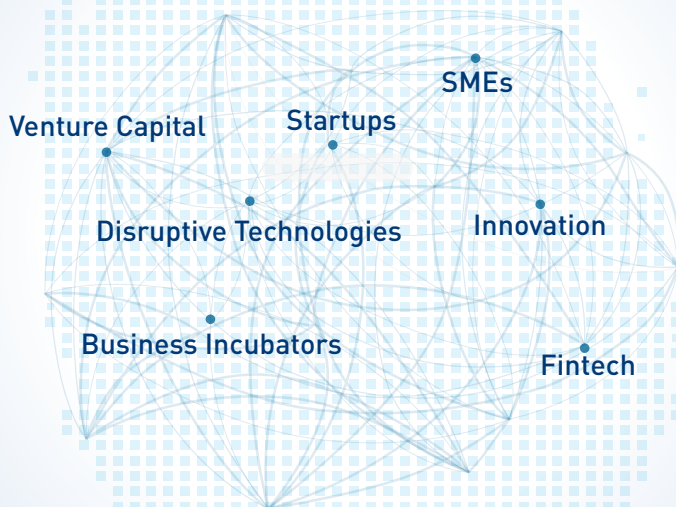


QATAR'S ENTREPRENEURIAL ECOSYSTEM-2021 EDITION

Empowering the Transformation



ALLAN VILLEGAS-MATEOS, Ph.D.

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Foreword

Entrepreneurship is one of the most important engines of economic development, and a central driver of economic diversification. Indeed, it's entrepreneurs, their teams, and the firms they create who search for opportunities in a market, and create and capture economic value in the process, increasing the levels of innovation of whole economies. When one sees an innovative economy, it is impossible not to see at the molecular level the work of hundreds of startups, and of entrepreneurial leadership in established firms: it is through innovation that new value is created, at the firm level, and also at the macro economic level.

Innovation, entrepreneurship, economic growth, and development are intrinsically linked, so much so that it is difficult to think of a diversified, vibrant economy without the work of entrepreneurs and their firms, and their constant effort to create value with innovative products, services, or business models. The constant, relentless exploration that fuels entrepreneurship is the engine that allows new ideas to emerge, and new forms of value creation to appear in a market.

The Qatar National Vision 2030 seeks to diversify Qatar's economy by incorporating new activities that, over time, will become a significant percentage of the GDP and eventually replace oil and gas and extractive industries in general. In particular, high-value-added professional services are needed to achieve that goal, and ultimately to transform Qatar into a "knowledge economy" that is strong, sustainable, respectful of the planet, and of course capable of ensuring the material and spiritual well-being of its current citizens and residents, and the future generations to come.

Yet, entrepreneurial activities happen in a context which heavily influences the quantity and the quality of the activities that take place in it. The success of entrepreneurial firms, then, depends not only on the quality of the entrepreneurs but also on the quality of other persons and institutions that surround them. That environment is usually defined as the “entrepreneurial ecosystem” of a region or even a nation, and includes a variety of entities with different missions and activities, all of them at least partially interested in the creation and the growth of healthy and innovative business firms led by entrepreneurial managers. It is generally accepted that the quality of the entrepreneurial ecosystem, and the constant efforts to improve it, are what differentiates fast-growing, innovative economies from less successful ones. Resources still matter, of course, but ideas matter more in this century of climate change and technological disruption.

Among the institutions that constitute an entrepreneurial ecosystem, business schools such as HEC Paris in Qatar play a key role. Not only do they provide education and training that increase the quality of the entrepreneurial initiatives and reduce the risk of failures, but also they foster a network of entrepreneurial leaders who can support each other and exchange ideas and experiences. Also-and this is a key role for any institution of higher learning-they provide thought leadership and high-quality academic research.

The document you have in your hands is a research effort led by HEC Paris in Qatar to map as accurately as possible the entrepreneurial ecosystem of Qatar in 2020, by identifying and analyzing the core players and their actions. This effort also seeks to understand how these players interact with each other, and to highlight evidence-based areas of improvement that could increase the positive impact of the ecosystem. This study seeks to complement the excellent efforts led by other institutions in

Doha, and provide insights and analysis that can help the decision-makers of the public and private sectors to increase the quality of the ecosystem by providing mechanisms that will encourage the creation of new entrepreneurial firms. An example of that excellent work is the Global Entrepreneurship Monitor, a world study led in Doha by the Qatar Development Bank as part of its many initiatives to support entrepreneurship and innovation in general, and high-growth exporting firms in particular.

HEC's objective with this study is to provide an updated map of the ecosystem, and to feed the conversation about the different initiatives that can be taken to increase entrepreneurship and innovation in Qatar. As one of the world's leading business schools, and as a member of the Qatar Foundation family since 2010, HEC is proud to provide this study in the hope it will be a modest contribution on the road to National Vision 2030.

HEC Paris in Qatar is grateful to Dr. Allan Villegas-Mateos, who accepted our invitation to join our team during the pandemic-created confinement, and who worked remotely to gather and analyze all the information that is presented in this book. Because of travel restrictions, he did most of his research work remotely, sometimes having to juggle with time zones and other logistical complications that made his work a great deal more difficult than it should have been. Yet, his prior work and expertise in entrepreneurial ecosystems, part of which was at the core of his Ph.D. thesis and the subsequent papers that came out of it, facilitated his task in spite of all the difficulties.

