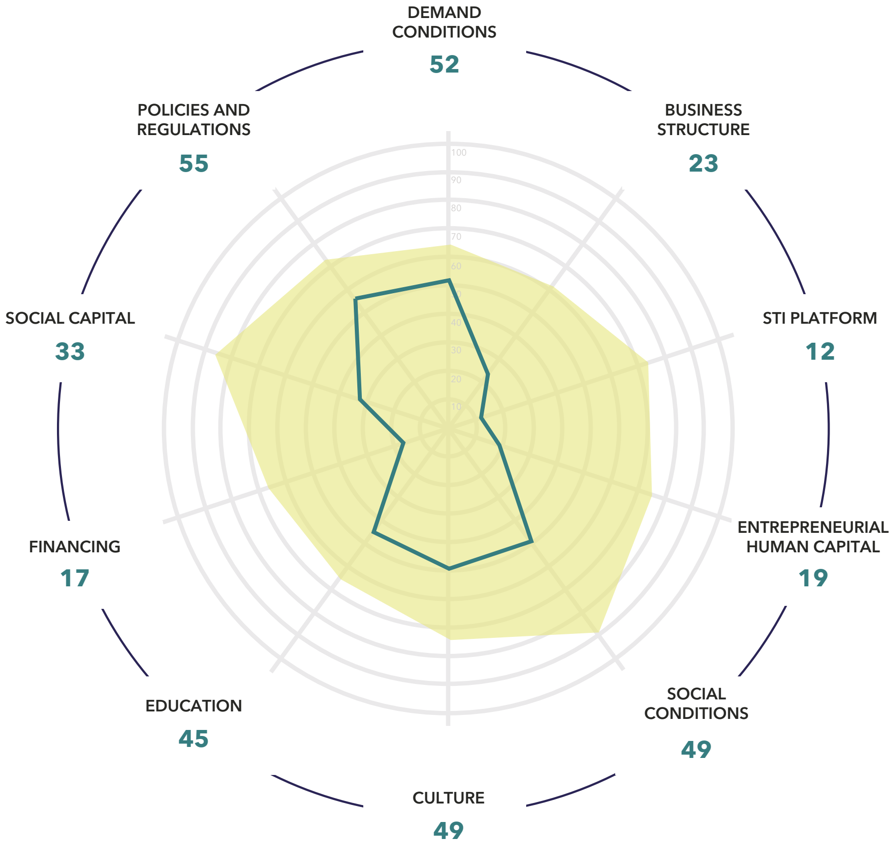
**20 M**

GDP per capita (USD)

**15,604**

GDP growth rate

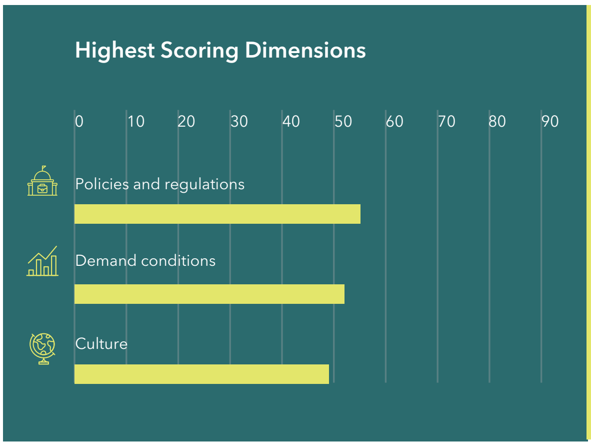
**2.44%**

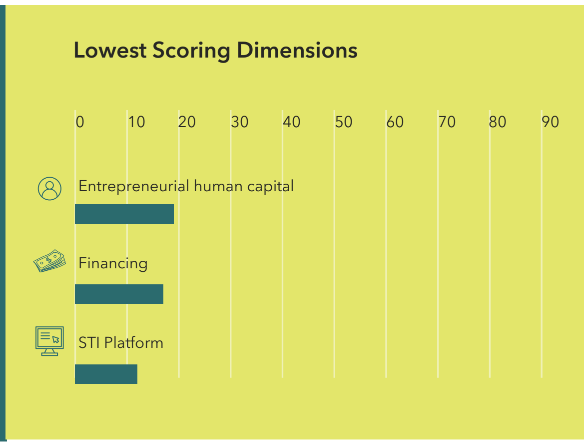



Chile

International benchmark

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



# IDE 2023

# China

IDE ranking

**17**

IDE value

**41.0**

Population
(Millon habitants)

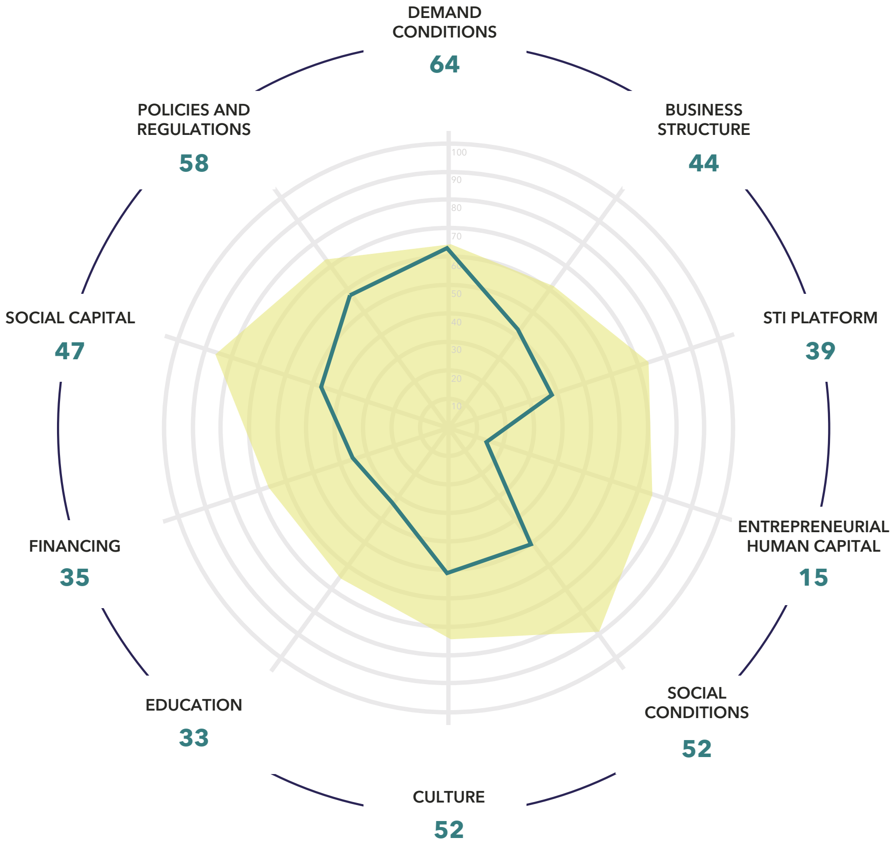
**1,413 M**

GDP per capita (USD)

**12,970**

GDP growth rate

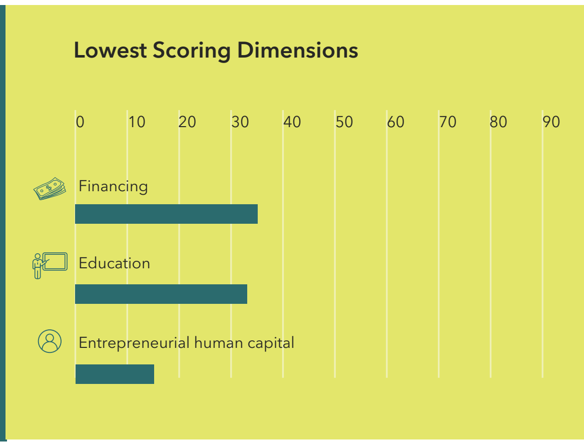
**3%**




China

International benchmark

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

## IDE 2023

# Colombia

IDE ranking

**35**

IDE value

**27.3**

Population
(Millon habitants)

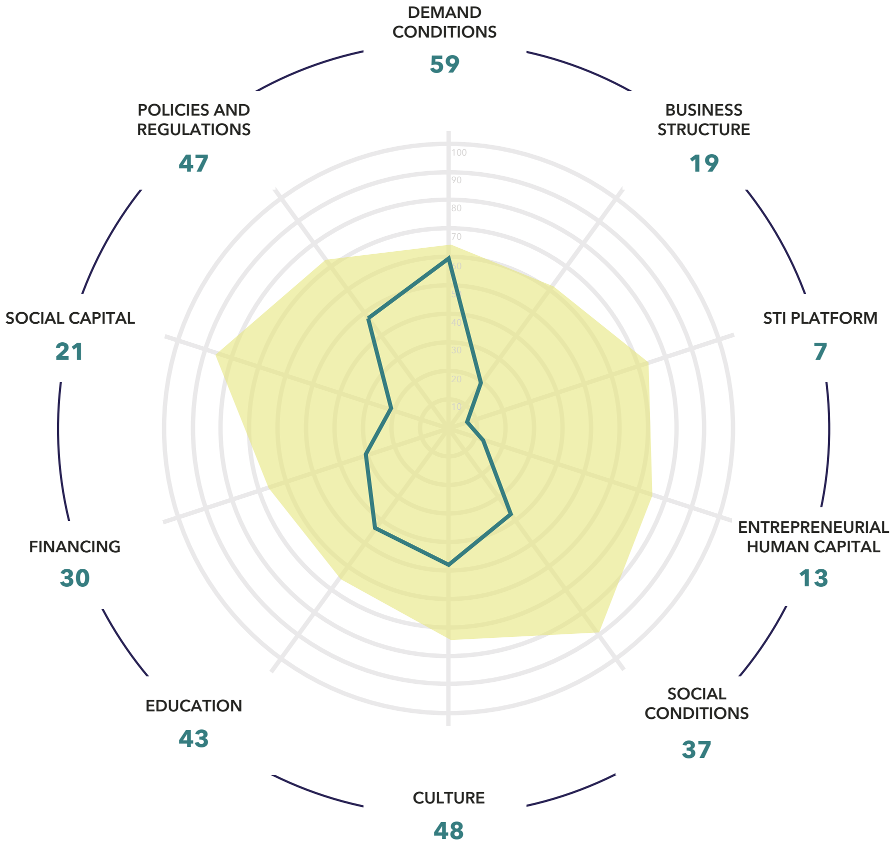
**52 M**

GDP per capita (USD)

**6,644**

GDP growth rate

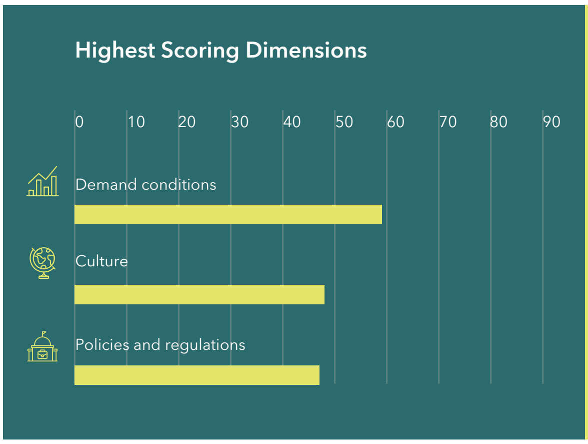
**7.5%**

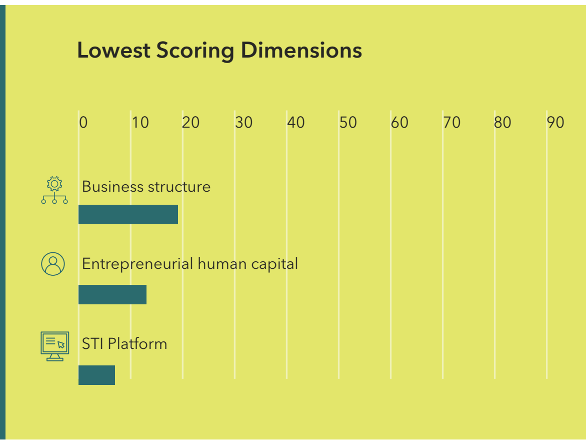



Colombia

International benchmark

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



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Prodem
Investigación, acción, aprendizaje

## IDE 2023

# Costa Rica

IDE ranking

**43**

IDE value

**23.6**

Population
(Millon habitants)

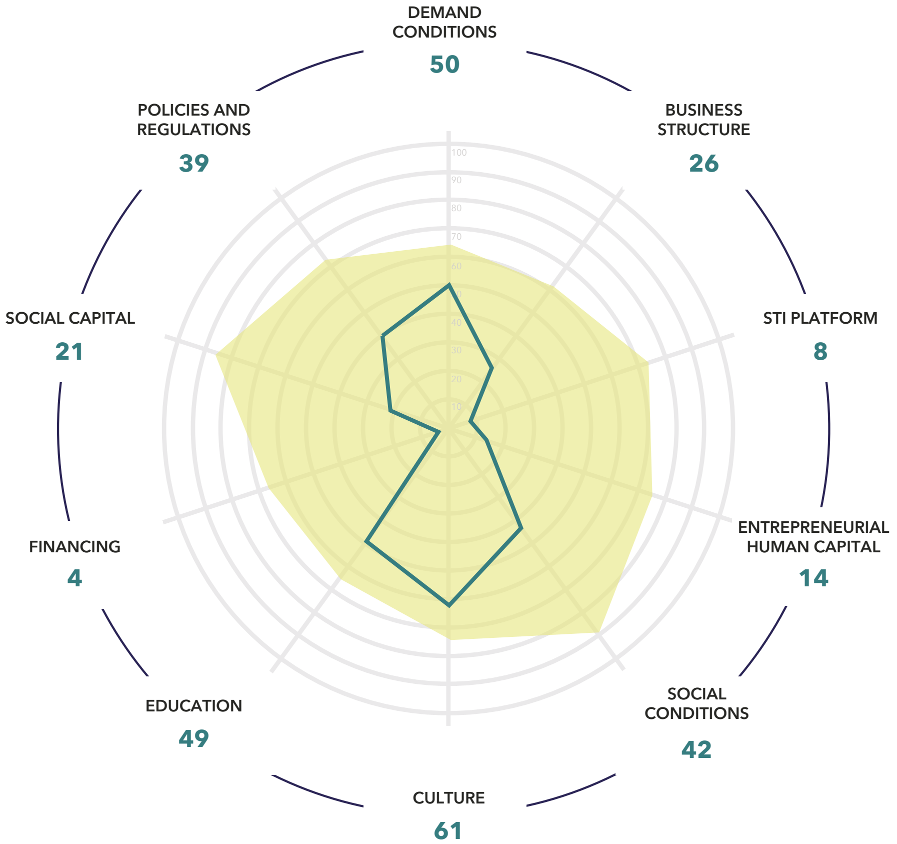
**5 M**

GDP per capita (USD)

**13,090**

GDP growth rate

**4.32%**

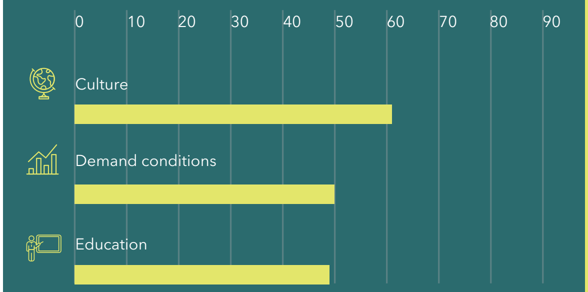



Costa Rica

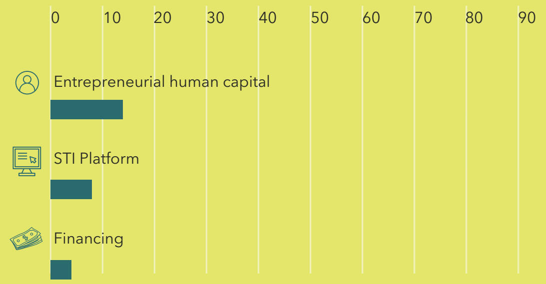
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Croatia

IDE ranking

**24**

IDE value

**35.7**

Population
(Millon habitants)

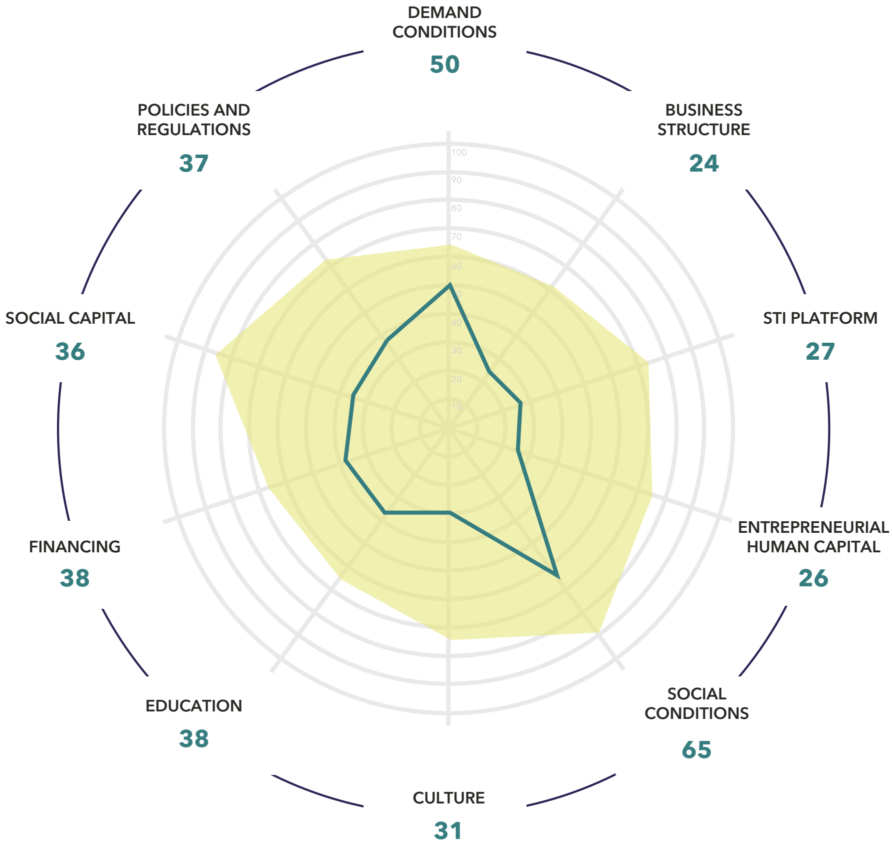
**4 M**

GDP per capita (USD)

**17,318**

GDP growth rate

**6.3%**

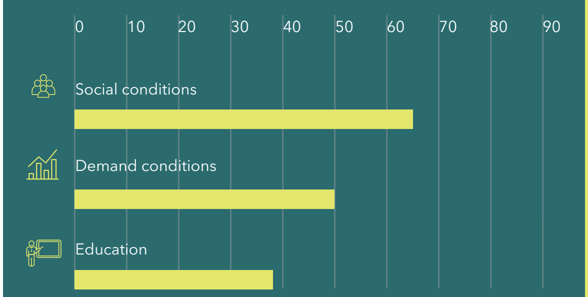



Croatia

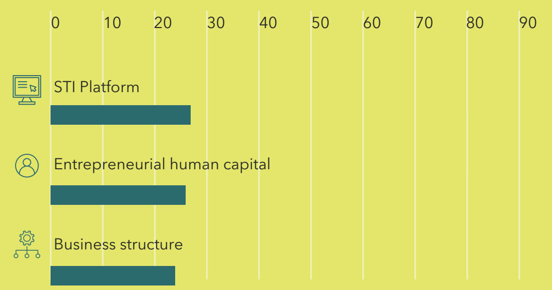
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



# IDE 2023

# Dominican Republic

IDE ranking

**49**

IDE value

**13.1**

Population
(Millon habitants)

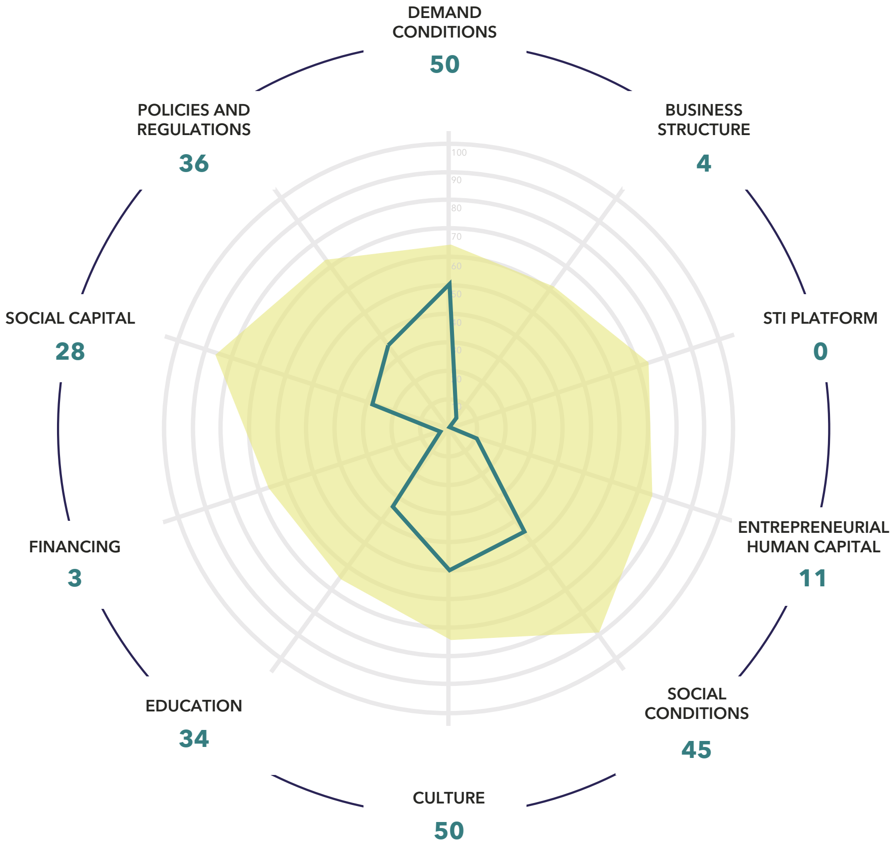
**11 M**

GDP per capita (USD)

**10,573**

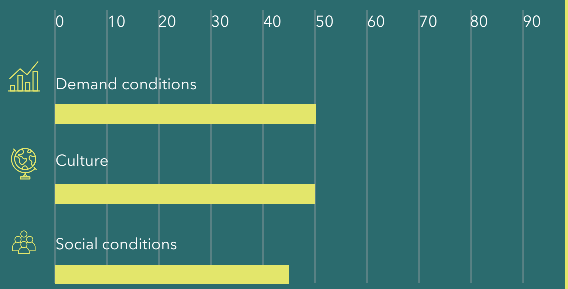
GDP growth rate

**4.9%**

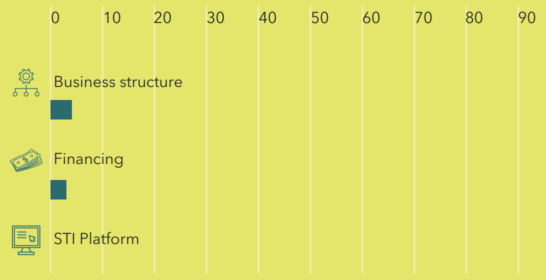



The international benchmark reflects the average value of the top 3 countries for each dimension.