A map, very much like the city of Doha, is always a work-in-progress: no sooner is it finished than new elements appear. It is the sincere desire of HEC to work with its partners in Qatar

to keep this map updated as it changes, and provide useful ideas to enhance both the quantity and quality of entrepreneurship in Qatar and in the region, providing a forum for discussion about public policies and private investments alike. Ultimately, it is through impactful entrepreneurship that countries develop, but that entrepreneurship cannot happen without a context that nurtures it adequately: entrepreneurship needs business schools, incubators, angel investors, venture capitalists, development banks, and hackathons among many others to flourish. HEC Paris in Qatar is proud to participate in that conversation, and to be part of the entrepreneurial ecosystem of Qatar.

Doha, Qatar, February 1, 2021.

Pablo MARTIN DE HOLAN, Ph.D.

Dean - HEC Paris in Qatar

Executive Summary

There is an emerging trend of discussing “entrepreneurial ecosystems” and the potential effects of entrepreneurship on the rapid growth of countries. This has been accompanied by a growing effort from governments to push innovation-driven entrepreneurial projects because of their relation to the economic growth and job creation. Questions remain without an answer and much of the evidence is inconclusive or incomplete, but a growing number of academics are focusing on researching the different entrepreneurship-related questions. Understanding the process of entrepreneurship is key to creating the ideal conditions to foster business creation and development, ideally of high impact based on innovation because they have a bigger potential to provide jobs and income for the long term. Therefore, researching the entrepreneurship phenomena must be linked closely to the practical experiences of entrepreneurs and key stakeholders to be as accurate as possible. Following this trend, the entrepreneurial ecosystem appears in the entrepreneurship literature as the leading theory used by practitioners and researchers about entrepreneurship policy portfolios, regional clusters of entrepreneurs and specialized resources, as well as national systems of entrepreneurship. The concept usually underpins studies looking at the dynamics of competition and collaboration in co-specialized technology-intensive settings. Consequently, as explained in chapter 1, this report aims to examine the reality of an entrepreneurial ecosystem in a country that has made several efforts to transform into a knowledge-based economy, making the country a regional hub for knowledge and high-value industrial and economic activities. That country is Qatar.

To study Qatar's entrepreneurial ecosystem this research report departs from defining it as the systematic view of entrepreneurship activities that occur in a local phenomenon given the interdependence of key actors and factors. Therefore, assessing the extent to which Qatar's entrepreneurial ecosystem is supportive for business creation and development is required to identify the composition of it and its key stakeholders from an institutional point of view. In chapter 2, the report focuses on five entrepreneurial framework conditions to analyze thoroughly who participates in each: (1) Education, (2) Finance, (3) Government, (4) Support organizations, and (5) Entrepreneurship competitions and sponsors. In general, it follows a mixed method approach based on primary data obtained from in-depth interviews with key stakeholders and the analysis of secondary data. This report also examines in chapter 3 the ecosystem dynamics including population demographics like employment, entrepreneur's profile, motivations, salaries, investments landscape, foreign trade and main productive sectors. At the same time, the report examines in chapter 4 some barriers to entrepreneurship and it concludes in chapter 5 with some implications and limitations for key stakeholders in Qatar's entrepreneurial ecosystem. The report concludes with recommendations to shed light on the best practices that entrepreneurs and stakeholders in the ecosystem can adopt to support each other and advance towards Qatar's National Vision 2030.

In this research report you can find the following:

- Qatar is advancing well in adapting the local conditions and has potential to become a leading entrepreneurial ecosystem considering that there is a synergistic relationship

between universities, government, industry, and abundant access to capital.

- There are some specific support institutions such as Qatar Foundation, Qatar Development Bank and Qatar Financial Centre providing remarkable support for other organizations involved in education, science, and technology; these are directly linked to a broader view of how the country is building the entrepreneurial framework conditions in terms of creating or bringing the right talent, providing financial sources, and establishing ideal regulatory conditions for business and entrepreneurs, among others.
- Qatar is the home of world class education institutions that are part of a national effort to support the transition towards a knowledge-based economy, so the government and private sectors recognize the importance of universities to provide human capital infrastructure and eventually foster more innovative projects within the country. This helps nationals and expatriates since there is no need to travel abroad to get a world class education, and helps future entrepreneurs trying to find the right talent.
- There are more than 18 universities with different areas of specialties and this report has found that there is not a limitation on participation by women. The evidence shows that women are in fact taking advantage of the world class education but are finding restrictions in occupying certain positions, earning salaries, and more importantly, in the motivations to pursue entrepreneurial careers because of their gender roles. Nevertheless, the student enrollment in universities includes more women than men, and the leaders recognize women as more capable entrepreneurs.

- In terms of financial sources, the ecosystem in Qatar reflects several options, but there is not an institutionalized fund-raising structure affected by the abundant wealth among the Qatari citizens that bootstrap their businesses. According to investors interviewed, sometimes there are neither good ideas nor teams to execute them and other times there are no viable financial plans on how much money the businesses need to grow, and this affects valuations.