## Highest Scoring Dimensions




## Lowest Scoring Dimensions



## IDE 2023

# Ecuador

IDE ranking

**48**

IDE value

**18.4**

Population
(Millon habitants)

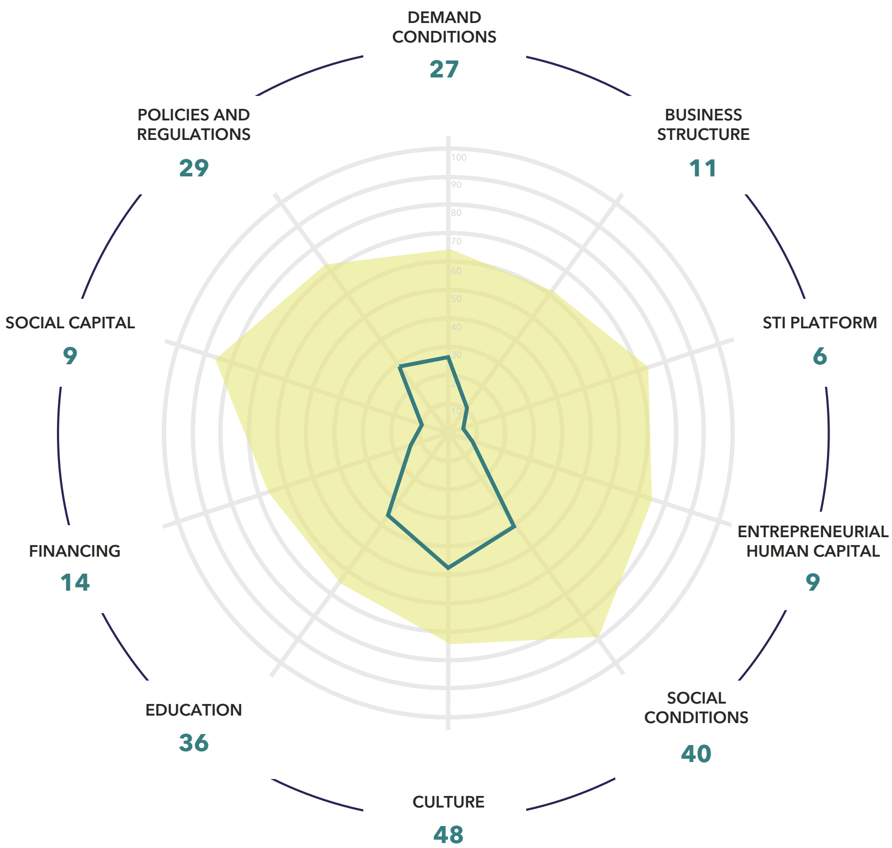
**18 M**

GDP per capita (USD)

**6,413**

GDP growth rate

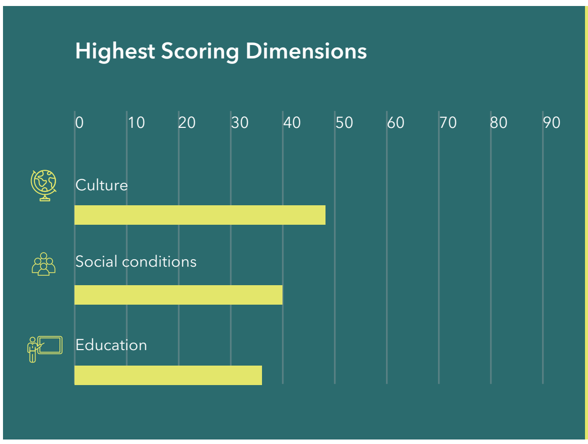
**3.04%**

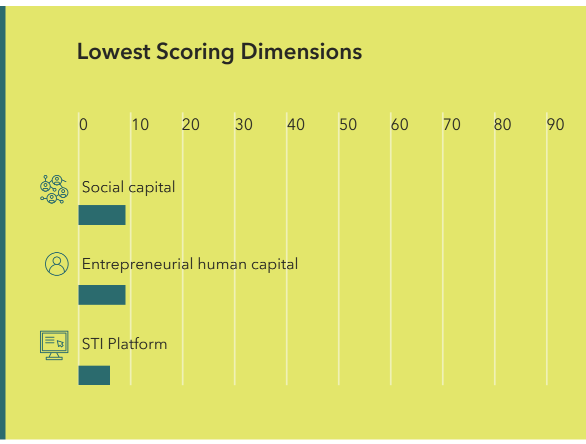



Ecuador

International benchmark

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



## IDE 2023

# Egypt



IDE ranking

**40**

IDE value

**25.3**

Population
(Millon habitants)

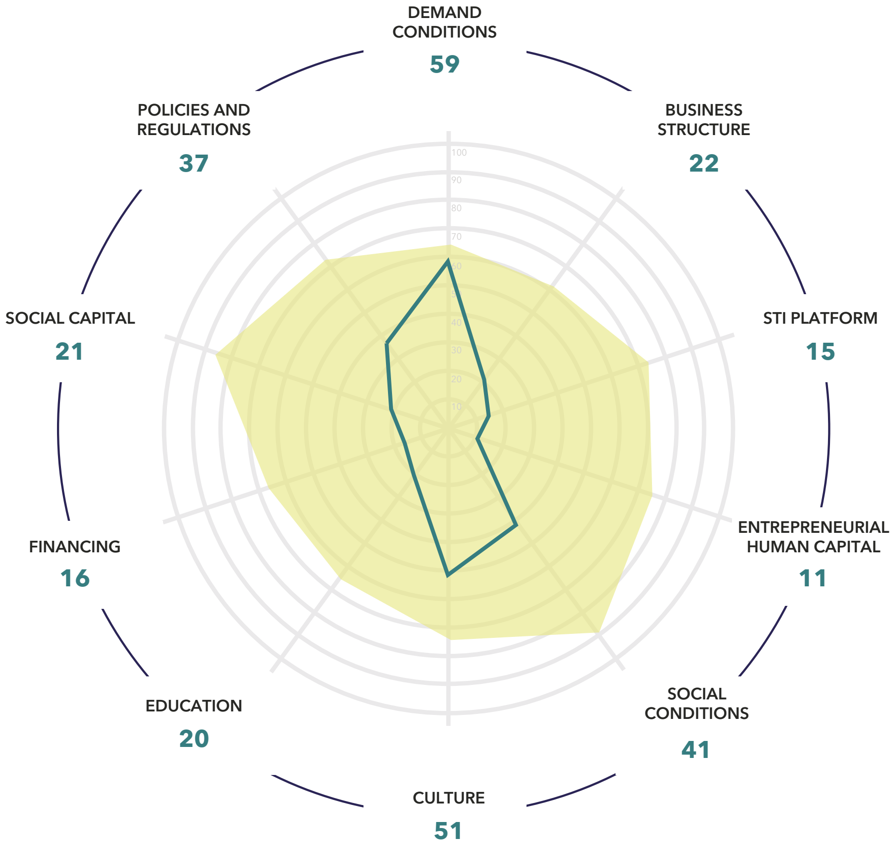
**104 M**

GDP per capita
(USD)

**4,504**

GDP growth rate

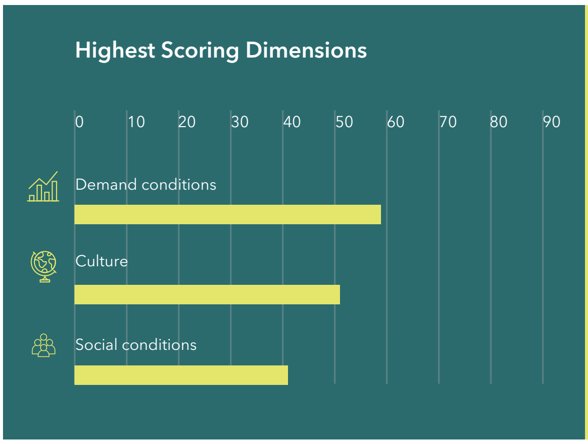
**6.6%**

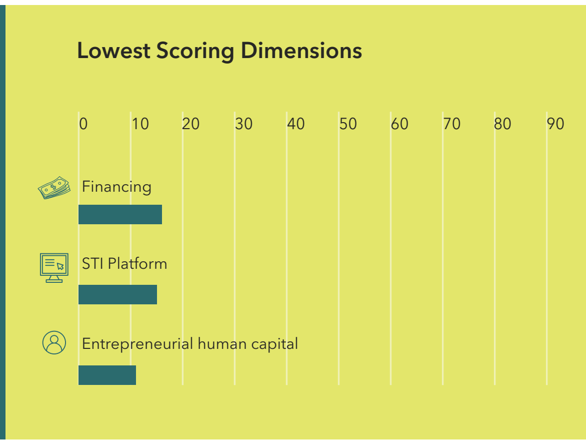



Egypt

International benchmark

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



## IDE 2023

# Finland

IDE
ranking

**3**

IDE value

**60.3**

Population
(Millon habitants)

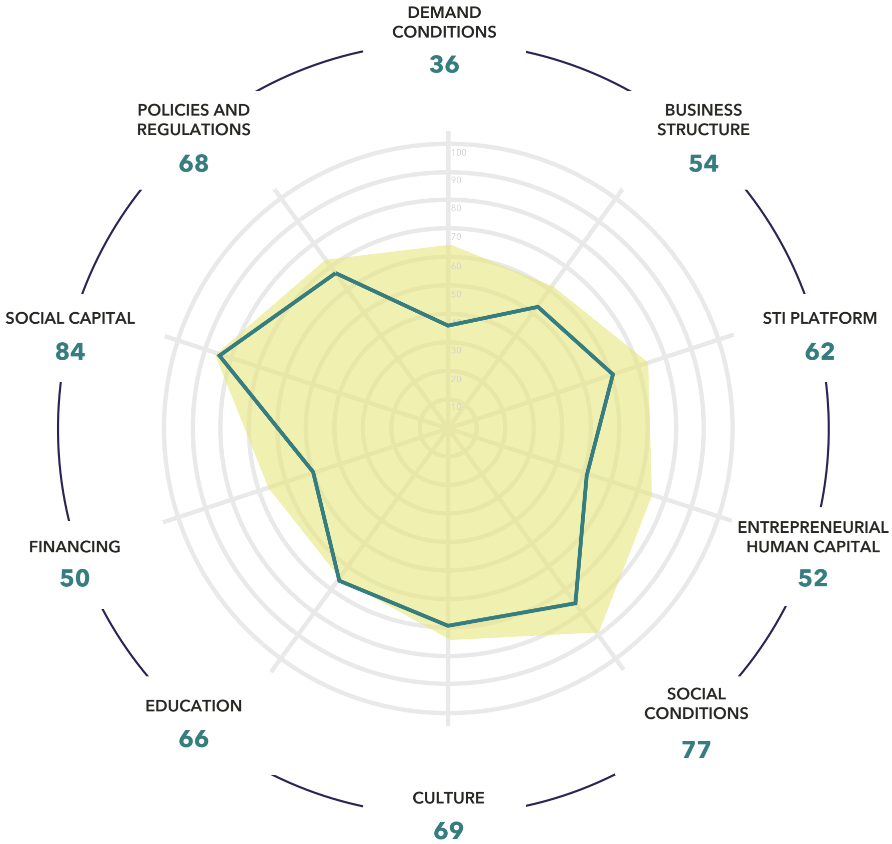
**6 M**

GDP per capita
(USD)

**50,818**

GDP growth rate

**2.1%**

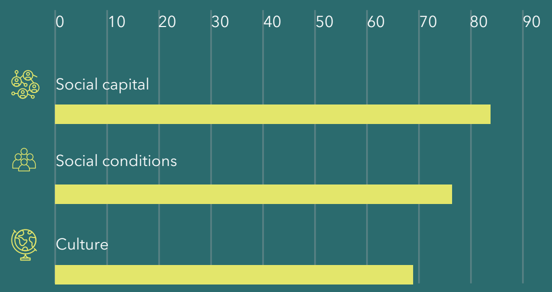



Finland

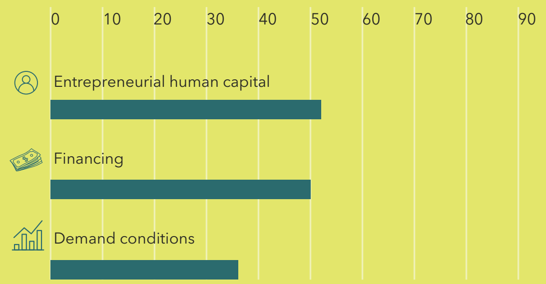
International benchmark

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

### Highest Scoring Dimensions

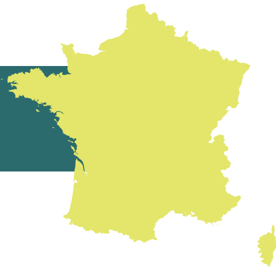



### Lowest Scoring Dimensions



# IDE 2023

# France



IDE
ranking

**15**

IDE value

**47.2**

Population
(Millon habitants)

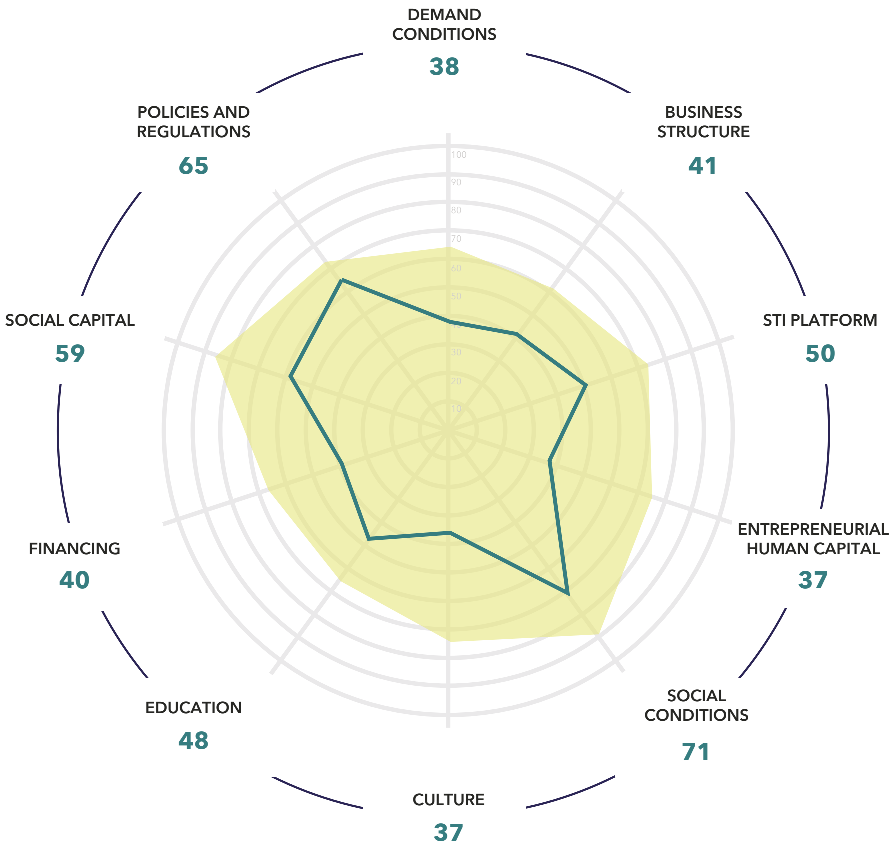
**66 M**

GDP per capita
(USD)

**42,330**

GDP growth rate

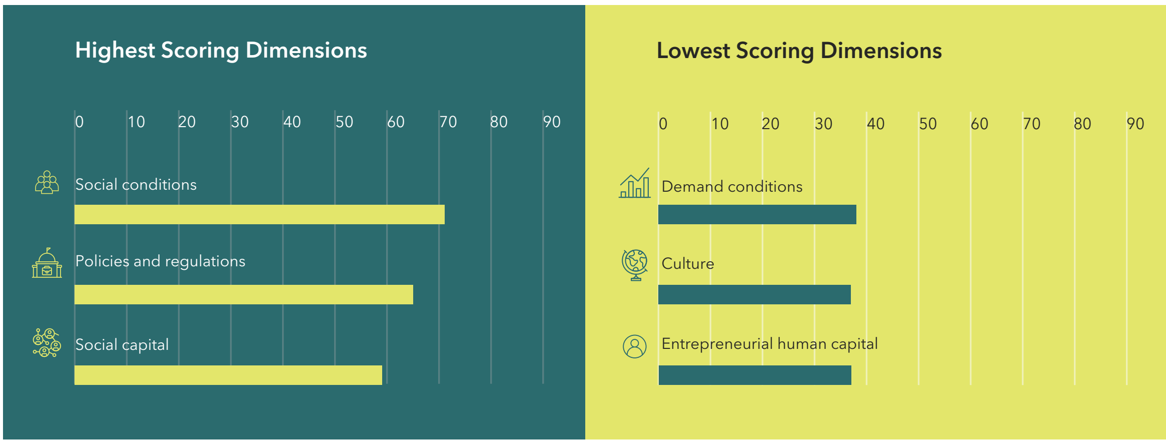
**2.6%**




France

International benchmark

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



## IDE 2023

# Germany

IDE ranking

**11**

IDE value

**52.6**

Population
(Millon habitants)

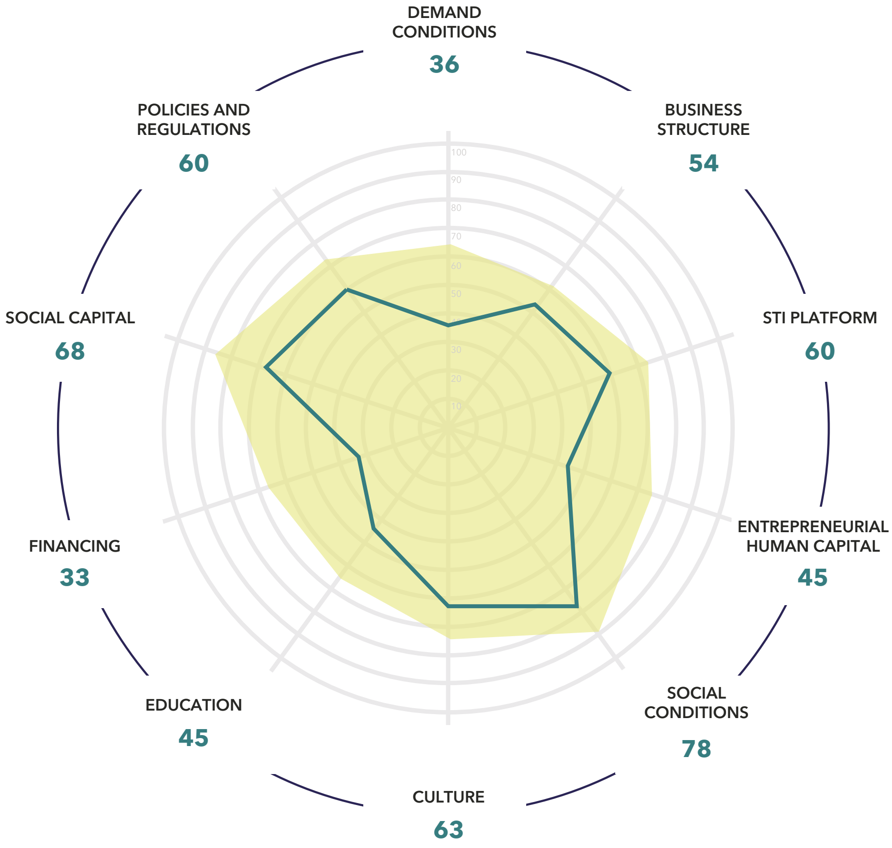
**83 M**

GDP per capita (USD)

**48,398**

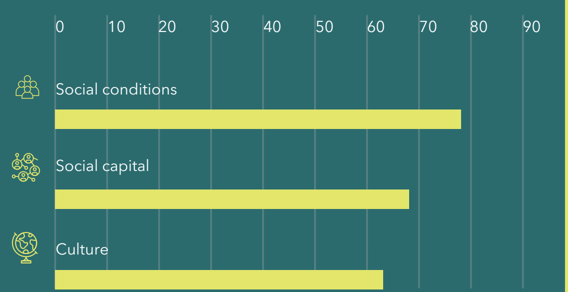
GDP growth rate

**1.8%**

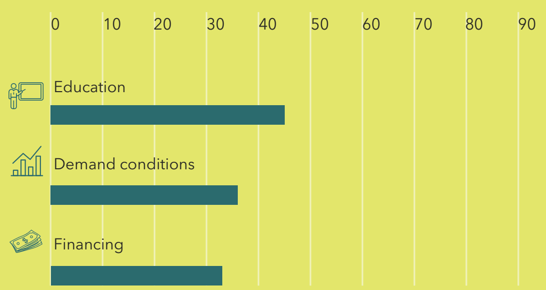



The international benchmark reflects the average value of the top 3 countries for each dimension.