Part 1: Introduction

The local outlook

Qatar, one of the Gulf Cooperation Council (GCC) countries, is a small country in the Persian Gulf covering an area of approximately 11,437 km², with a population of 2.7 million. The exploitation of Qatar's oilfields started in 1949. The oil boom in the 1970s transformed the country's physical, social, cultural, and demographic status. Today, Qatar has the third largest gas reserves in the world, after Iran and Russia. The problem is the high volatility of oil prices that puts additional pressure on the Qatari economy. Therefore, the leaders in Qatar agree that the country needs a long-term strategy to reduce its dependence on gas and oil. Hence, the Qatar National Vision 2030 is a plan that aims to transform the country into a knowledge-based economy, making the country a regional hub for knowledge and high-value industrial and economic activities. This transformation is closely related to support for innovation, technology development, and entrepreneurship, among others.

Box 1 Qatar National Vision 2030 objectives

The Qatar National Vision 2030 seeks a diversified economy that gradually reduces its dependence on hydrocarbon industries, enhances the role of the private sector and maintains its competitiveness. For the government, converting the hydrocarbon resources into financial wealth provides a

means to invest in world-class infrastructure, build efficient delivery mechanisms for public services, create a highly skilled and productive labor force, and of course, support the development of entrepreneurship and innovation capabilities. The private sector plays an essential role to achieve that vision. Entrepreneurs are recognized as key to drive that transition. The government is providing a platform for diversification of Qatar's economy and recognizes training and support for entrepreneurs as a basic precondition to carry out its required role beyond the financial and non-financial support mechanisms that constitute the entrepreneurial ecosystem.

Why study Qatar's entrepreneurial ecosystem?

Entrepreneurship has been recognized worldwide as the engine of economic growth and creation of jobs that can lead a country towards superior development. For example, according to the 2018/2019 United States (USA) Global Entrepreneurship Monitor (GEM) Report, entrepreneurship represents a viable career path for many even though the low USA unemployment rate shows that there are enough job options for Americans. Nearly 16% of the United States adult population are entrepreneurs: about 31 million entrepreneurs are motivated by opportunity. The entrepreneurial ecosystem framework conditions in the USA are generally positive, especially with respect to access to finance and cultural and social norms, with some areas of opportunities regarding government policy and programs, and R&D transfer involving entrepreneurs. If we compare the USA and Qatar, both are among high-income economies; the difference is that in the USA

people see entrepreneurial opportunities and perceive that they have the capabilities to pursue them. In Qatar, the unemployment rate is close to 0% and jobs are very well paid with generous benefits, especially for Qatari nationals, and expatriates see risks in becoming entrepreneurs. Nevertheless, as shown in Fig. 1, the Total Early-stage Entrepreneurial Activity (TEA) rate has been growing year by year in Qatar and unemployment remains at similar rates. This research report aims to identify what can lead people in Qatar with the right skills to pursue entrepreneurial opportunities from the point of view of entrepreneurial ecosystem conditions.

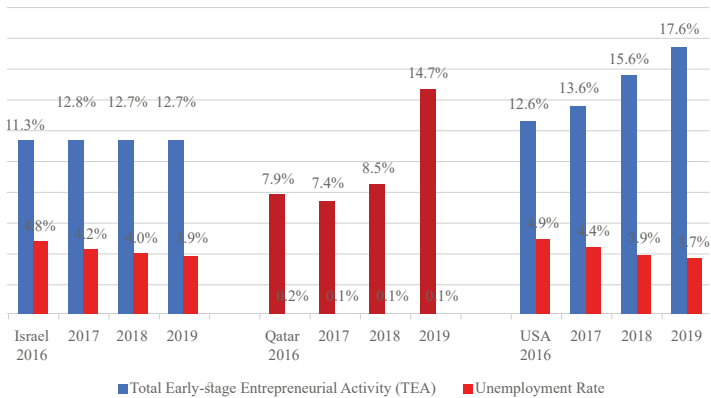


Fig. 1 Comparisons of TEA and unemployment rates of Israel, Qatar and the USA (2016-2019), Source: Global Entrepreneurship Monitor/Adults Population Survey and global statistics.

The entrepreneurial ecosystem metaphor is based on the biological concept of “ecosystem” in which a community of living organisms, in conjunction with the nonliving components of their environment, interact as a system. In this case the living organisms are the new and existing businesses that operate in a limited geographic area given certain conditions. Therefore,

an entrepreneurial ecosystem should stimulate the creation and development of business ventures, ideally of high impact. High impact businesses are based on innovation and opportunity, and they have a bigger potential to provide jobs and income for the long term. In many cases, high impact businesses can be identified as startups or scale-ups; this type of business develops products or services of great innovation with a broader demand and its business model is based on the integration of technology. An entrepreneurial ecosystem that provides adequate support in terms of funding, performance, talent, market, research, and development, should stimulate the emergence of startups and by consequence should be ideal for any other type of traditional business.