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



GLOBAL ENTREPRENEURSHIP NETWORK

Prodem
Investigación, acción, aprendizaje

## IDE 2023

# Greece

IDE ranking

**38**

IDE value

**25.4**

Population
(Millon habitants)

**11 M**

GDP per capita
(USD)

**20,876**

GDP growth rate

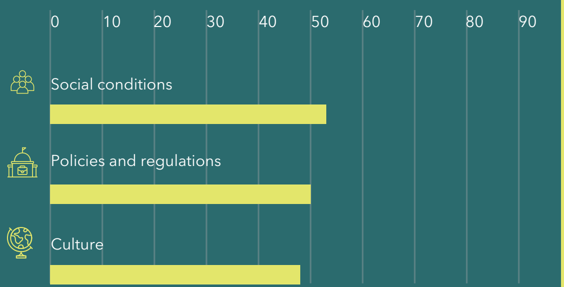
**5.91%**


Greece

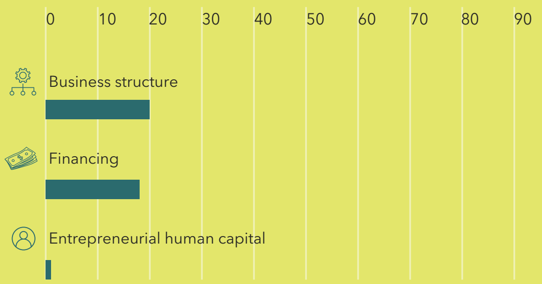
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



# IDE 2023

# Guatemala

IDE ranking

**50**

IDE value

**8.4**

Population
(Millon habitants)

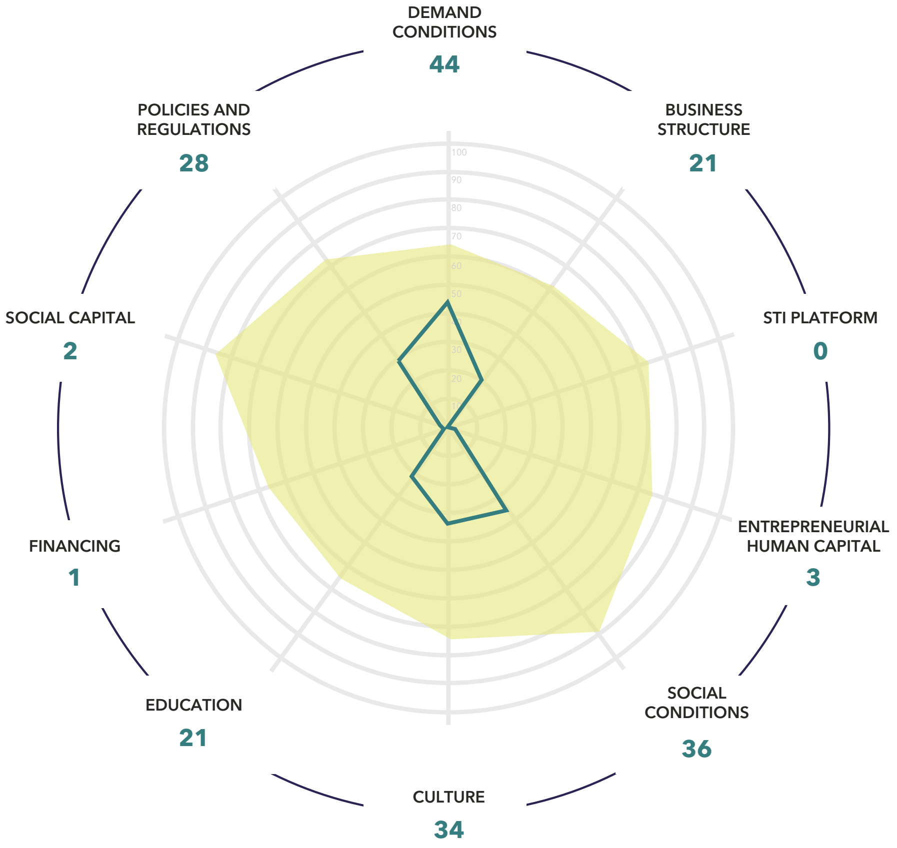
**19 M**

GDP per capita (USD)

**4,880**

GDP growth rate

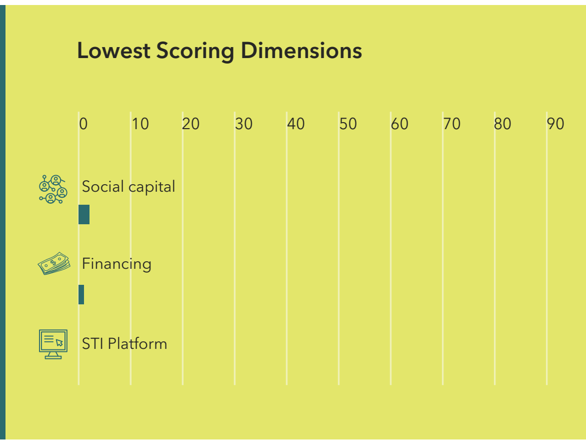
**4.0%**




Guatemala

International benchmark

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

## IDE 2023

# Hungary

IDE ranking

**19**

IDE value

**40.0**

Population
(Millon habitants)

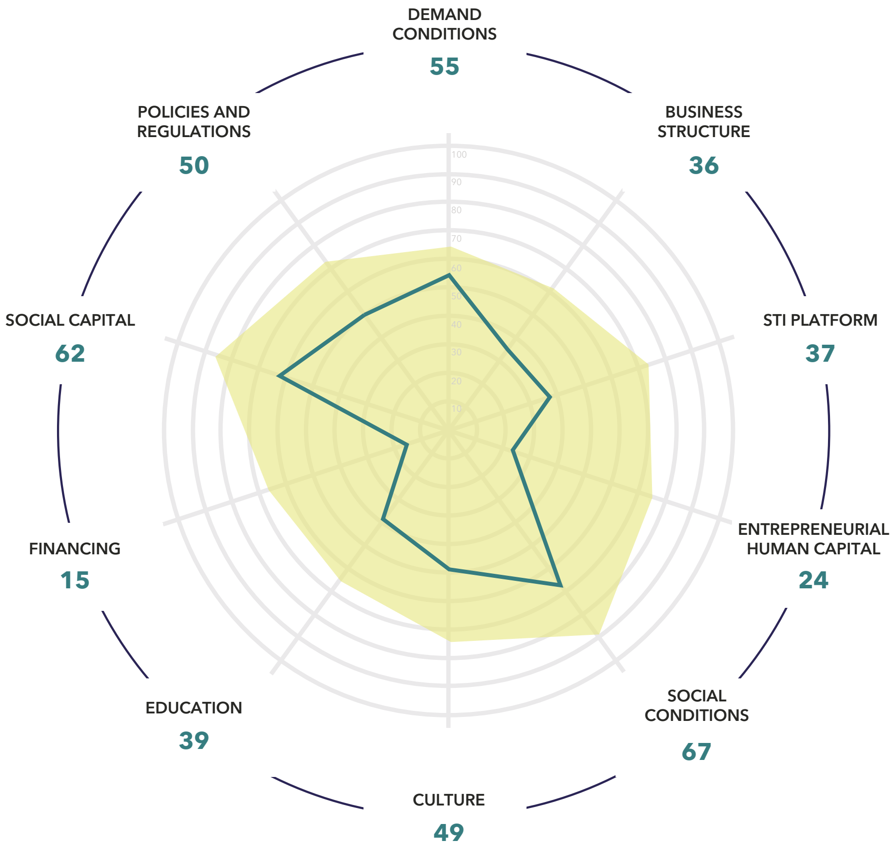
**10 M**

GDP per capita (USD)

**18,983**

GDP growth rate

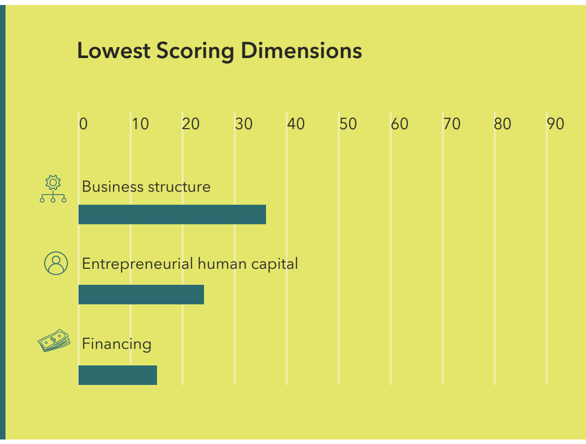
**4.9%**




Hungary

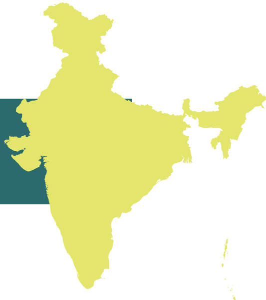
International benchmark

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

# IDE 2023

# India



IDE ranking

**26**

IDE value

**35.2**

Population
(Millon habitants)

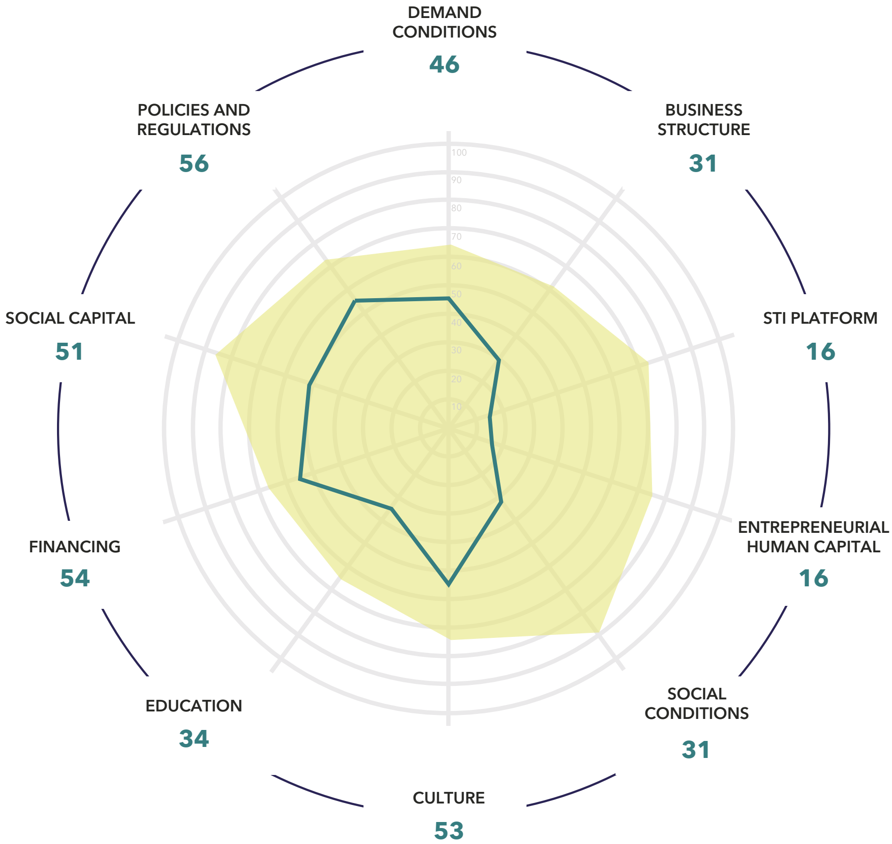
**1,407 M**

GDP per capita (USD)

**2,466**

GDP growth rate

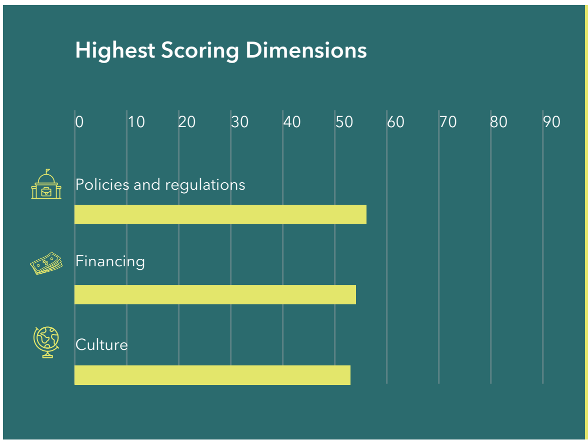
**6.8%**

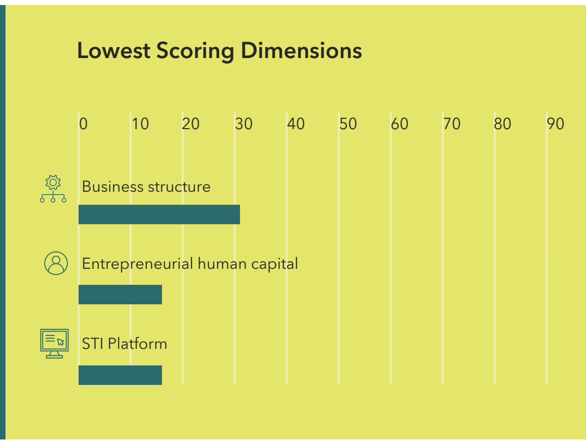



India

International benchmark

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



# IDE 2023

# Indonesia

IDE
ranking

**33**

IDE value

**28.9**

Population
(Millon habitants)

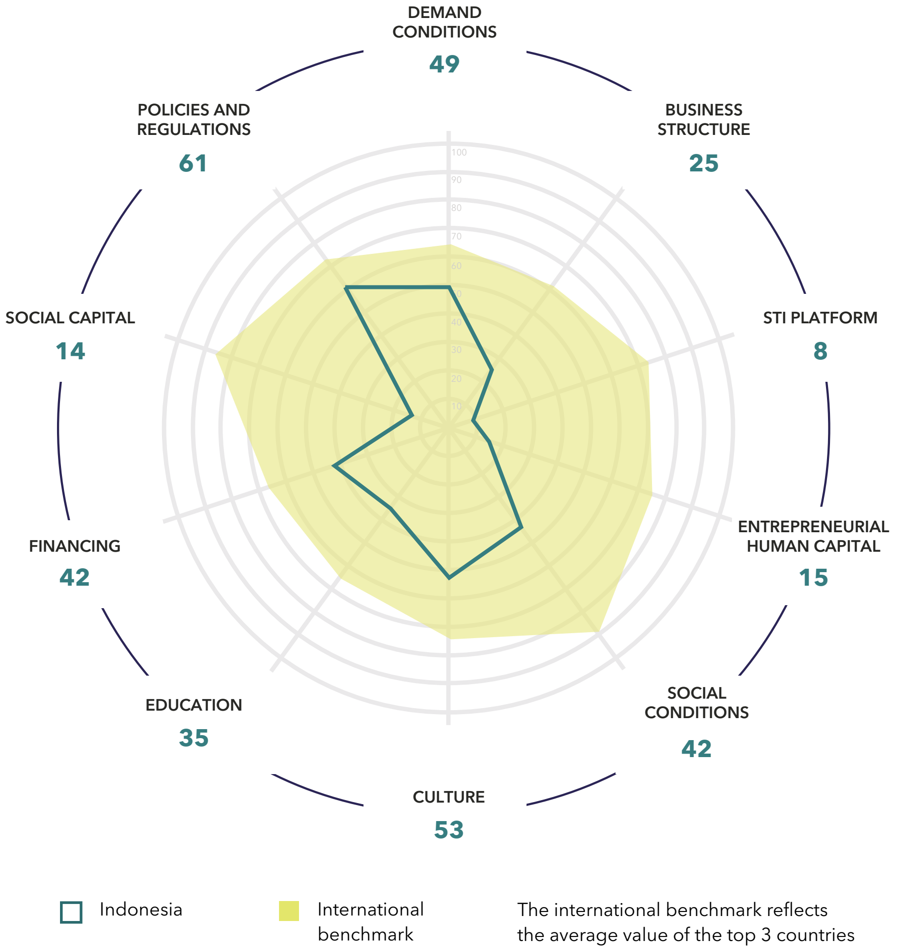
**275 M**

GDP per capita
(USD)

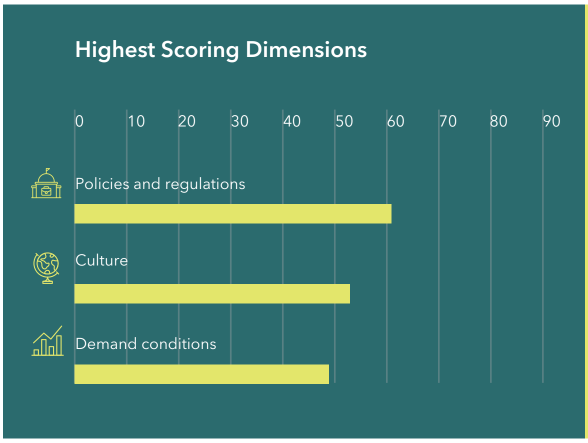
**4,691**

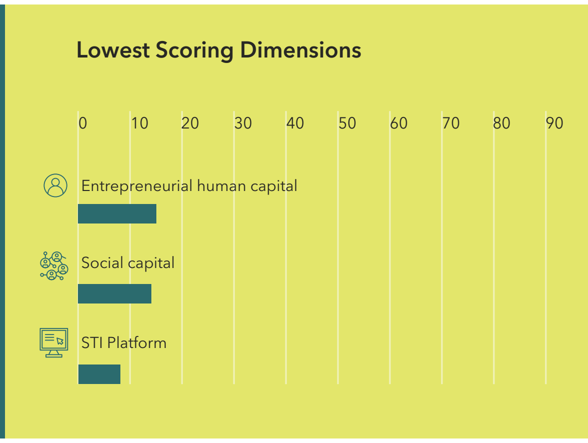
GDP growth rate

**5.3%**



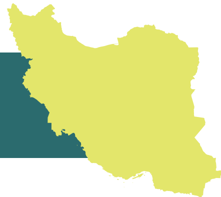

The international benchmark reflects the average value of the top 3 countries for each dimension.



## IDE 2023

# Iran



IDE ranking

**47**

IDE value

**18.8**

Population
(Millon habitants)

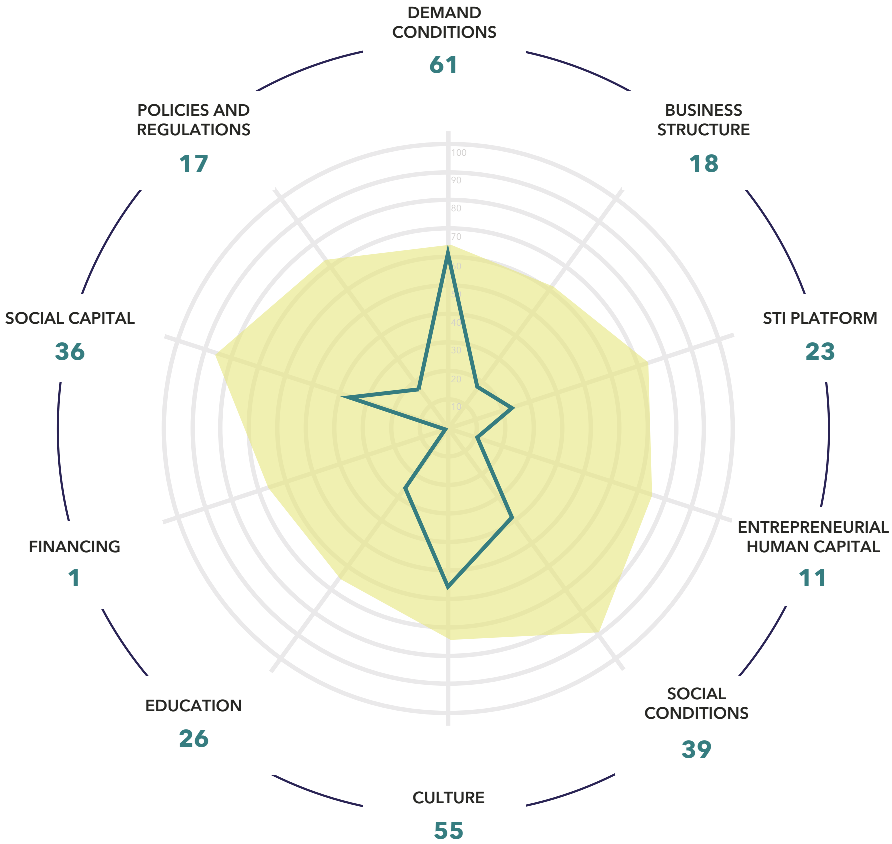
**86 M**

GDP per capita (USD)

**23,034**

GDP growth rate

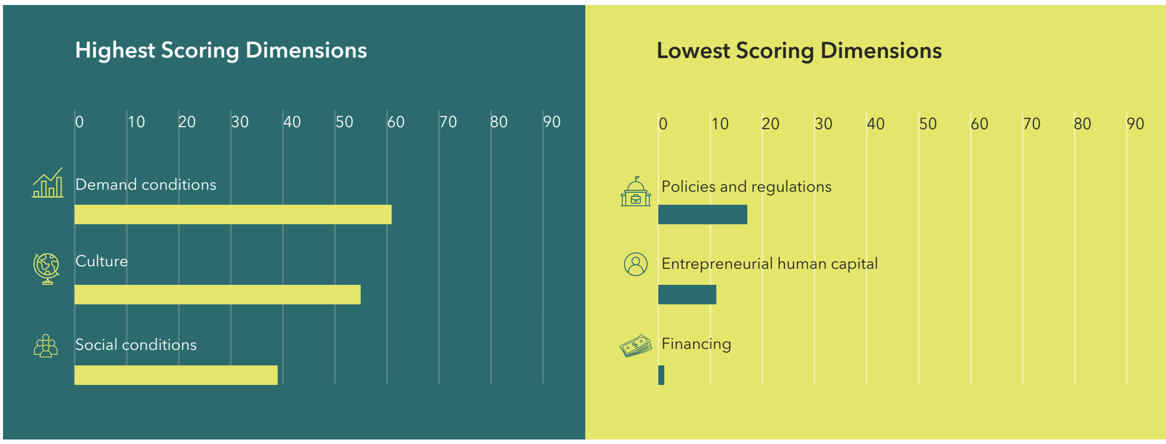
**2.5%**




Iran

International benchmark

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



# IDE 2023

# Ireland

IDE ranking

**6**

IDE value

**56.2**

Population
(Millon habitants)

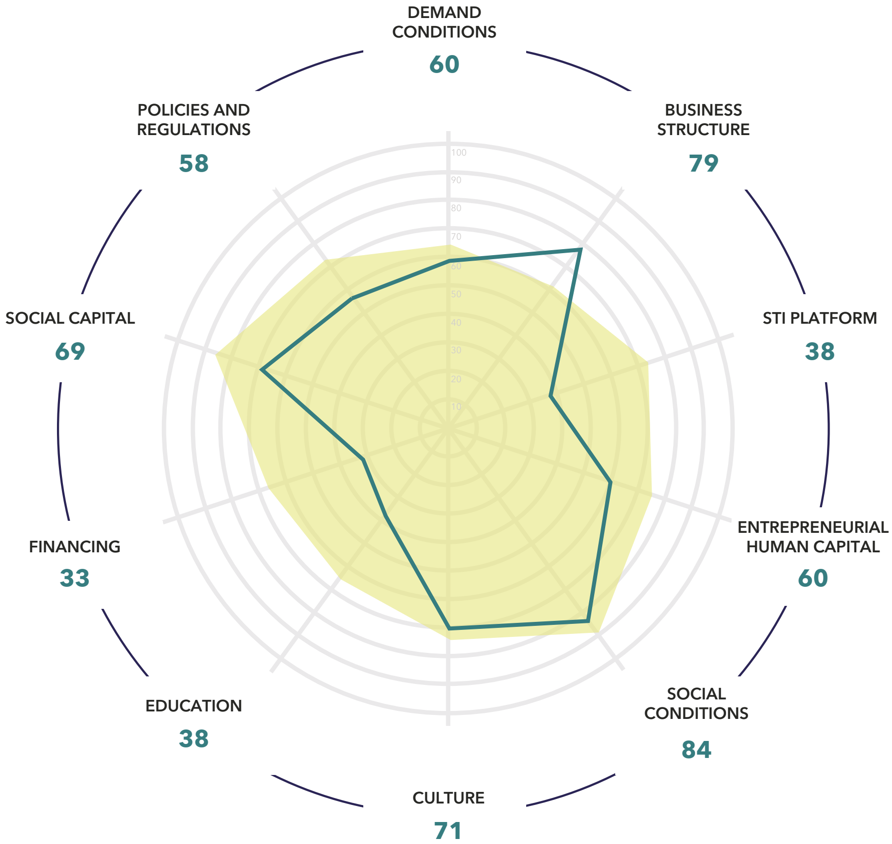
**5 M**

GDP per capita (USD)