According to the Global Startup Ecosystem Report (2020), Silicon Valley located in the San Francisco Bay area in California, USA, is ranked worldwide as the #1 ecosystem for technology startups to be located because of its unique conditions. Also, in the Middle East region, Tel Aviv-Jerusalem in Israel appears ranked as the #6 startup ecosystem sharing the rank with Los Angeles in USA. Jerusalem is home to Israel's leading universities such as The Hebrew University and Bezalel Academy of Art & Design, which play significant roles in creation of science-based startups and fueling the ecosystem with new talent, entrepreneurship is a national priority development area, offering tax benefits and non-dilutive grants of up to \$165,000 for tech and up to \$1 million for Life Sciences companies. In the case of Silicon Valley, some of the most successful tech companies in the world are settled there, including Google, Facebook, Uber and Apple. The collaboration of stakeholders, professional networks, funding opportunities and top universities surrounding the area have been key for the success of these ecosystems. If we compare the conditions, Qatar has everything to become a top ecosystem destination for high impact

entrepreneurs. For example, Qatar has nine satellite campuses of top international universities located in Education City and since the blockade started in 2017, nationalism has fostered a culture of collaboration and support. Also, Qatar's National Vision 2030 foresees development through four interconnected pillars that are linked to creating a vibrant ecosystem: human, social, economic, and environmental development. These pillars are driving the good progress in developing a political and organizational climate that supports the business sector; nevertheless, some aspects need more development for Qatar to become more competitive and attractive for investments.

The key to succeed in supporting entrepreneurial activities is understanding how new innovative and competitive firms emerge in defined geographic spaces and under which conditions these entrepreneurship activities interact with other components of the "ecosystem" (Stam, 2015). One key aspect is that most of the definitions of entrepreneurial ecosystems agree that they need the interdependence of actors and factors and are a local phenomenon. That is why the first thing we need to understand is that we don't need to copy or replicate a Silicon Valley; we need to shape the local conditions in Qatar and engage stakeholders in issues that include reforming legal, bureaucratic and regulatory frameworks to create a vibrant ecosystem (Isenberg, 2010). In this process, it is basic to identify all these key stakeholders from an institutional point of view, but also to keep in mind the entrepreneurs that are considered the central heart of any entrepreneurial ecosystem.

Studying entrepreneurial ecosystems also offers a systematic view of entrepreneurship activity (Cavallo et al., 2018). Nevertheless, most of the studies are conducted in Eastern or Western countries (Kebaili et al., 2017) and OECD economies.

The studies about this field in the Gulf Cooperation Council (GCC) regions are scarce (Ben Hassen, 2020), and Qatar's social, economic, and political contexts are totally different than most of the previous studies in other countries. It is relevant since hydrocarbon-dependent economies such as Qatar are in the transition to knowledge-based economies where human capital is the driver of creativity, innovation, and generation of new ideas. Qatar has also made major efforts to create a vibrant entrepreneurship ecosystem with the creation of significant institutions and organizations to help entrepreneurs: such as incubators and funding structures, including the Qatar Development Bank (QDB), Enterprise Qatar, Silatech, Social Development Center, INJAZ Qatar, Center for Entrepreneurship (Qatar University), Qatar Business Incubation Center (QBIC), Digital Incubation Center (DIC), Qatar Science and Technology Park (QSTP), and Qatar Foundation (QF) (Ben Hassen, 2019). Consequently, in 2018, according to the Global Entrepreneurship Index, Qatar was ranked first among GCC countries, second in the MENA region, and in 22nd position globally (Acs et al., 2018). In accordance with the Qatar National Report 2017 from the Global Entrepreneurship Monitor sponsored by the Qatar Development Bank, 15.7% of the adult population expressed their intentions to start a business in this country and 65.9% see entrepreneurship as a good career choice, ranking Qatar as 18th of 52 countries.

Qatar's entrepreneurial ecosystem framework conditions

In order to identify the key stakeholders of Qatar's entrepreneurial ecosystem, the following model (see Fig. 2) proposes five types of conditions that encompass the most important institutional factors recognized by most of the entrepreneurial

ecosystem models in the literature (Reynolds et al., 2005; Isenberg, 2011; Feld, 2012; WEF, 2013; Mason and Brown, 2014; Stam, 2015; Cavallo et al., 2018):

1. Education
2. Finance
3. Government
4. Support organizations
5. Entrepreneurship competitions and sponsors

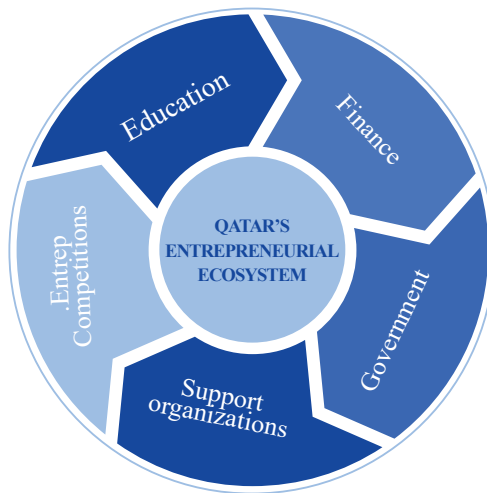


Fig. 2 Qatar's entrepreneurial ecosystem framework conditions

Part 2: The key stakeholders mapping

This chapter provides an overview of key stakeholders that need to be considered in an entrepreneurial ecosystem and that could implement effective entrepreneurship policies. It discusses what an entrepreneurial ecosystem is and presents a mapping of institutions in Qatar that represents their current practices that this chapter highlights as very important to evaluate and take into consideration to keep advancing the support for entrepreneurship in this country. Following a social network approach, the map of Qatar institutions involved directly in entrepreneurship conditions (see Fig. 3) shows a strong connection among three leading institutions (Qatar Foundation, Qatar Development Bank, and Qatar Financial Centre), and at the same time education institutions reflect a strong presence in the country linked by the Ministry of Education and/or Qatar Foundation.

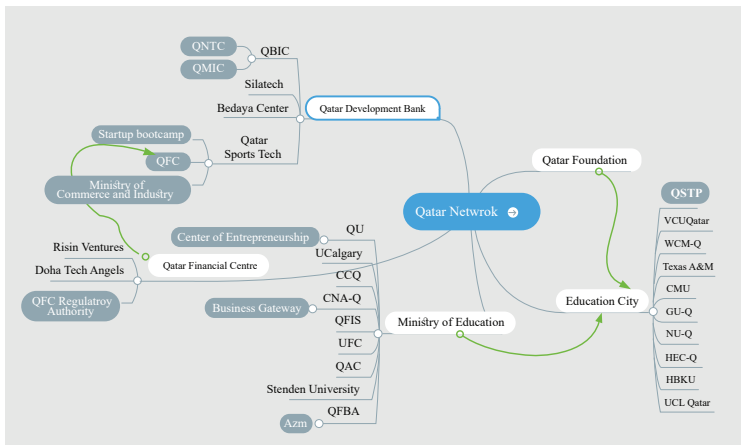


Fig. 3 Qatar’s institutional framework of the ecosystem, Source: Made by the author with information from in-depth interviews and available in websites.

Any entrepreneurial ecosystem is composed of interconnected actors and factors that create a vibrant set of conditions that try to foster the creation and development of business in a specific geographic area. In this case, Qatar's entrepreneurial ecosystem consists of a complex network of institutions and organizations that support entrepreneurs and help to build a knowledge-based economy (Nasser Al-Khalifa, 2018). It has been possible due to the Qatar National Vision 2030 plan that stimulates a business climate capable of attracting foreign funds and technologies and encouraging national investments. Also, it is important to consider that the Qatari government has a strong involvement and determination to create a vibrant entrepreneurial ecosystem. In consequence, there are several government institutions supporting private and public institutions in Qatar's entrepreneurial ecosystem, from education and research to finance. Therefore, this report first identifies which institutions have a key role in Qatar's entrepreneurial ecosystem, and then studies the connections among them through in-depth interviews with entrepreneurs that have started companies in this country, and leaders of the institutions that are part of this ecosystem. Second, it provides a general view of the ecosystem dynamics and barriers to entrepreneurship. Finally, it ends with recommendations in terms of public policies, private and public actions, and general implications and limitations.

Education

Qatar's National Vision 2030 plan contemplates several objectives regarding the educational system. The government is promoting education to intensify the national identity and promote morals and social values among its population. It serves as a route to diversify the economy away from the hydrocarbons and start moving forward towards a knowledge-based economy. In general

terms, the educational system in Qatar is controlled by the Supreme Education Council and the Ministry of Education. The Ministry of Education is responsible for providing support to private schools while the Supreme Education Council is responsible for government schools. In Qatar education is free in government schools and students are provided with textbooks and transportation to and from schools. Nevertheless, entering your child in a government school is highly competitive and the places are reserved first for Qatari nationals. Education in Qatar has benefitted enormously from hydrocarbon revenues. It is a 12-year system based on the K-12 education system that is used in western countries like the USA. Qatar has many private and international schools where most expatriates send their children. Nevertheless, there is no evidence of entrepreneurial education programs at primary and/or secondary levels in Qatar.

In terms of higher education, the Qatar University was the first university established in Qatar and today it offers a broad range of degrees in eight different schools including Education, Business and Economics, Arts and Sciences, Engineering, Sharia, Pharmacy, Law, and Medicine. The Qatar University is public, and government supported with a special focus on supporting entrepreneurship and innovation. It is the largest in terms of number of students and number of programs, and it has created a university-based ecosystem as illustrated in Fig. 4 with more than 2,300 students across the different schools. Qatar University is a research institution that holds 17 research centers within a multi-million-dollar research complex, and partnerships among which we can highlight the Center for Entrepreneurship established in 2013 as an example of Qatar University's initiative to support entrepreneurship at the university and in the community at large.