**102,217**

GDP growth rate

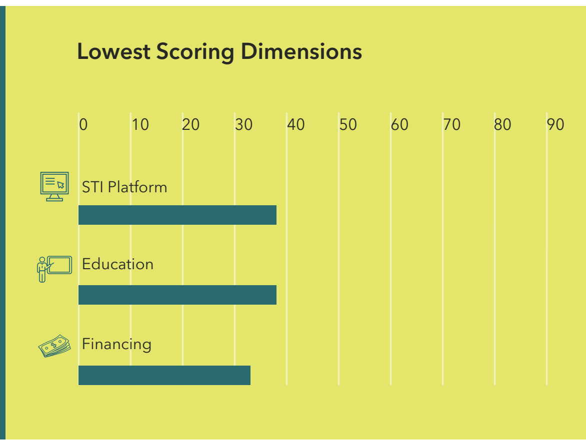
**12%**




Ireland

International benchmark

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

# IDE 2023

# Israel

IDE ranking

**5**

IDE value

**57.4**

Population (Millon habitants)

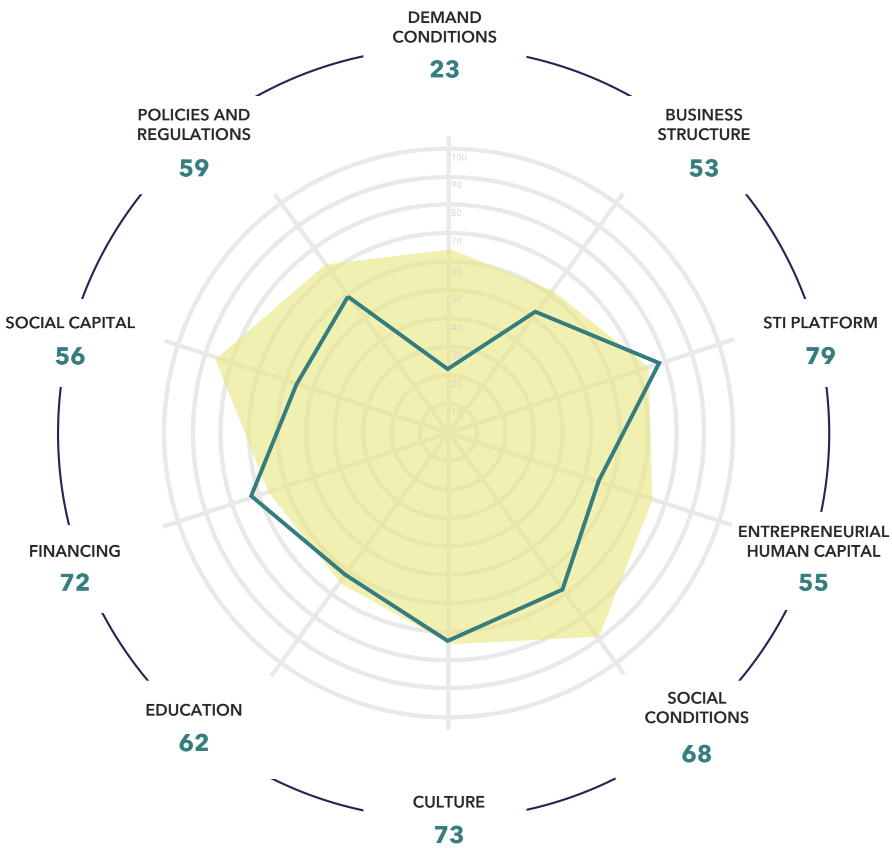
**10 M**

GDP per capita (USD)

**55,359**

GDP growth rate

**6.4%**

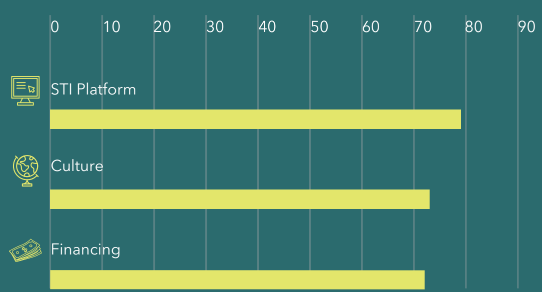



Israel

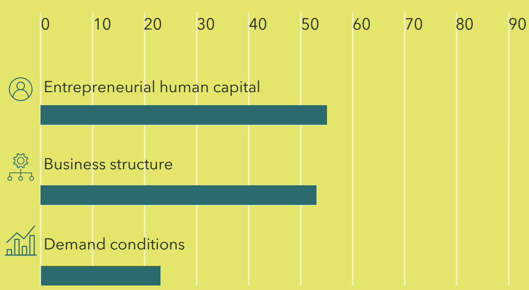
International benchmark

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

## Highest Scoring Dimensions




## Lowest Scoring Dimensions



# IDE 2023

# Italy

IDE ranking

**22**

IDE value

**39.2**

Population
(Millon habitants)

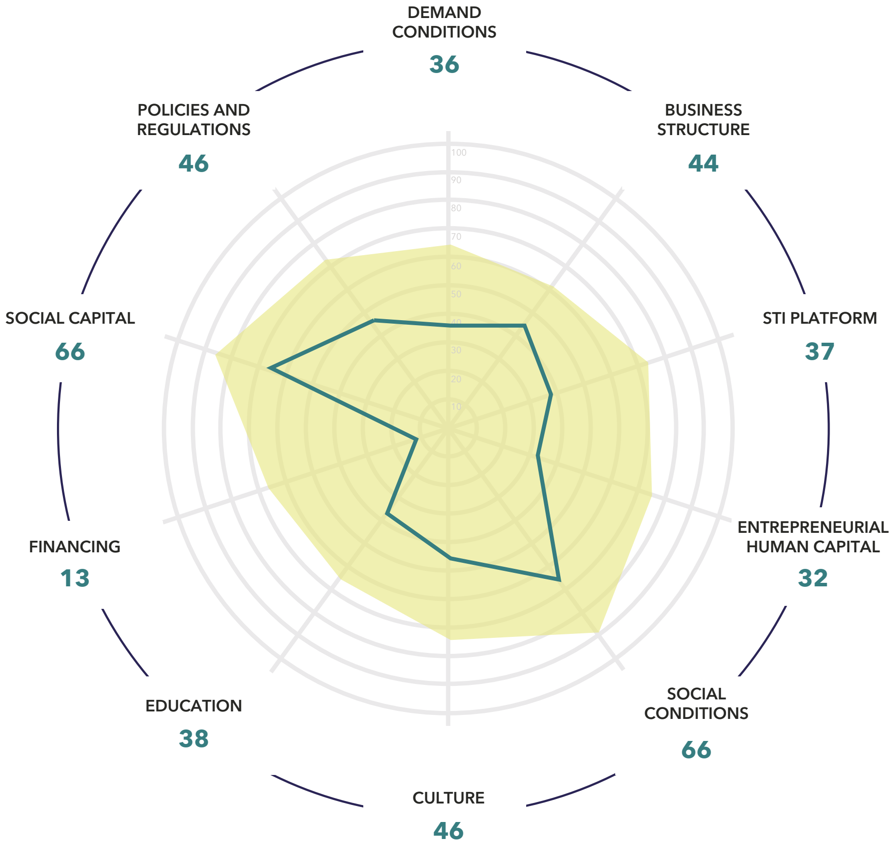
**59 M**

GDP per capita (USD)

**33,740**

GDP growth rate

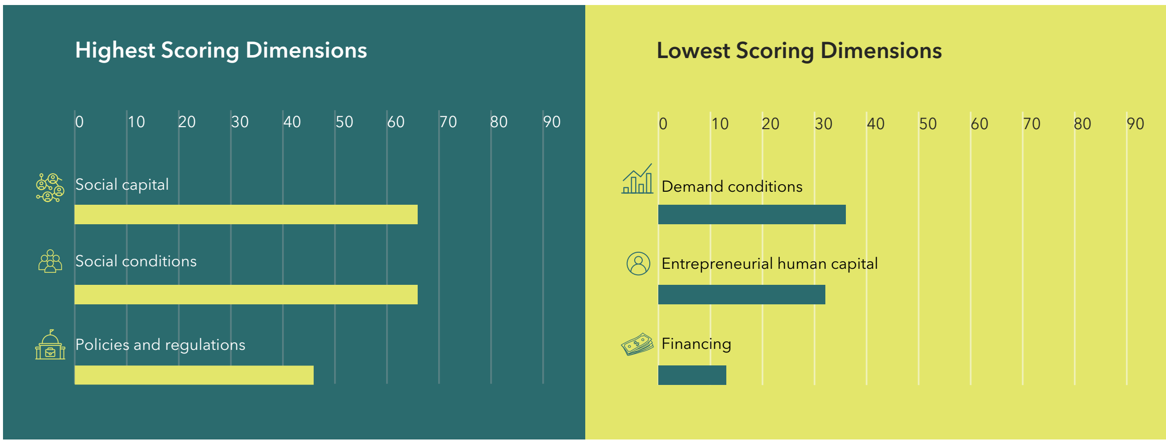
**3.7%**




Italy

International benchmark

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



# IDE 2023

# Japan

IDE
ranking

**20**

IDE value

**39.2**

Population
(Millon habitants)

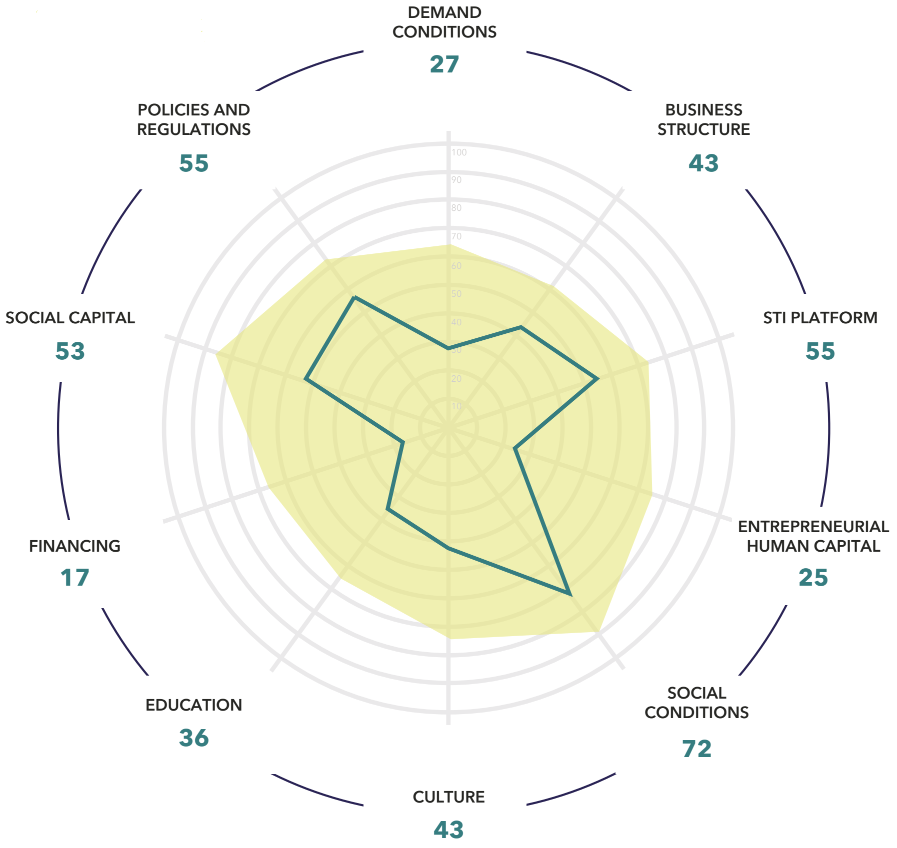
**125 M**

GDP per capita
(USD)

**34,358**

GDP growth rate

**1.1%**

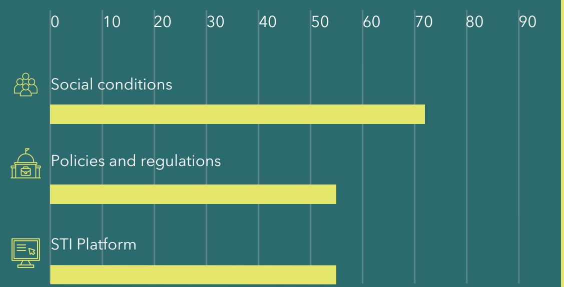



Japan

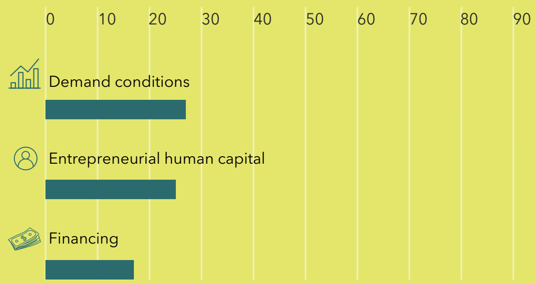
International benchmark

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

## Highest Scoring Dimensions




## Lowest Scoring Dimensions



# IDE 2023

# Korea

IDE
ranking

**9**

IDE value

**53.1**

Population
(Millon habitants)

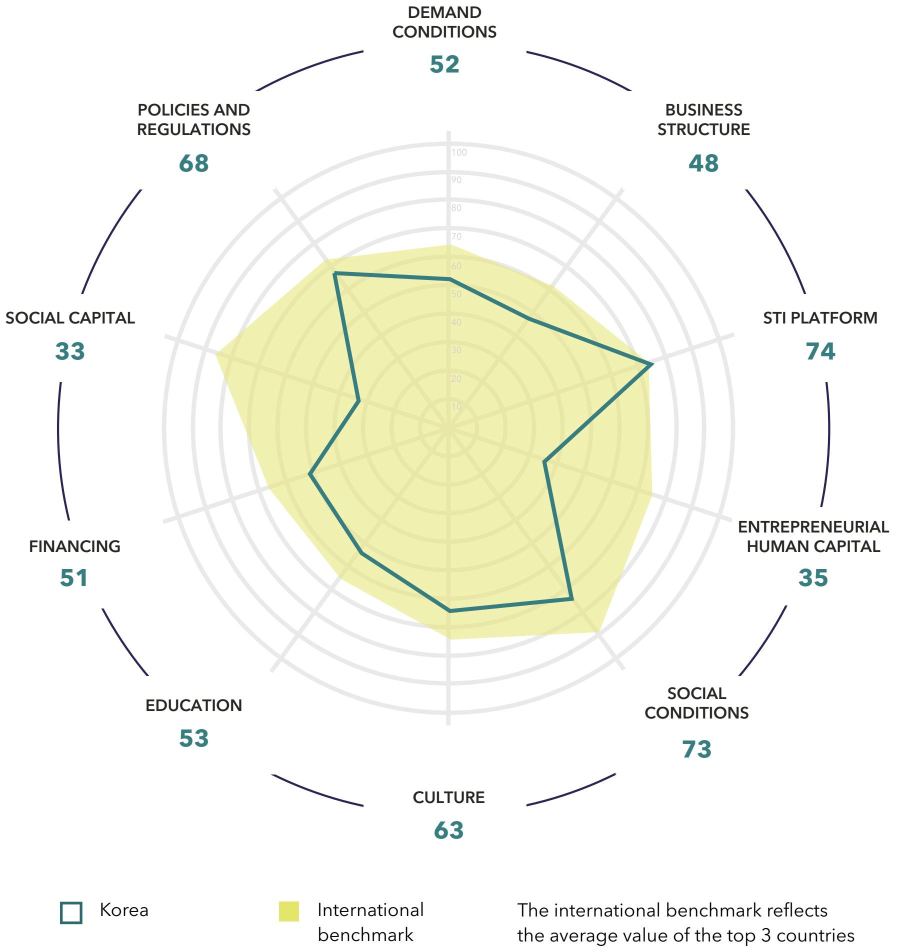
**52 M**

GDP per capita
(USD)

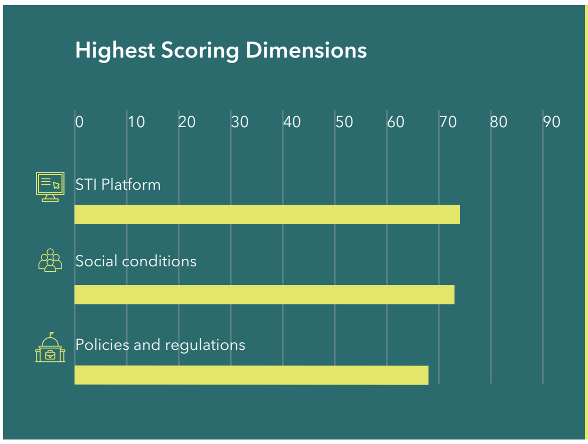
**33,592**

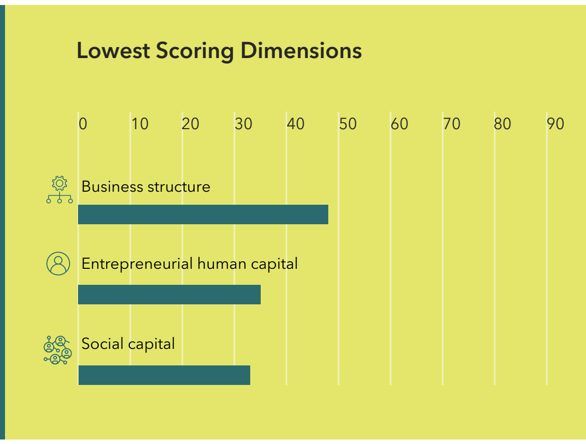
GDP growth rate

**2.6%**




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



## IDE 2023

# Latvia

IDE ranking

**18**

IDE value

**40.2**

Population
(Millon habitants)

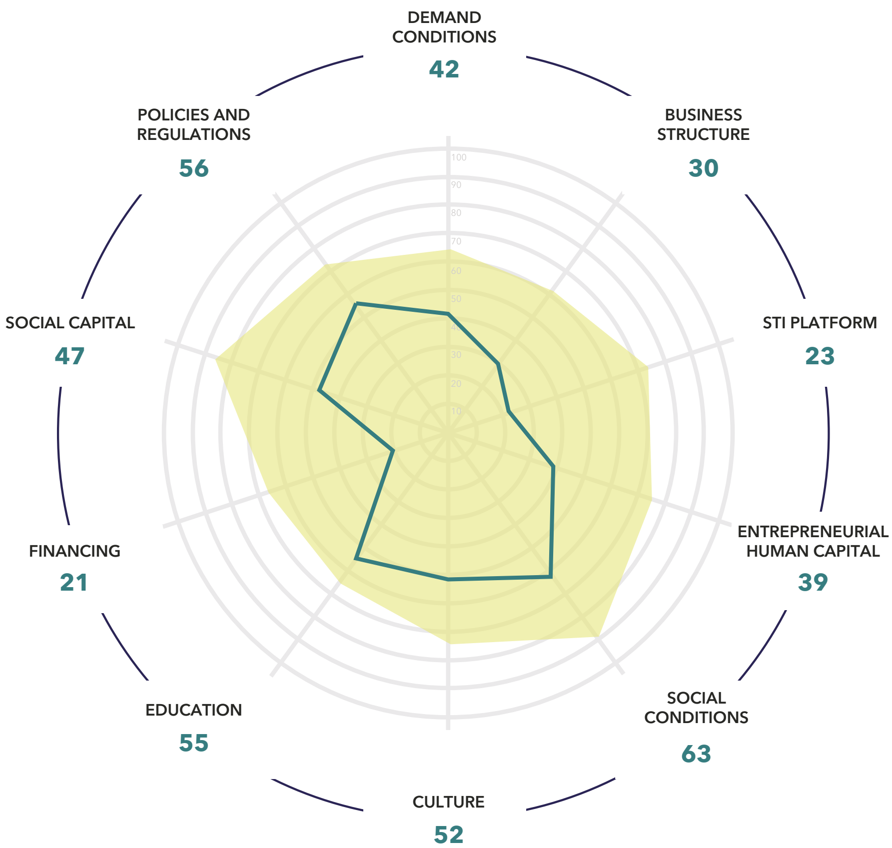
**2 M**

GDP per capita (USD)

**21,482**

GDP growth rate

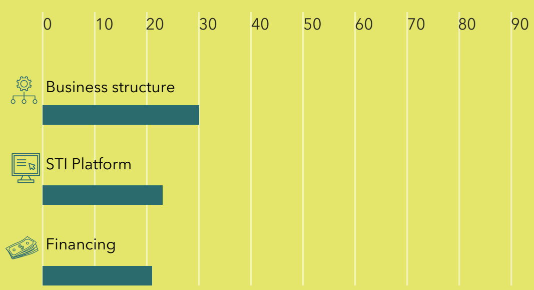
**2.0%**




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

### Highest Scoring Dimensions


### Lowest Scoring Dimensions



IDE 2023

# Luxembourg

IDE
ranking

**14**

IDE value

**48.2**

Population
(Millon habitants)

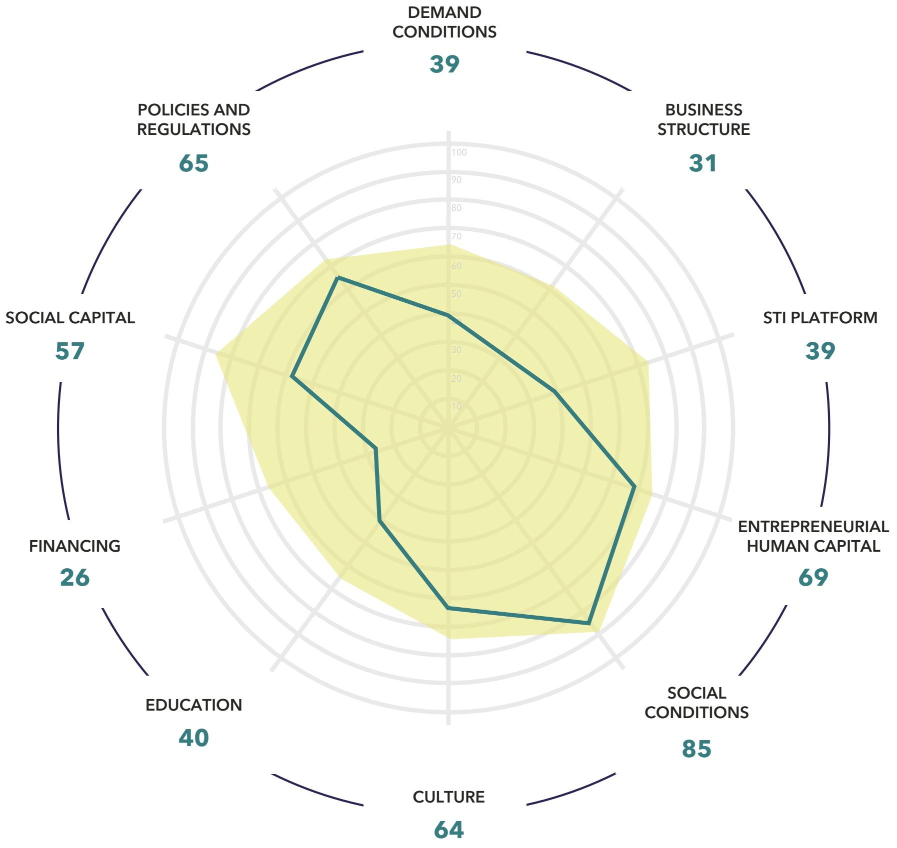
**1 M**

GDP per capita
(USD)

**127,673**

GDP growth rate

**1.5%**

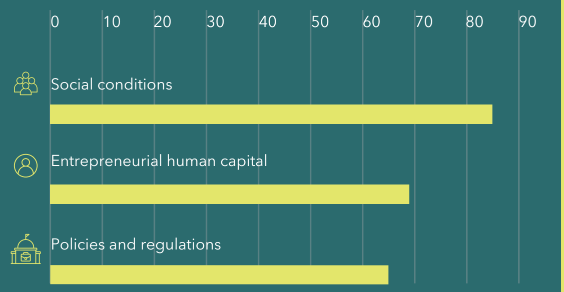



Luxembourg

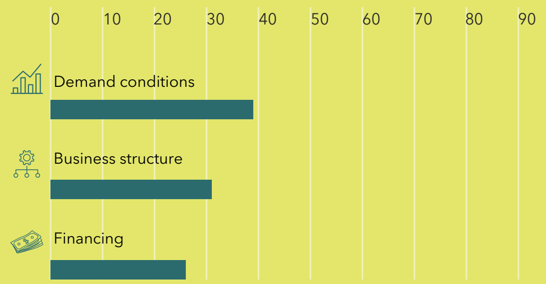
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Malaysia

IDE ranking

**36**

IDE value

**26.9**

Population
(Millon habitants)

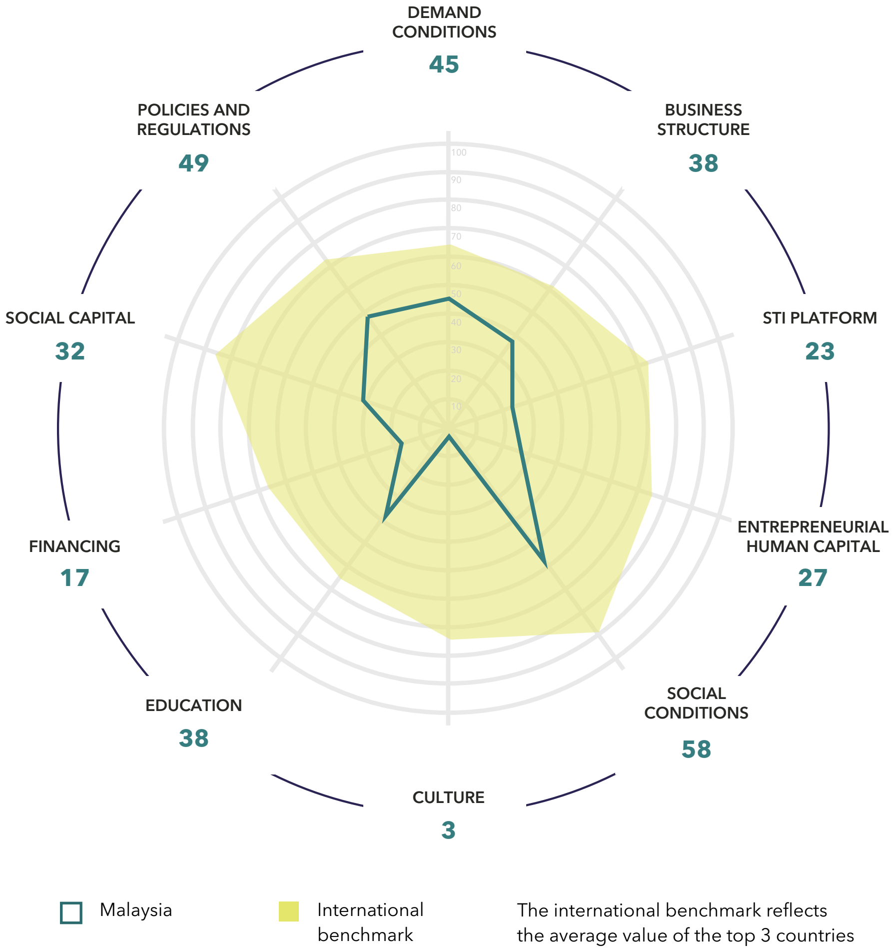
**33 M**

GDP per capita (USD)

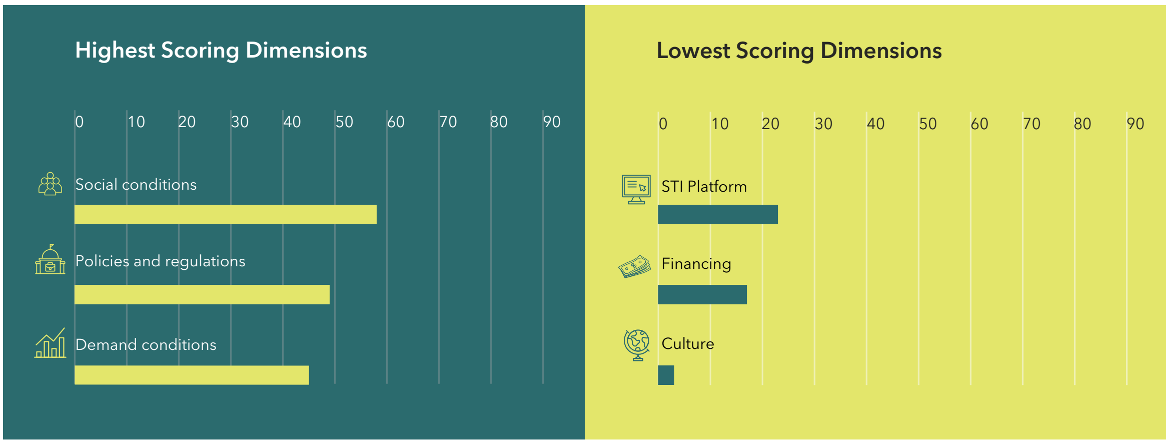
**13,108**

GDP growth rate

**8.69%**




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



## IDE 2023

# Mexico

IDE ranking

**41**

IDE value

**24.0**

Population
(Millon habitants)

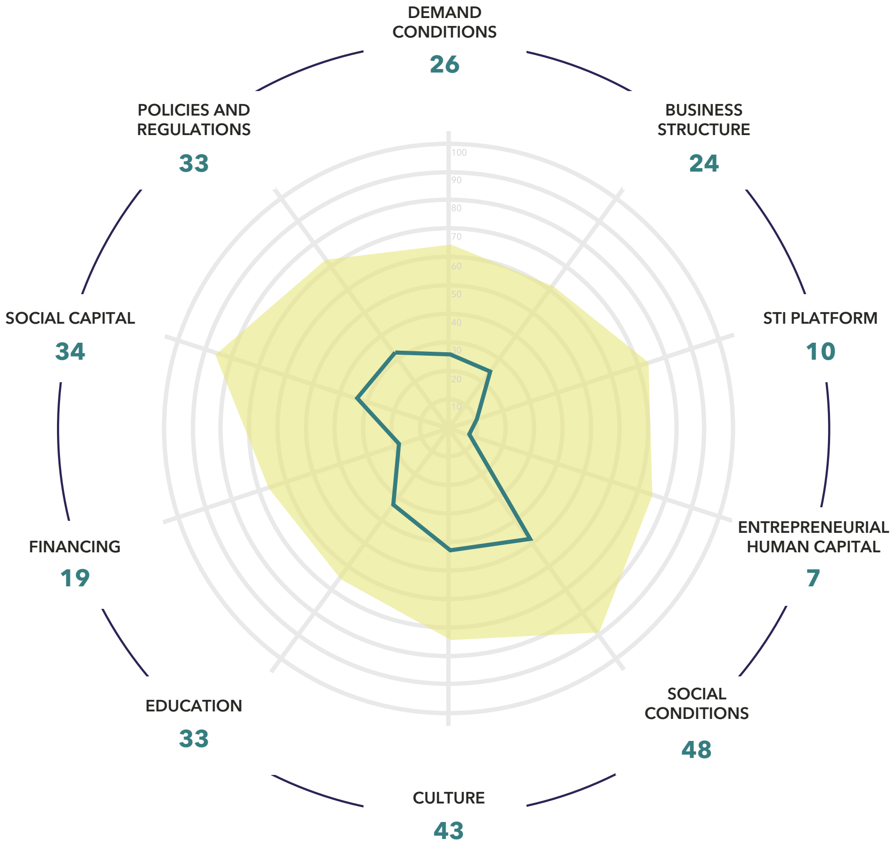
**130 M**

GDP per capita (USD)

**10,948**

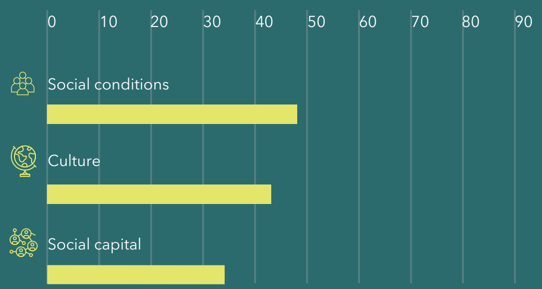
GDP growth rate

**3.1%**

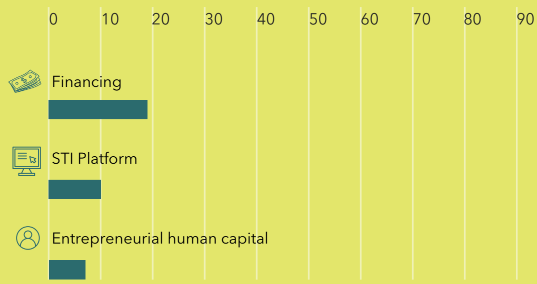



The international benchmark reflects the average value of the top 3 countries for each dimension.

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Morocco

IDE ranking

**42**

IDE value

**23.8**

Population
(Millon habitants)

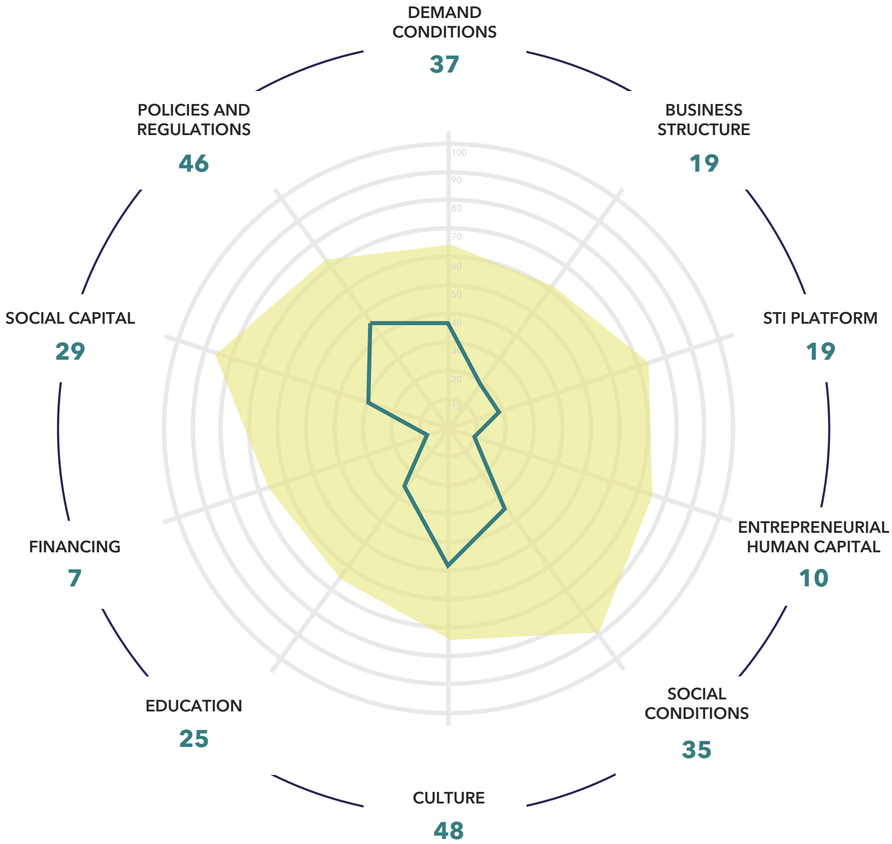
**37 M**

GDP per capita (USD)

**3,896**

GDP growth rate

**1.1%**

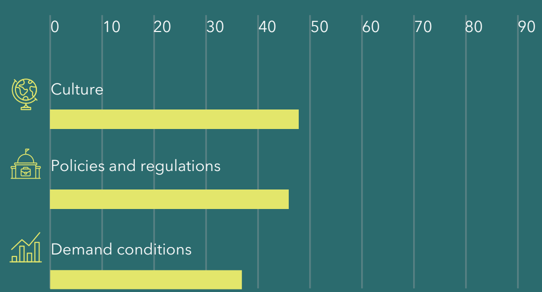



Morocco

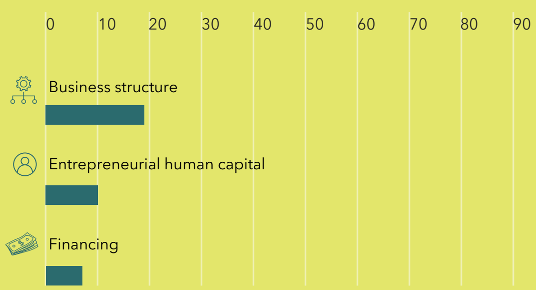
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Netherlands

IDE ranking

**2**

IDE value

**60.8**

Population
(Millon habitants)

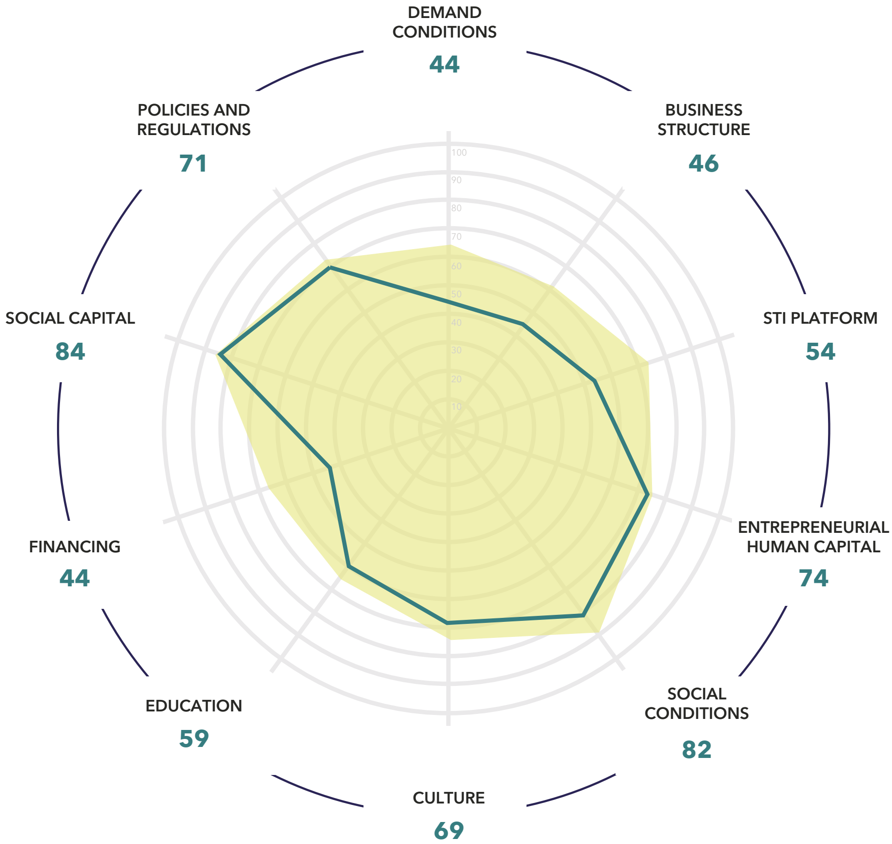
**18 M**

GDP per capita (USD)

**56,298**

GDP growth rate

**4.52%**

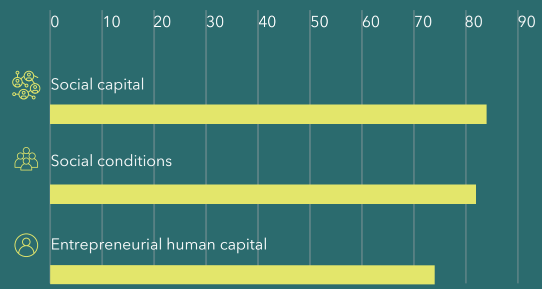



Netherlands

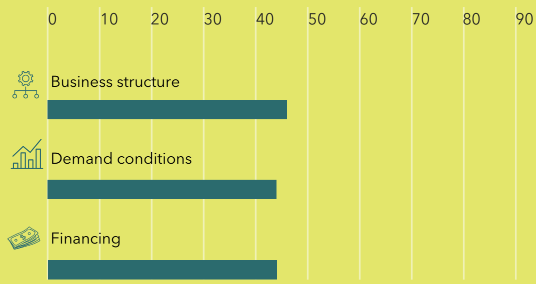
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Norway

IDE ranking

**7**

IDE value

**55.7**

Population
(Millon habitants)

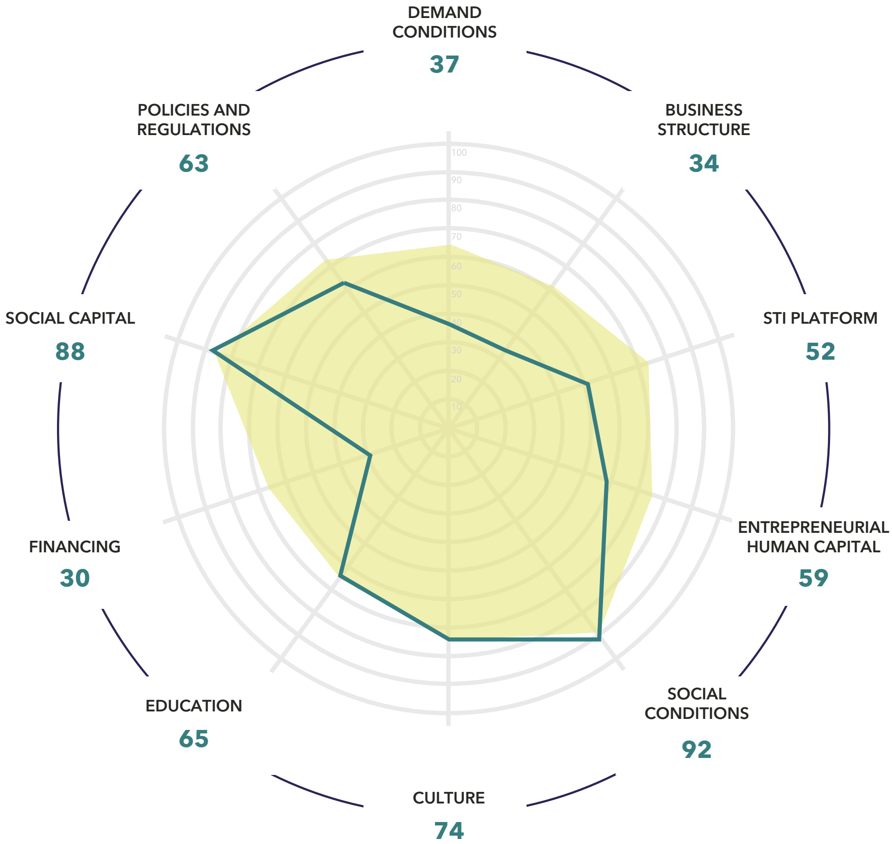
**5 M**

GDP per capita (USD)

**92,646**

GDP growth rate

**3.28%**

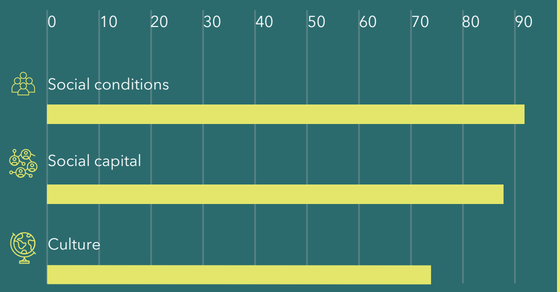



Norway

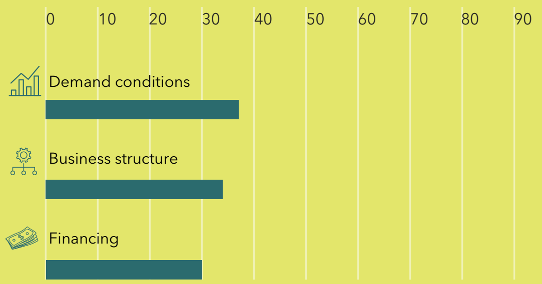
International benchmark

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

### Highest Scoring Dimensions

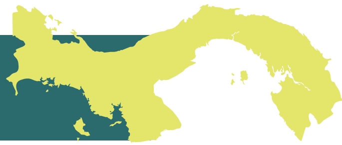



### Lowest Scoring Dimensions



# IDE 2023

# Panama



IDE ranking

**46**

IDE value

**20.8**

Population
(Millon habitants)