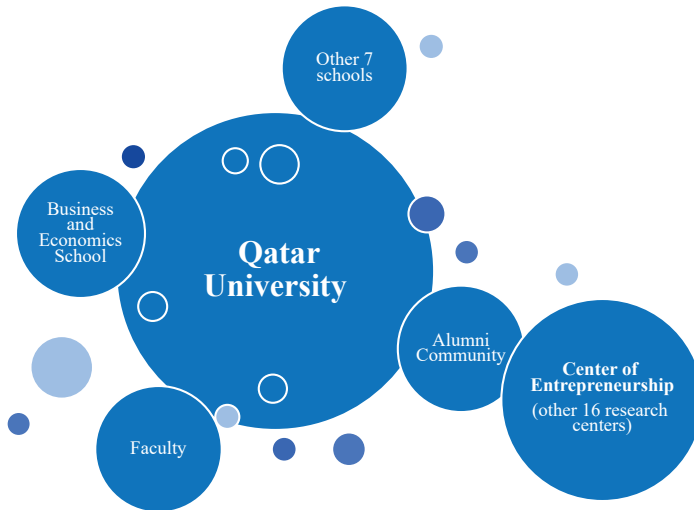


Fig. 4 Qatar University-based ecosystem

Currently Qatar has several private universities, some of them American and others European. In Qatar there is a development located in Al Rayyan that was supported by the Qatar Foundation called Education City. It was opened officially in 2003. In Education City you can find many educational facilities and, more importantly, there are satellite campuses of international universities including Virginia Commonwealth University in Qatar, Weill Cornell Medicine – Qatar, Texas A&M University at Qatar, Carnegie Mellon University in Qatar, Georgetown University in Qatar, Northwestern University in Qatar, HEC Paris in Qatar, and Hamad Bin Khalifa University. Besides these universities in Education City, there are other universities operating in Qatar including University of Calgary, Community College of Qatar, Weill Cornell Medical College in Qatar, College of the North Atlantic Qatar, Qatar Faculty of Islamic Studies, University Foundation College, Qatar Aeronautical

College, Stenden University, University College London, and Qatar Finance & Business Academy. All the universities are interconnected through the Ministry of Education and some of them through the Qatar Foundation, especially international universities. In terms of support for entrepreneurship and innovation, the international universities in Education City are very active and collaborative with government initiatives. They have varying impacts because most of their alumni communities are formed by high level executives and current leaders of government institutions in Qatar.

The Qatar Foundation for Education, Science and Community Development is a private chartered non-profit organization, and is government supported and in some manner government funded. Its mission is to support Qatar in its transition from a hydrocarbon-dependent economy to a knowledge-based economy by unlocking human potential. The Qatar Foundation (QF) is responsible for establishing the satellite campuses of the nine international universities previously mentioned in its effort to offer better educational institutions. As part of its goal to develop a youth population with the necessary expertise to maintain a knowledge economy, the QF requested the following universities to establish campuses in Qatar: Virginia Commonwealth University, Weill Cornell Medicine-Qatar, Texas A&M University at Qatar, Carnegie Mellon University Qatar, Georgetown University School of Foreign Service in Qatar, Northwestern University in Qatar, Hamad Bin Khalifa University, HEC Paris in Qatar, and University College London Qatar. Among these, only three offer programs directly related with business (Carnegie Mellon University Qatar, Georgetown University School of Foreign Service in Qatar, and HEC Paris in Qatar). The rest offer a variety of programs, from arts to medicine and STEM programs.

All satellite campuses in Education City are established based on a limited time contract with QF, which is subject to renewal. With these resources, the residents of Qatar don't have to leave the country to obtain a higher degree from a top university, and in many cases, they can keep working in good positions. Qatari nationals in government positions are a majority of the students enrolled at these universities.

“Most ladies in Doha are classic, depend on salary and their husbands. Nevertheless, some divorced and single women are starting business. For me, I was lucky my husband supported me, but when I tried to access a formal incubation process, the program was full and I got rejected, so I took some courses from Al-Jazeera, and I am about to quit my government position.”

Women Qatari National

2 years, CEO of IT startup

Former QU student

For many women in Qatar, access to education is not an issue; they are allowed and pushed to pursue higher degrees, and the problem is their personal motivations caused by gender roles. For example, in Qatar University, women make up approximately 70% of the student population. Experts' perceptions are that women have full support in Qatar at many levels but the gender gap remains present in other issues such as occupying certain positions and salary ranges. It is relevant in terms of education because some of the institutions-whether they are public or private, national, or international-are creating entrepreneurship support initiatives in different forms as part of the university-based ecosystems in which they are involved, depending on their own mission and offering (see **Table 1**). Therefore, Qatar government officials in direct

contact with entrepreneurs have identified that women are better entrepreneurs because they are more committed and passionate than men even when they can have more responsibilities beyond college. In Qatar it is a reality that women are benefiting more from education and it helps that they are more involved in the society and are working. As they improve their school grades, they also get better positions in government. This is a problem because it reflects that women possess the required skills to become good entrepreneurs, but something is lacking for them to identify opportunities and/or to perceive they have the capabilities to follow entrepreneurship as a career choice. In Qatar, the gender gap in entrepreneurship is caused by personal motivations.