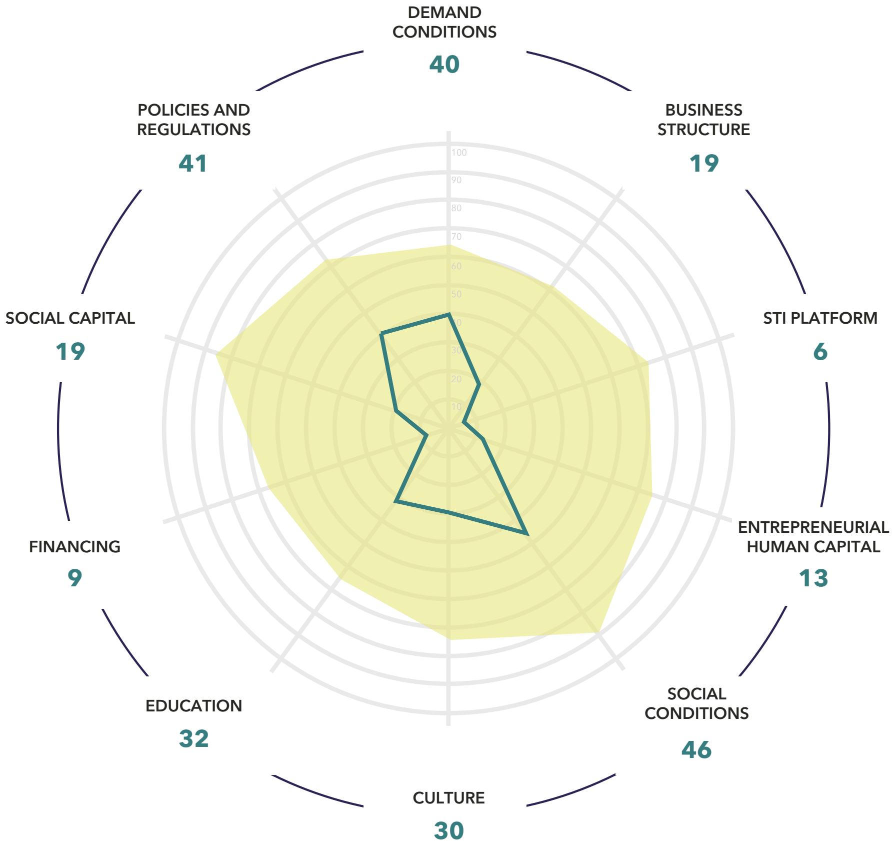
**4 M**

GDP per capita (USD)

**16,173**

GDP growth rate

**10%**

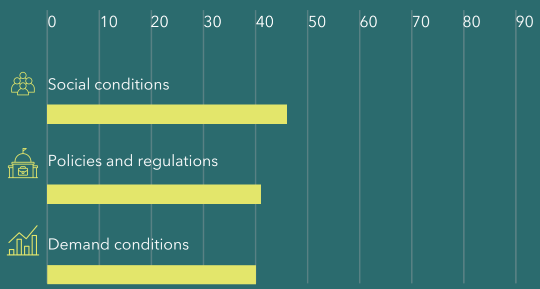



Panama

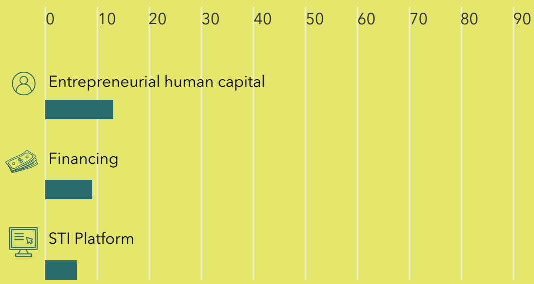
International benchmark

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

## Highest Scoring Dimensions

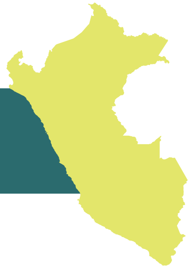



## Lowest Scoring Dimensions



# IDE 2023

# Peru



IDE ranking

**45**

IDE value

**22.1**

Population
(Millon habitants)

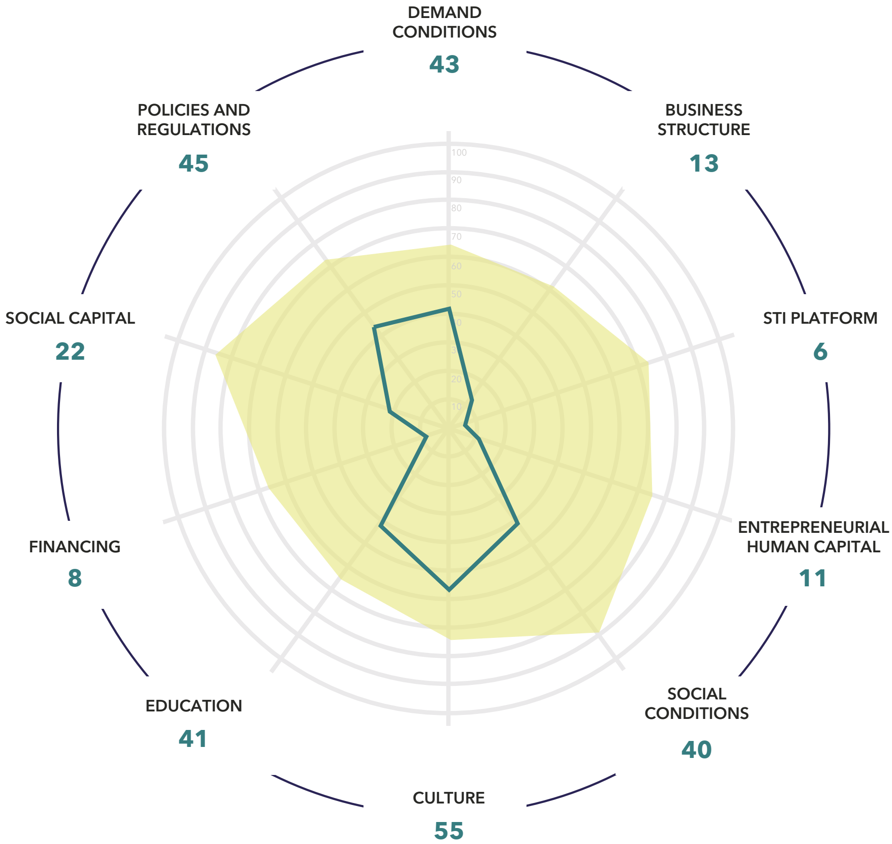
**34 M**

GDP per capita (USD)

**7,005**

GDP growth rate

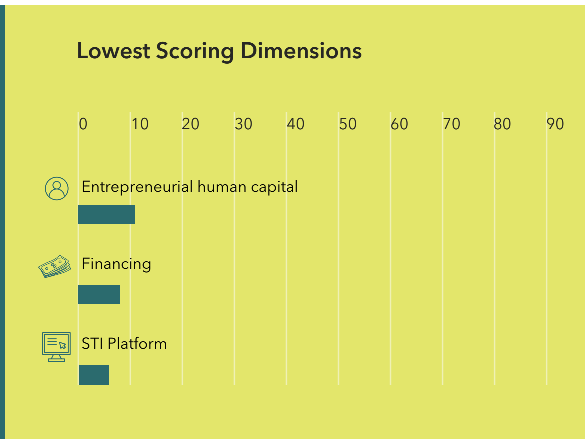
**2.7%**




Peru

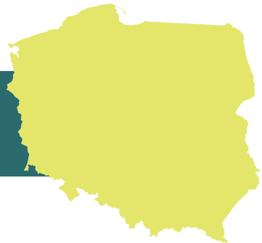
International benchmark

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

## IDE 2023

# Poland



IDE ranking

**25**

IDE value

**35.6**

Population (Millon habitants)

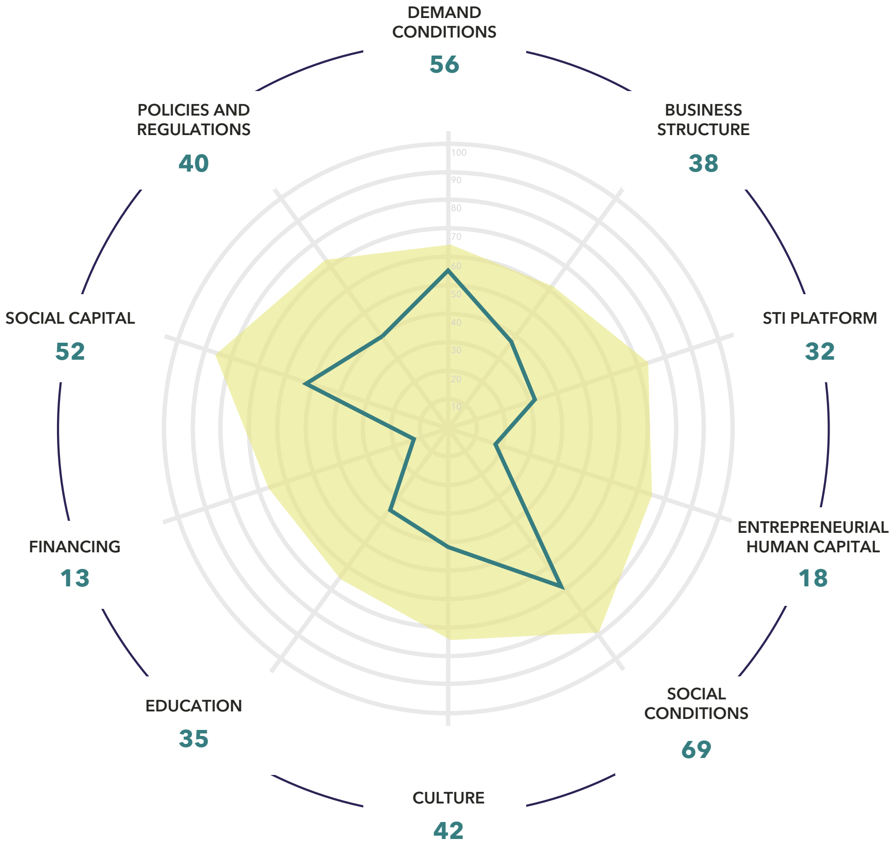
**38 M**

GDP per capita (USD)

**19,023**

GDP growth rate

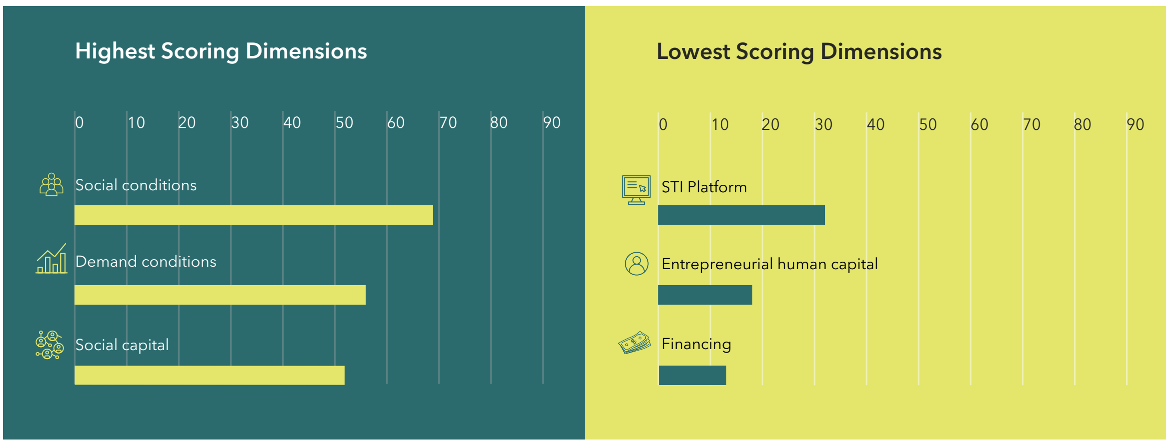
**4.9%**




Poland

International benchmark

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



## IDE 2023

# Qatar

IDE ranking

**32**

IDE value

**29.4**

Population
(Millon habitants)

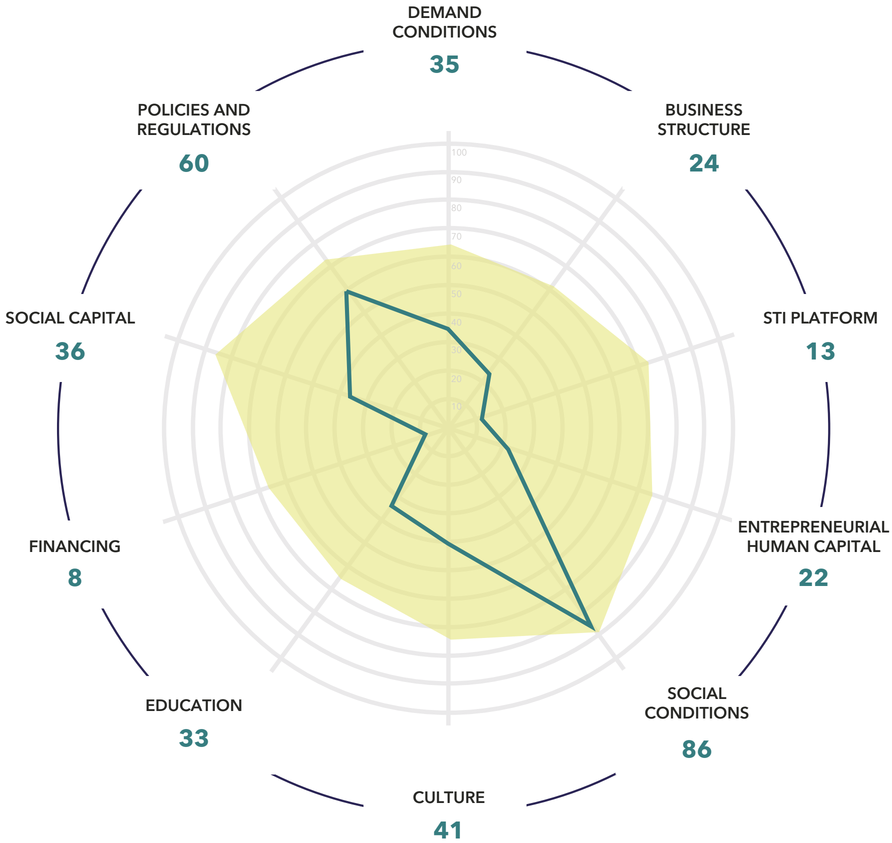
**3 M**

GDP per capita (USD)

**82,887**

GDP growth rate

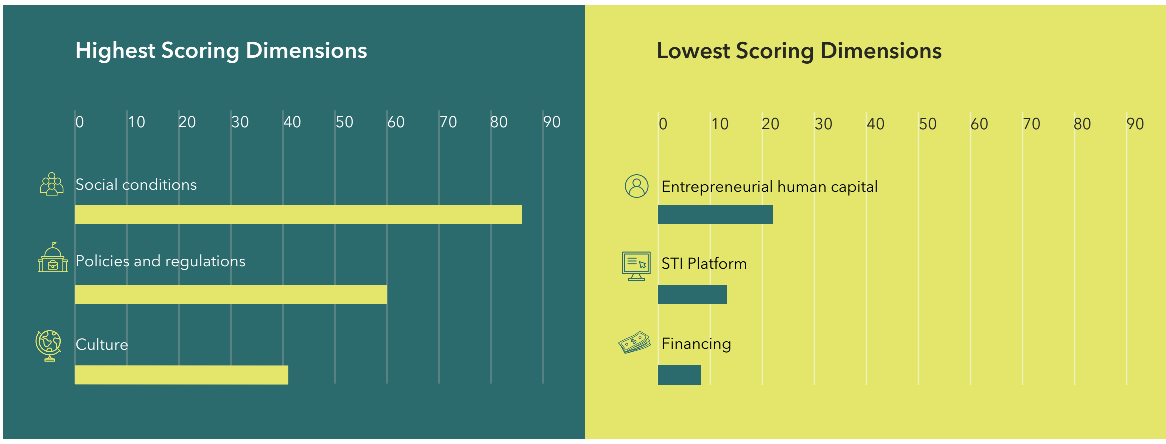
**4.24%**




Qatar

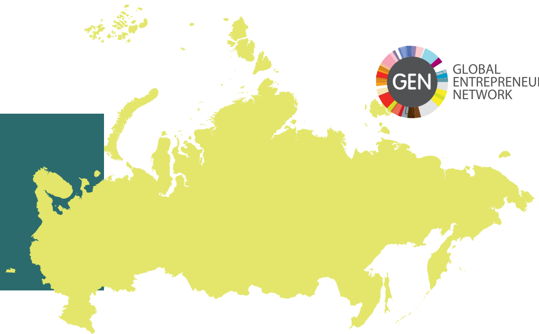
International benchmark

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



## IDE 2023

# Russian Federation



IDE ranking

**37**

IDE value

**26.4**

Population
(Millon habitants)

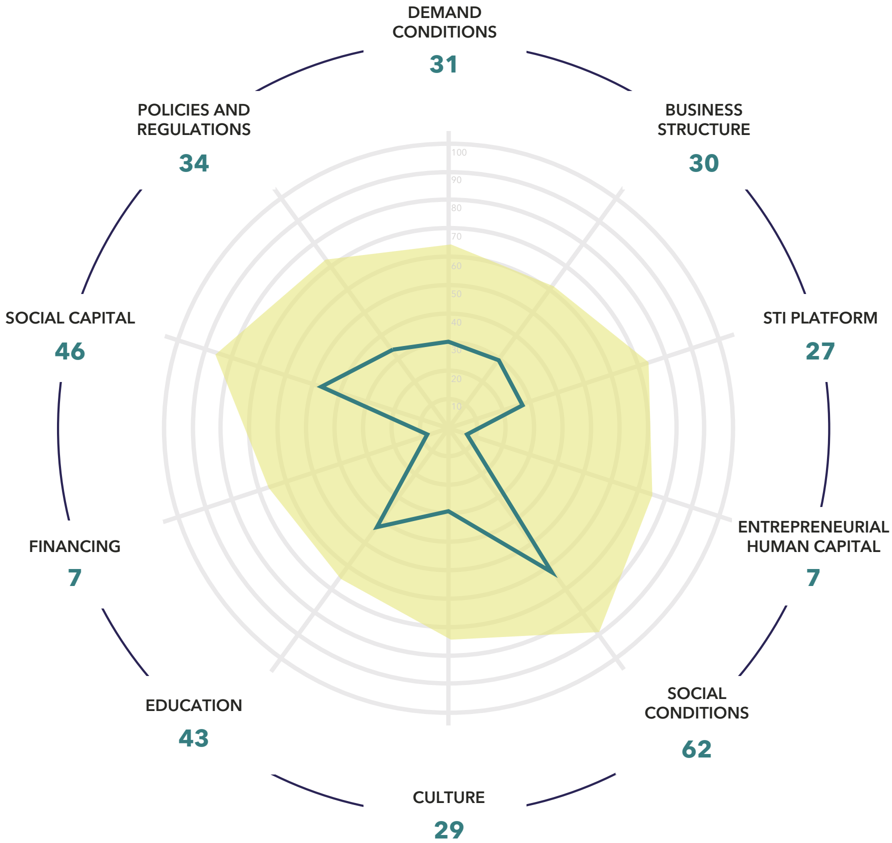
**145 M**

GDP per capita (USD)

**14,655**

GDP growth rate

**-2.1%**

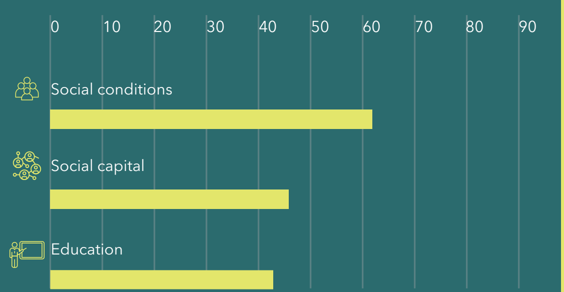



Russian Federation

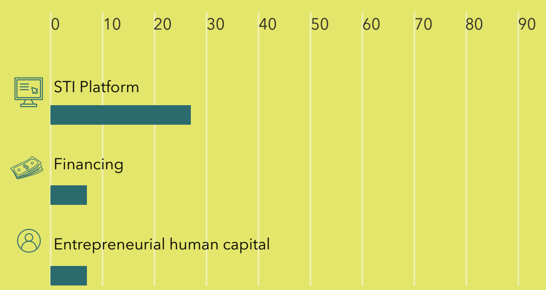
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Saudi Arabia

IDE ranking

**23**

IDE value

**37.1**

Population
(Millon habitants)

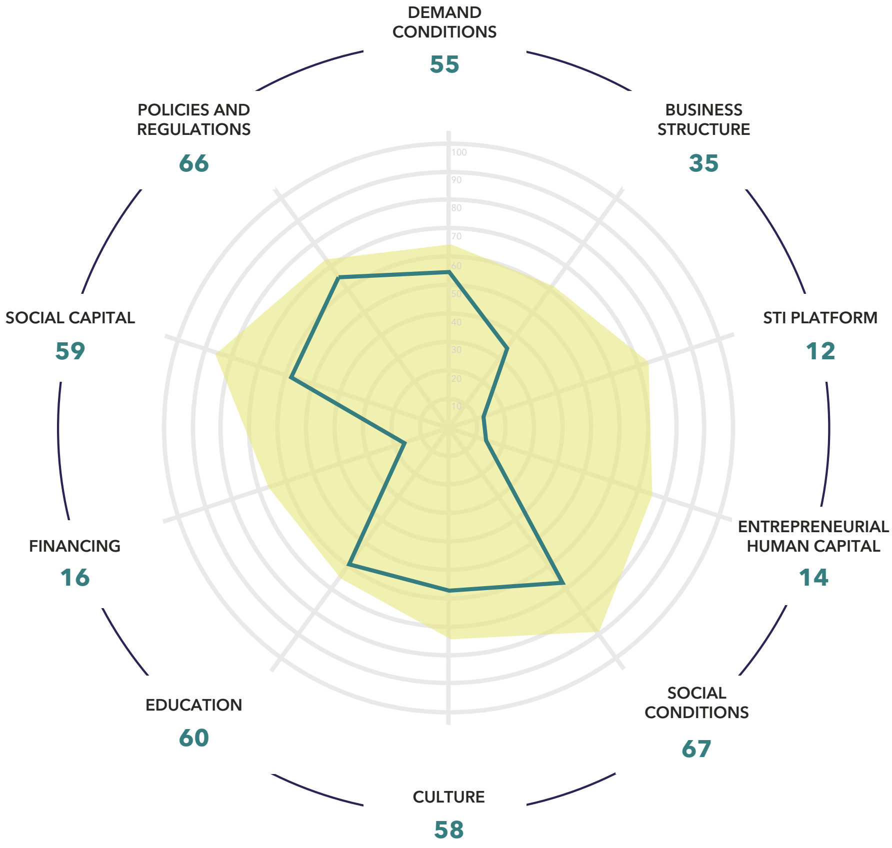
**36 M**

GDP per capita (USD)

**27,941**

GDP growth rate

**8.7%**

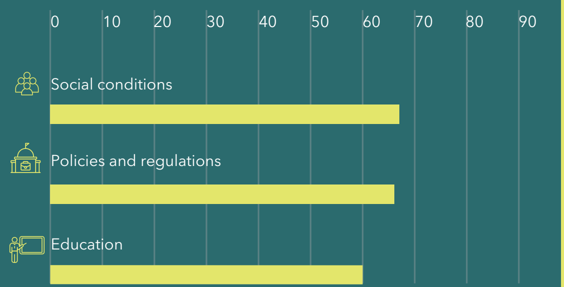



Saudi Arabia

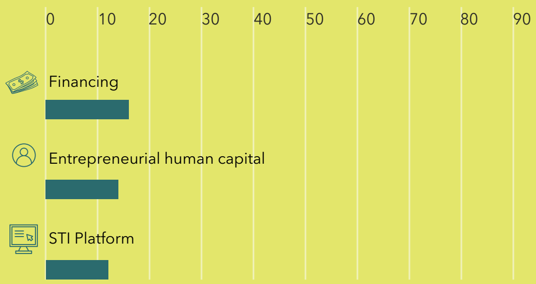
International benchmark

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

### Highest Scoring Dimensions

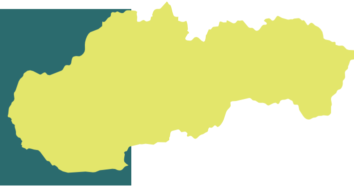



### Lowest Scoring Dimensions



## IDE 2023

# Slovak Republic



IDE ranking

**39**

IDE value

**25.3**

Population
(Millon habitants)

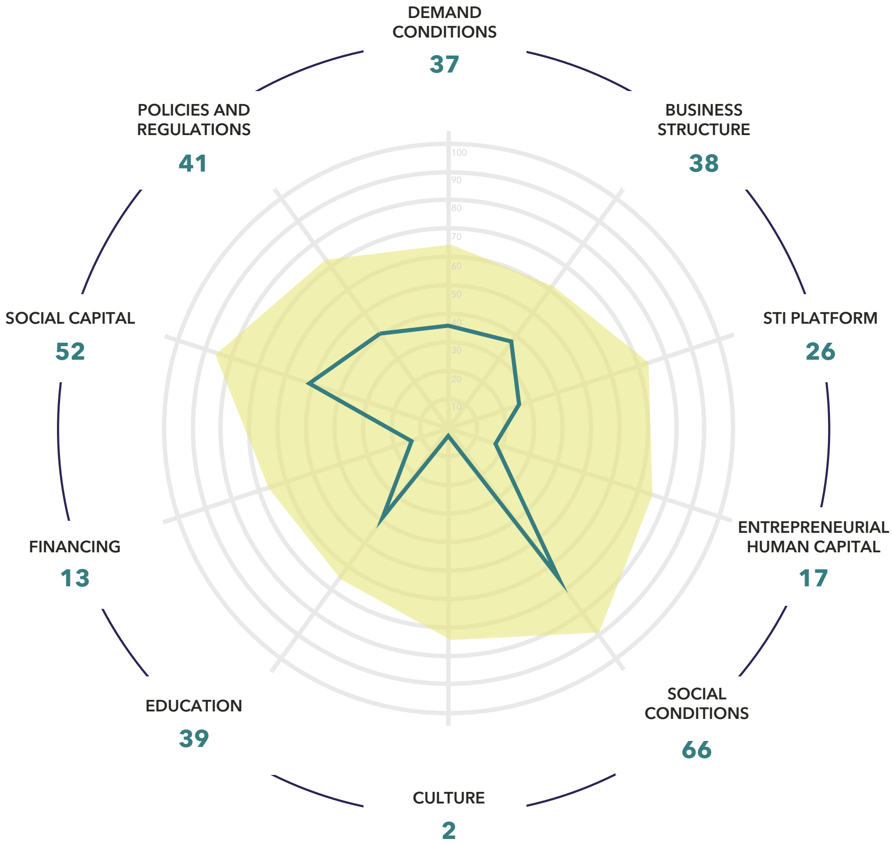
**5 M**

GDP per capita (USD)

**20,565**

GDP growth rate

**1.7%**

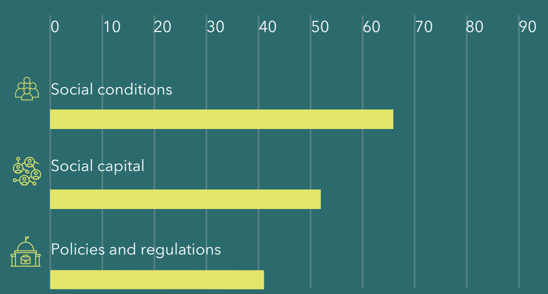



Slovak Republic

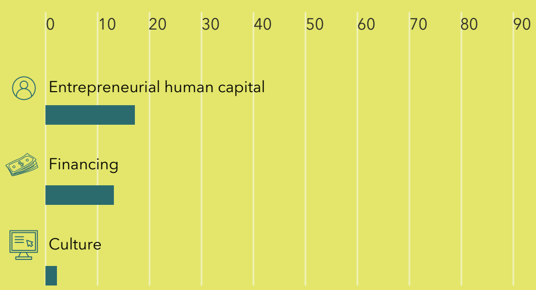
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



## IDE 2023

# Slovenia

IDE ranking

**21**

IDE value

**39.2**

Population
(Millon habitants)

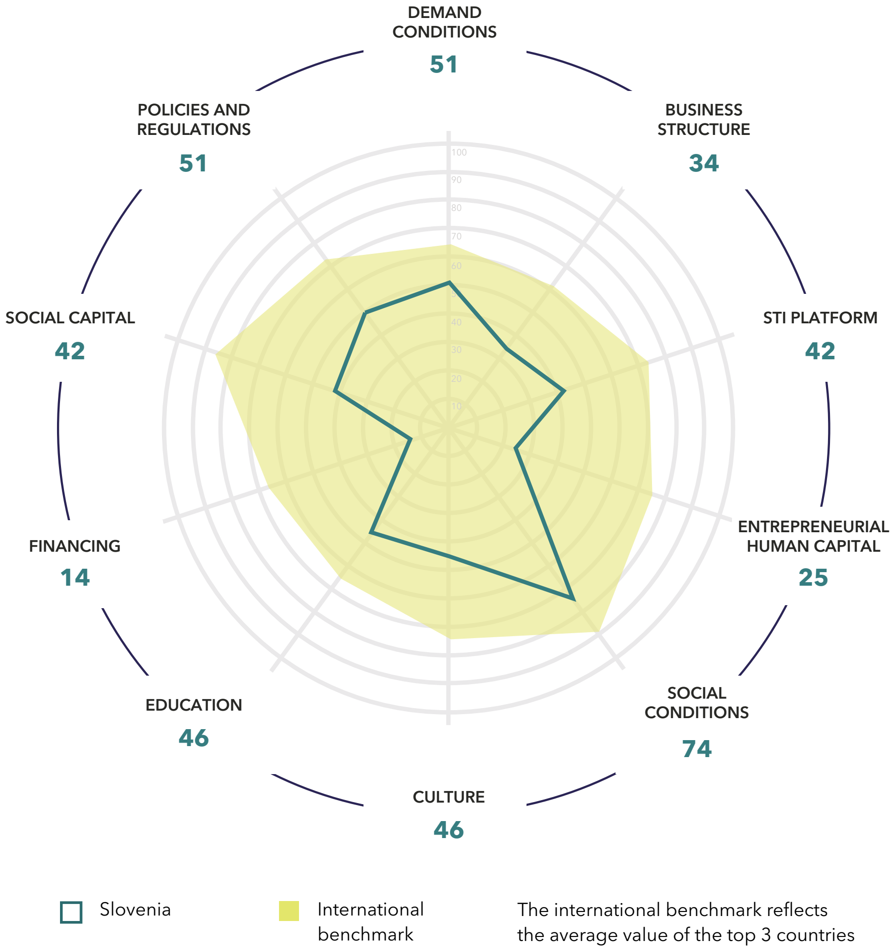
**2 M**

GDP per capita (USD)

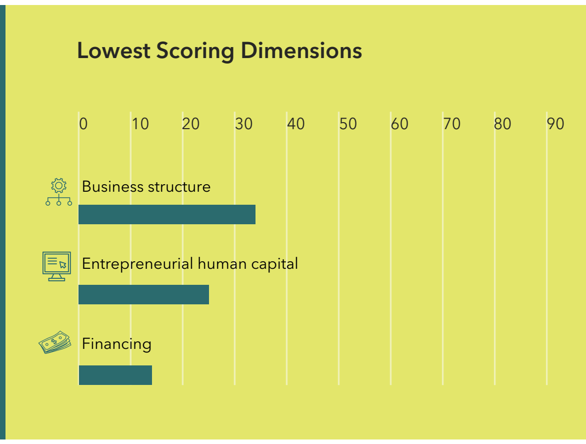
**29,469**

GDP growth rate

**5.4%**




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

## IDE 2023

# South Africa



IDE ranking

**44**

IDE value

**22.7**

Population
(Millon habitants)

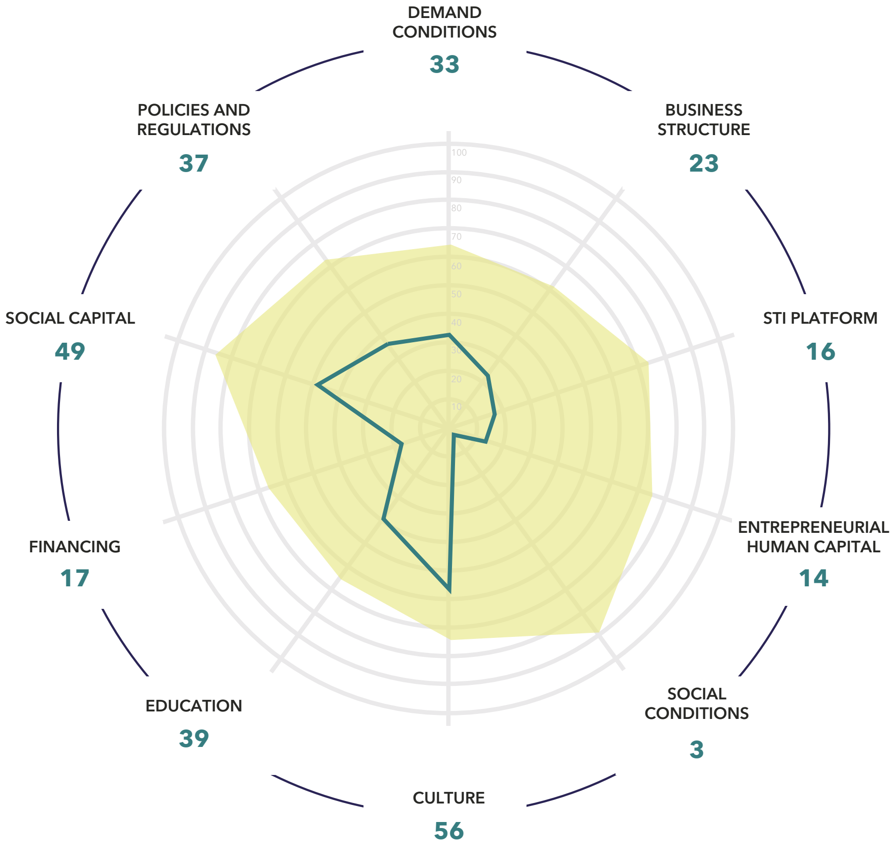
**61 M**

GDP per capita (USD)

**6,739**

GDP growth rate

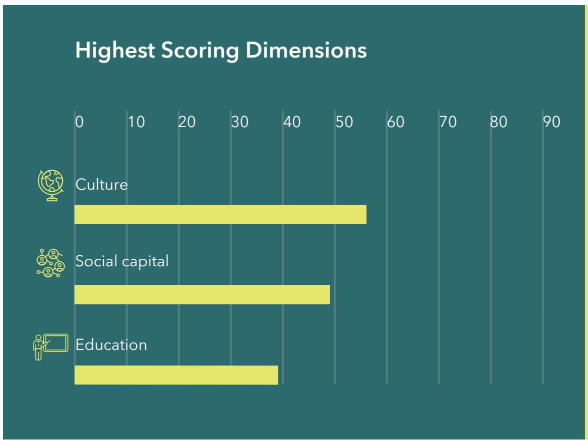
**2.0%**

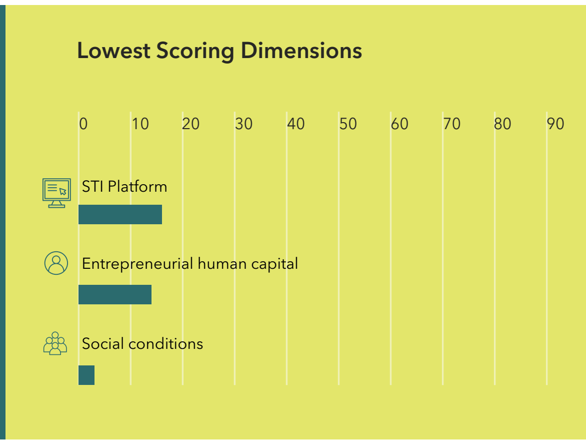



South Africa

International benchmark

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



# IDE 2023

## Spain

IDE ranking

**28**

IDE value

**34.0**

Population
(Millon habitants)

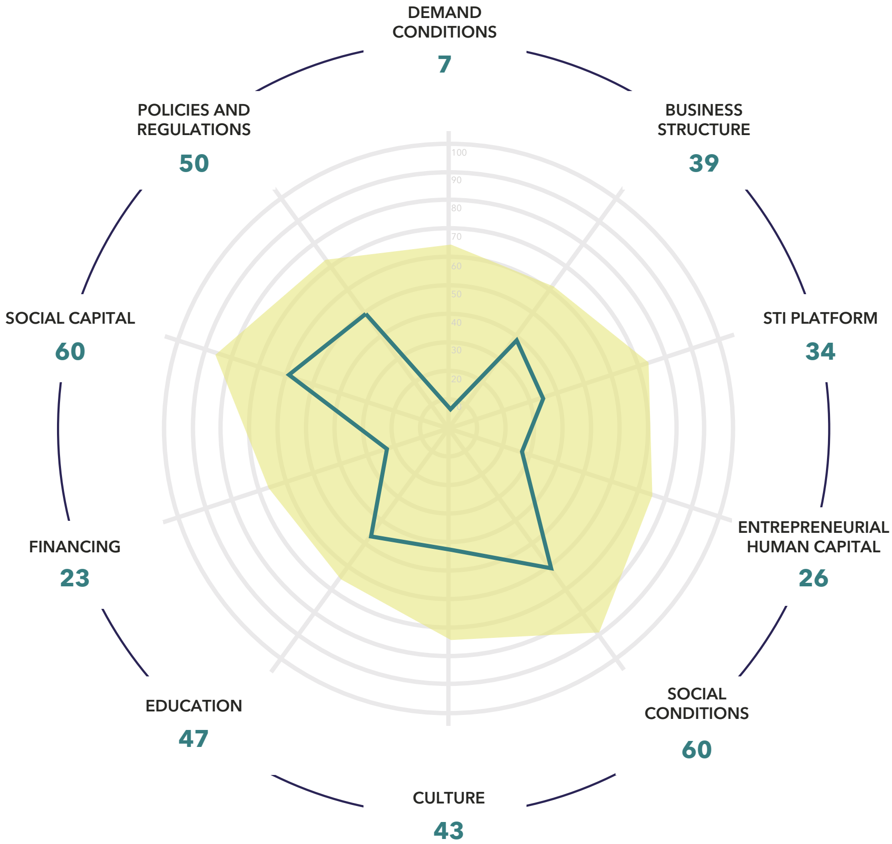
**48 M**

GDP per capita (USD)

**29,198**

GDP growth rate

**5.5%**

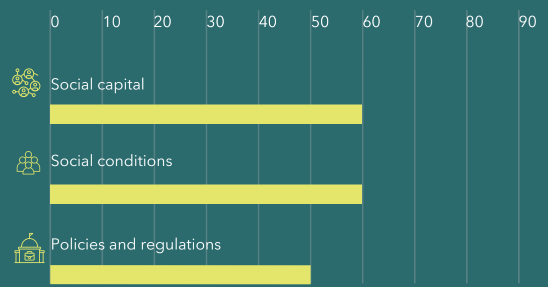



Spain

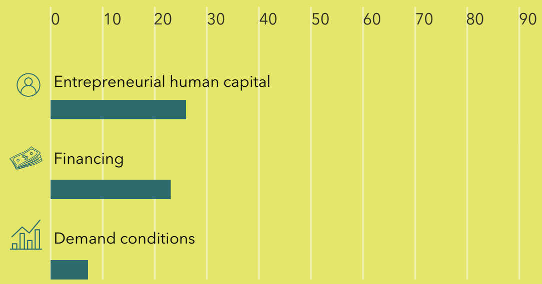
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



# IDE 2023

# Sweden

IDE ranking

**1**

IDE value

**62.6**

Population (Millon habitants)

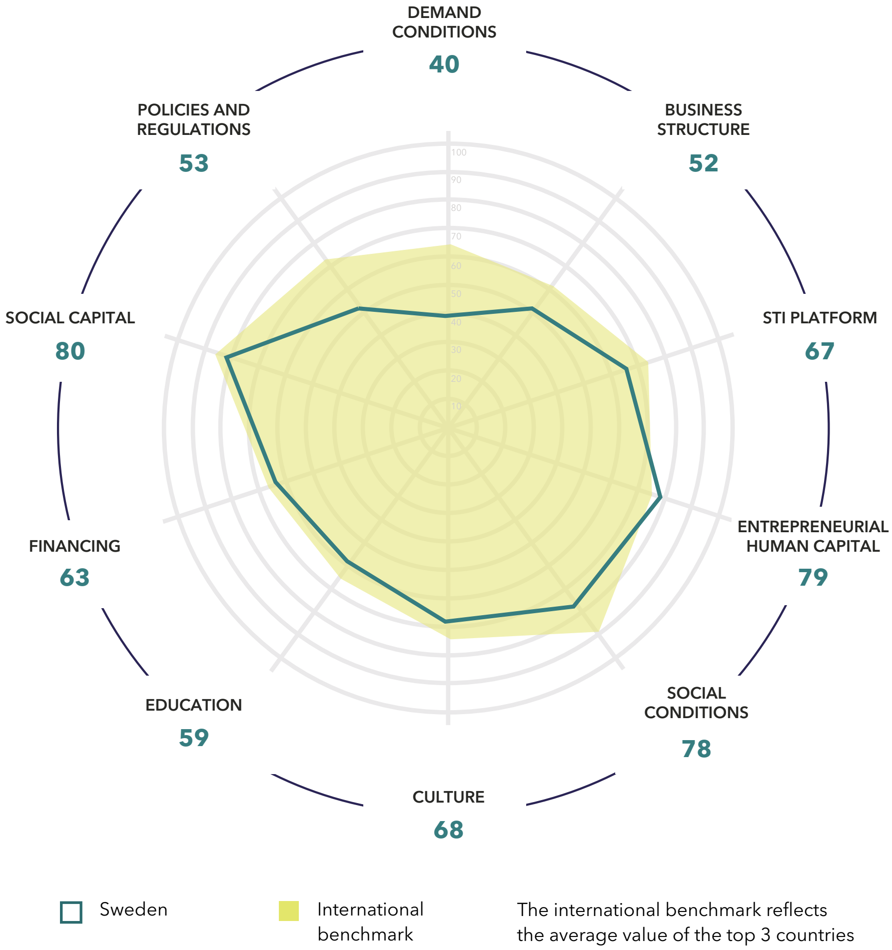
**11 M**

GDP per capita (USD)

**56,361**

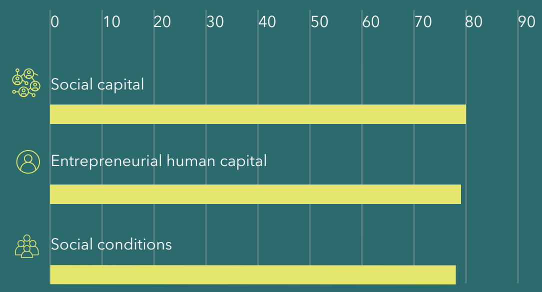
GDP growth rate

**2.6%**

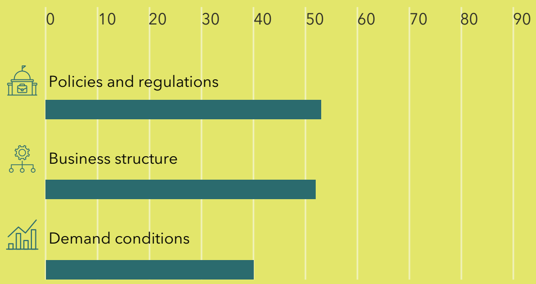



The international benchmark reflects the average value of the top 3 countries for each dimension.