University	Origin	Description	Entrepreneurship support initiatives
Qatar University (QU)	Qatar	The university hosts 10 colleges: Arts and Sciences, Business and Economics, Education, Engineering, Law, Sharia and Islamic Studies, Pharmacy, College of Health Science, College of Medicine, and the latest College of Dental Medicine.	Center of Entrepreneurship, Business Incubator, and Innovation & Entrepreneurship Contest.
University of Calgary (UCalgary)	Canada	Undergraduate and graduate programs in nursing.	*
Community College of Qatar (CCQ)	Qatar	Associate and bachelor's degrees of business administration, customs management, health information management, arts, science, engineering and information technology, and public administration.	*

College of the North Atlantic Qatar (CNA-Q)	Canada	A national technical college offering over 30 programs through three schools: business management and information technology, engineering technology and industrial trades, and health sciences.	Business Gateway
Qatar Faculty of Islamic Studies (QFIS)	Qatar	International center for Islamic thinking and dialogue, committed to enhancing research into Islamic culture.	*
University Foundation College	UK	Brings to Qatar “UK bridging” programs in Business, Humanities, Engineering and Science pathways developed and accredited by the Northern Consortium of UK universities (NCUK). Recent graduates have attended University of Bristol, University of Salford, University of Bradford, Liverpool John Moores University, and many more.	*
Qatar Aeronautical College (QAC)	Qatar	Offers full-time, approved courses for pilots, aircraft maintenance engineers, air traffic controllers, meteorologists and airport operations management, as well as short courses in a wide variety of aviation-related disciplines.	*

Stenden University Qatar	Netherlands	Undergraduate programs such as tourism management, international hospitality management, and international business. Graduate degrees of international hospitality and tourism management.	*
Qatar Finance & Business Academy (QFBA)	Qatar	QFBA excels in providing professional training to individuals and customized learning and development programs for executives.	Azm
Virginia Commonwealth University (VCU Qatar)	USA	Undergraduate degrees of Fine Arts in fashion design, graphic design, interior design, and painting & printmaking, a Bachelor of Arts degree in art history, and a Master of Fine Arts degree in design.	Design Entrepreneurship Network for Aspiring Design Entrepreneurs.
Weill Cornell Medicine-Qatar	USA	Medical graduate programs	*
Texas A&M University at Qatar	USA	Undergraduate degrees in chemical, electrical, mechanical, and petroleum engineering, and a Master's in chemical engineering.	Qatar Invents STEM enrichment program.
Carnegie Mellon University Qatar	USA	Undergraduate degrees are offered in Computer Science, Business Administration, Information Systems, Computational Biology, and Biological Sciences (a degree offered in conjunction with Weill Cornell Medical College in Qatar).	Young Entrepreneurs, and Quick Startup.

Georgetown University School of Foreign Service in Qatar (GU-Q)	USA	Bachelor of Science in Foreign Service with four majors.	Georgetown SFS-Qatar Enterprise (magazine).
Northwestern University in Qatar (NU-Q)	USA	Undergraduate degrees awarded in communication, journalism, and strategic communication.	Entrepreneurship features heavily in student preparation.
Hamad Bin Khalifa University (HBKU)	Qatar	Graduate programs in areas such as Information and Computing technologies, life sciences, sustainable development, Islamic studies, Islamic finance, Middle Eastern studies, translation studies, and law.	HBKU's Innovation Center.
HEC Paris in Qatar	France	Graduate programs such as master's degree in strategic business unit management, and international executive MBA.	Entrepreneurship Day, and Entrepreneurship and Business Development Certificate (or master's track).
University College London (UCL Qatar)	UK	Graduate programs such as master's degrees in museum studies, and library and information studies.	*

Source: Made by the author with public information from websites and personal interviews with leaders. *There is no evidence of any entrepreneurship initiative.

In the realm of research and science, the Qatar Foundation was responsible for the development of Education City and also supported the development of Qatar Science & Technology Park located in the same area. The Qatar Science & Technology Park is a facility comprising 45,000 square meters of office and laboratory space that provides incubation, funding, training, mentorship, and connection to the regional and global tech innovation ecosystem. Therefore, this facility is highly relevant to Qatar's entrepreneurial

ecosystem as well as the network of universities that can be a source of highly educated people that may want to become entrepreneurs with adequate guidance and support. Compared with Silicon Valley in the USA, Qatar is advancing well in adapting the local conditions and has potential to become a leading entrepreneurial ecosystem, considering that in Silicon Valley most of its success comes from a synergistic relationship between universities, government, industry, and abundant access to capital.

“Qatar Science & Technology Park programs were designed primarily for current students in Education City, and now they are taking students and professionals from outside, but the actual challenge is to encourage people to submit their technological ideas with commercial potential to the different programs.”

Senior Program Manager

5 years working in Education City

Finance

Financing of entrepreneurial projects in Qatar comes mainly from bootstrapping (personal savings, personal computing equipment, and garage space) investments fostered by the legal requirement that a Qatari national must have a majority of shares to establish certain types of businesses. Also, family businesses are very popular and can get external funding if they apply to programs like QBIC’s “Accelerate your company” or International Finance Corporation solutions. Nevertheless, in the process of creating a knowledge-based economy, the entrepreneurs interviewed for this report expressed their interest to seek external funding as it will also help to create a healthier entrepreneurial ecosystem. In accordance with experts in Qatar, the knowledge-based economy can only be created with

investment and better educational institutions; regarding the latter, the improvement is clear, but regarding investments it is yet unclear. In accordance with PitchBook (2020), there have been 118 investors with a total of 310 deals for 264 companies in Qatar since 2011. These numbers are far fewer than in Silicon Valley, with more than 279,000 deals. Yet, the largest deal in Qatar so far was for 3.5 billion USD, and there are registered 99 exits¹ in the last 10 years.