## Highest Scoring Dimensions

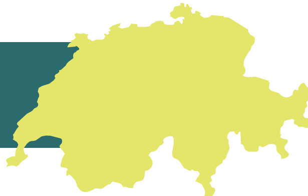



## Lowest Scoring Dimensions



# IDE 2023

# Switzerland



IDE ranking

**13**

IDE value

**48.8**

Population
(Millon habitants)

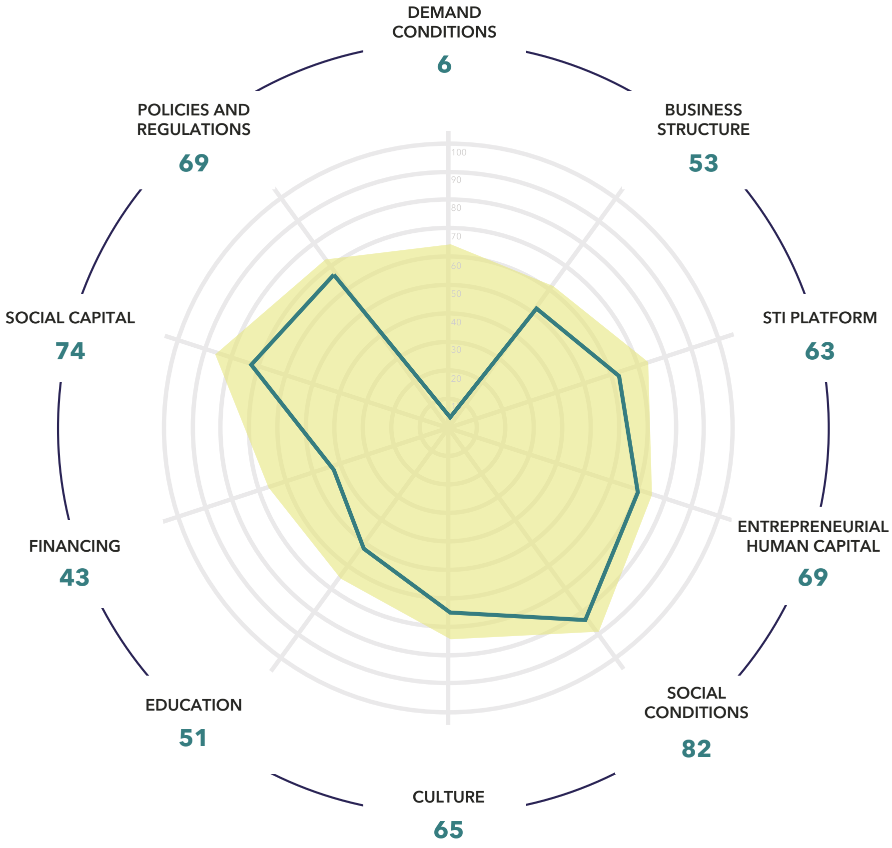
**9 M**

GDP per capita (USD)

**92,434**

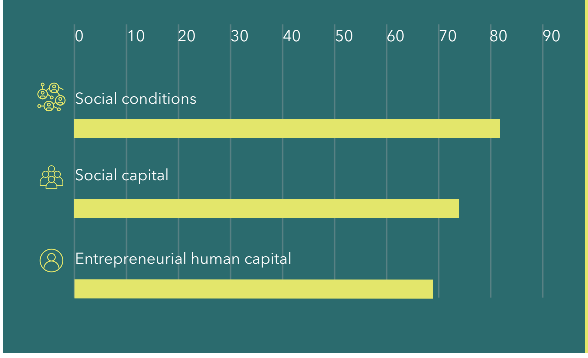
GDP growth rate

**2.13%**




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

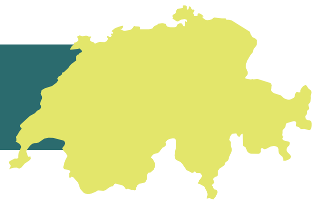
## Highest Scoring Dimensions




## Lowest Scoring Dimensions

## IDE 2023

# Turkey



IDE ranking

**27**

IDE value

**35.1**

Population
(Millon habitants)

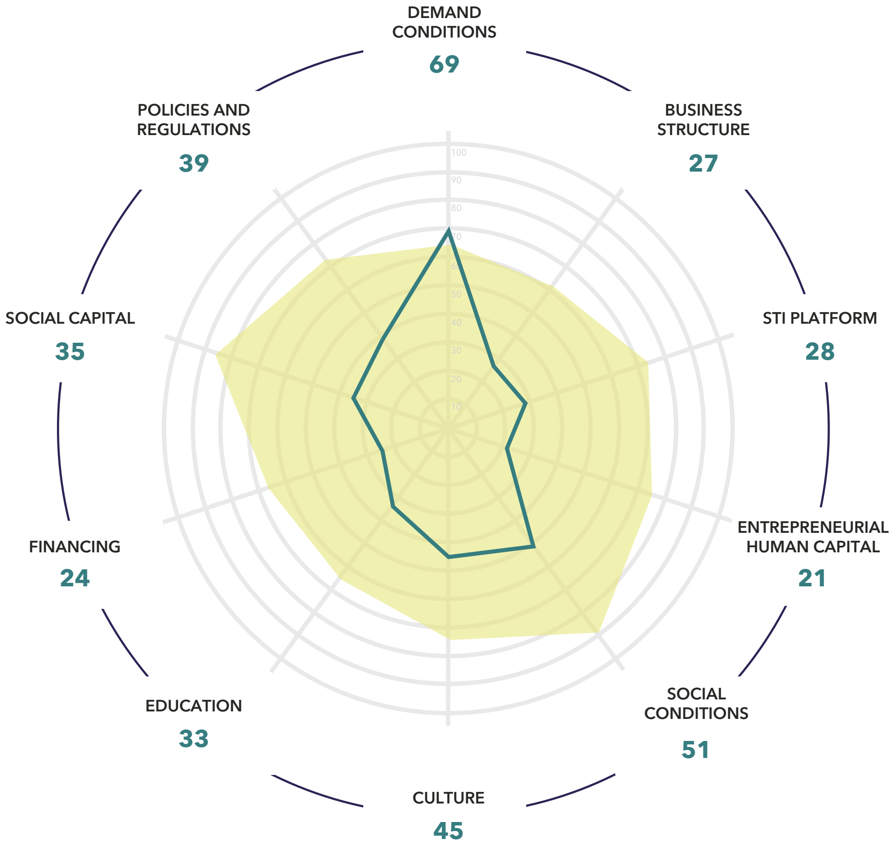
**86 M**

GDP per capita (USD)

**9,961**

GDP growth rate

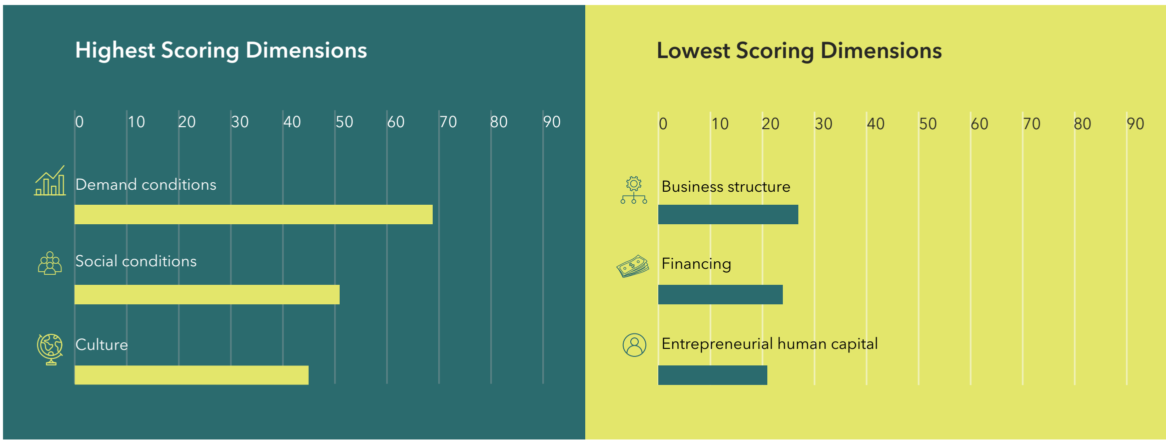
**5.6%**




Turkey

International benchmark

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



IDE 2023

# United Arab Emirates

IDE ranking

**16**

IDE value

**46.5**

Population
(Millon habitants)

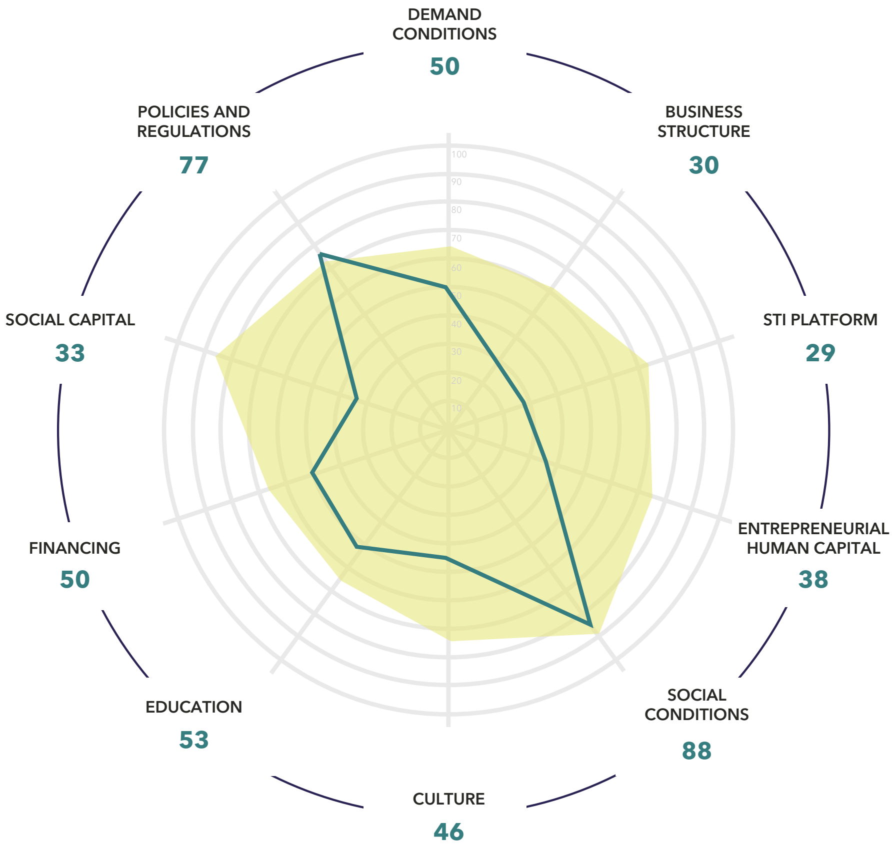
**11 M**

GDP per capita (USD)

**47,793**

GDP growth rate

**7.4%**

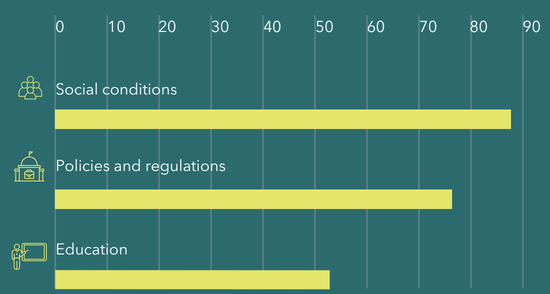



United Arab Emirates

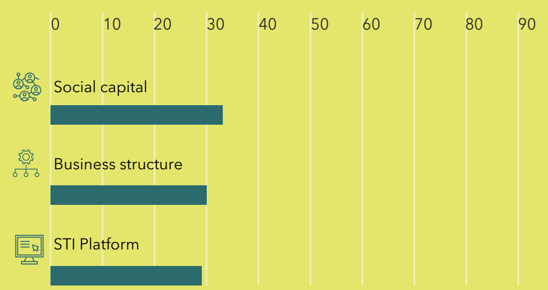
International benchmark

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

## Highest Scoring Dimensions




## Lowest Scoring Dimensions



## IDE 2023

# United Kingdom

IDE ranking

**8**

IDE value

**55.2**

Population
(Millon habitants)

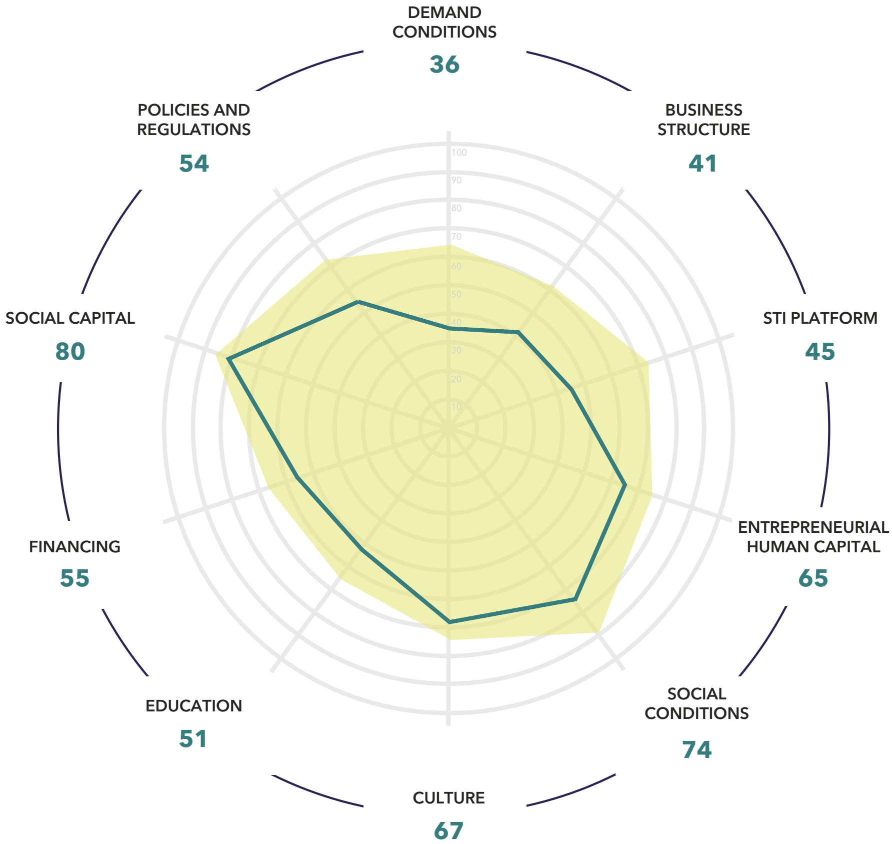
**68 M**

GDP per capita (USD)

**47,318**

GDP growth rate

**4.0%**

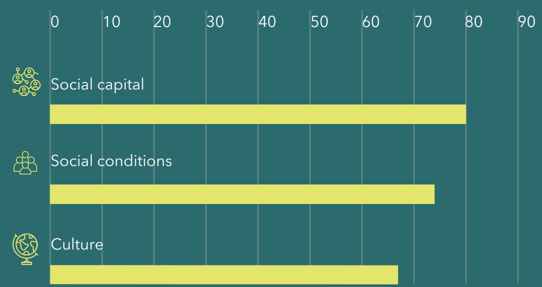



United Kingdom

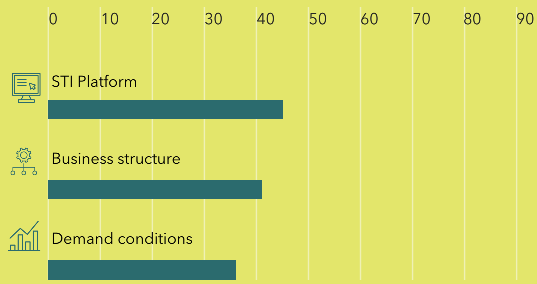
International benchmark

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

### Highest Scoring Dimensions

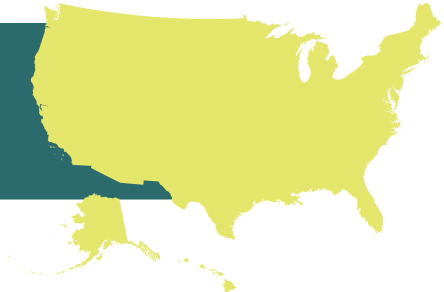



### Lowest Scoring Dimensions



## IDE 2023

# United States



IDE ranking

**4**

IDE value

**59.3**

Population
(Millon habitants)

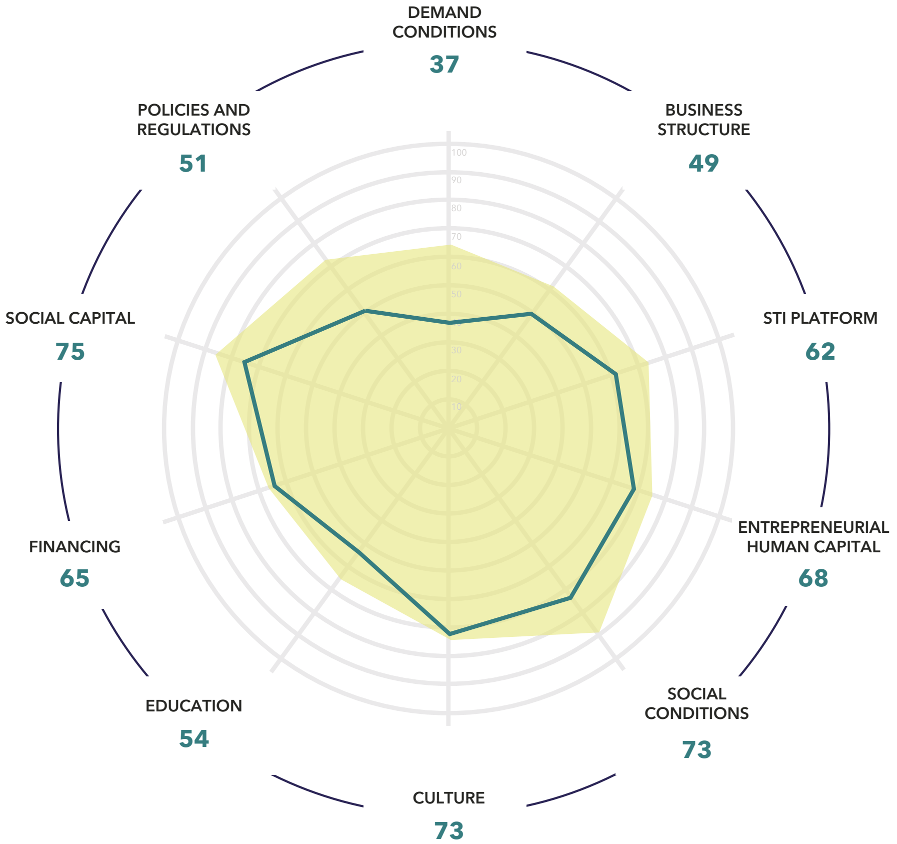
**333 M**

GDP per capita (USD)

**75,180**

GDP growth rate

**2.1%**

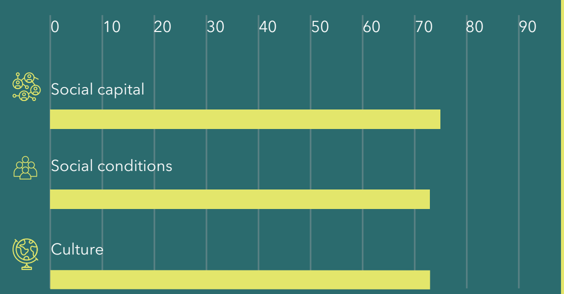



United States

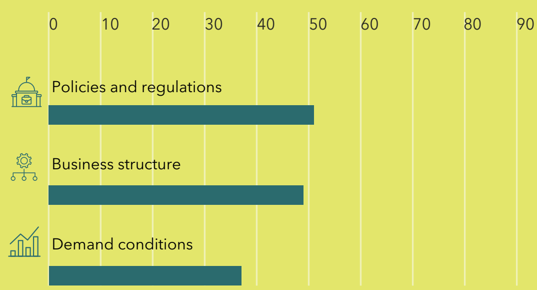
International benchmark

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

### Highest Scoring Dimensions




### Lowest Scoring Dimensions



IDE 2023

# Uruguay

IDE ranking

**30**

IDE value

**30.1**

Population
(Millon habitants)

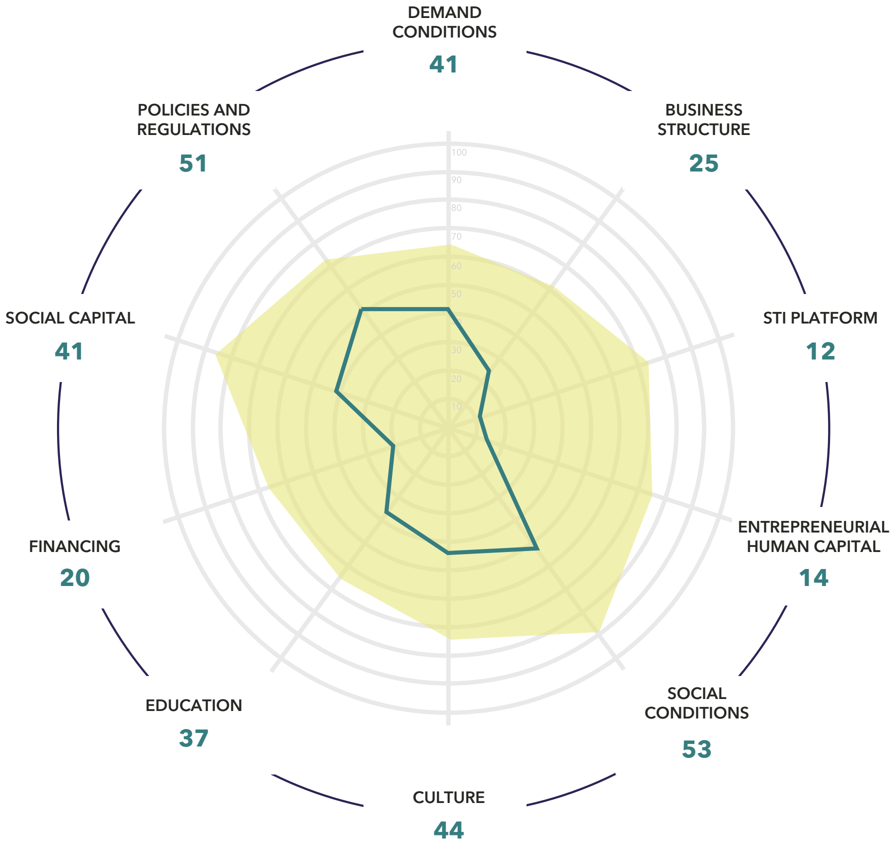
**4 M**

GDP per capita (USD)

**20,018**

GDP growth rate

**4.9%**



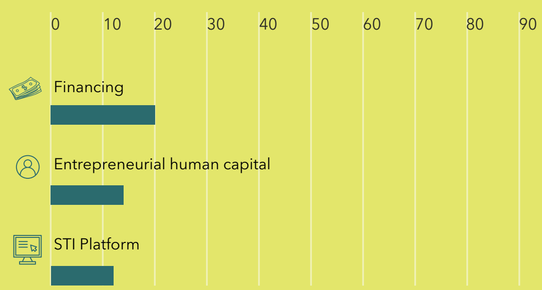

Uruguay

International benchmark

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

### Highest Scoring Dimensions


### Lowest Scoring Dimensions



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and the full methodology at
**https://prodem.ungs.edu.ar/icsed/**

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