The Venture Capital (VC) ecosystem in Qatar remains underdeveloped according to the entrepreneurs and experts interviewed for this report. The problem is that there isn't a risk-taking personality or culture, and although many people want to be an entrepreneur, few of them have the necessary skills it takes to be one. Entrepreneurs expressed that most of the venture capital funds prefer to invest in other countries with less foreign trade restrictions because of the blockade, more friendly immigration laws, and more accessible Foreign Direct Investment (FDI) policies. Hopefully these conditions would change with the end of the blockade at the beginning of 2021, the FIFA World Cup in 2022, and the QNV2030 in process of implementation. Although Qatar seems to be a small local market, the purchasing power of its residents is very high and the potential market is attractive, but companies must set international goals if they want to get funded. They require more extensive economic impact activities, and some experts working for multinational companies coming to Qatar said that most of the investors focus on the short-term generation of profits rather than the potential long-term business. Also, some Qatari nationals have accumulated cash from their well-paid government positions, and they want to invest and own companies, but they do not have operational business experience, so they don't understand very well the urgency of cash flow and the implications on the business for further funding rounds.

¹ Exits in an entrepreneurial ecosystem act as a metric to measure the performance or maturity of a local business scene, counting the number of companies that achieve an Initial Public Offering (IPO).

“Institutional funding is a major problem in Qatar. First, entrepreneurs don’t understand what kind of funding is required for their business. Normally they have very low valuations because startups don’t understand how much money they need to build the business right, so the fund-raising structure is failing. Even when venture capitals want to be there, the regulations and understanding are not clear yet.”

Investor and Incubator Manager
10 years as member in QFC

Nevertheless, entrepreneurs that require financing for their projects can find some alternatives in Qatar like seed capital, debt, venture capital, or equity. Table 2 summarizes some of the success stories by type of financial source. The Qatar Foundation has served as seed capital provider through different initiatives like research grants and competitions across the different institutions it supports. For example, the Qatar Science & Technology Park offers incubation programs and funding for research-based technology product development. The funds range from seed capital to Series B rounds up to 3 Million QAR. Therefore, the Qatar Science & Technology Park is committed to foster an open ecosystem for innovation, research, and entrepreneurship.

In the other hand, the Qatar Development Bank (QDB) is the leading institution in Qatar offering financial services, banking, and loans for the development of the industrial, tourism, educational, health care, agricultural, animal resources, and fisheries sectors of the Qatari economy. It was founded in 1997 with the aim of developing and empowering Qatari entrepreneurs and innovators to contribute to the diversification of the Qatari economy, through successful small and medium enterprises that can

compete in global markets. The QDB is the primary government entity responsible for promoting entrepreneurship and small and medium enterprises in Qatar. It provides mainly seed capital and loans to business initiatives, and it is the leading institution of the Global Entrepreneurship Monitor in Qatar. Several entrepreneurs recognized QDB as a key institution to grow their firms because of the different support mechanisms it provided to their companies.

In 2014, the QDB along with the Social Development Center started operating the Qatar Business Incubation Center (QBIC). The QBIC offers mentorship, financial support, and space for Qatari entrepreneurs and Qatari residents partnered with a Qatari national. Through 2020 the Qatar Business Incubation Center has incubated 180 companies and invested 4.7 Million QAR, positioning itself as the most important business incubator in the country. It has two sub-incubators, the QBIC Tourism incubator and the Digital & Beyond incubator. The QBIC has partnerships with the Qatar National Tourism Council and Qatar Mobility Innovations Center. Unlike the Center for Entrepreneurship from the Qatar University, the QBIC is open to the public rather than only the university collaborators, and the QBIC acts as seed investor in many cases or at least, in most cases, it helps connecting entrepreneurs with capital.

“The main difference on QSTP and QBIC outcomes is the quality of the ideas they are supporting. The lack of technology talent locally is pushing the programs to focus on MVP building, both are good initiatives, but one has stricter filters for good ideas.”

Investor and Entrepreneur
10 years in Qatar

For entrepreneurs seeking investment opportunities like seed capital or private capital to expand their business, the Middle Eastern branch of the Angel Investment Network offers connections within Qatar bringing together businesses looking for investment and investors with the capital, contacts, and knowledge to help them succeed. Their system works through an online platform and they support entrepreneurs in Middle Eastern countries like Qatar, Jordan, Egypt, Israel, Kuwait, United Arab Emirates, and Saudi Arabia. Their main investors are angel investors. Another platform for angel investments that is recognized worldwide with operations in Qatar is Angels Den. The Angels Den network has more than 4,500 angel investors and 92% of the companies funded through their online investment platform are still active today. Angels Den has a strong presence in the United Kingdom where it is headquartered, but it has a growing portfolio of investments in the Middle East between Qatar and the United Arab Emirates. Among the key seed funding investors in Qatar is Doha Tech Angels, which provides seed capital to Series A funding for early-stage disruptive technology startups in Qatar, the Middle East, and internationally.

Silatech is another key stakeholder of Qatar's entrepreneurial ecosystem since it is an institution that works to promote large-scale job creation, entrepreneurship, access to capital and markets, and the participation and engagement of young people in economic and social development since 2008. It does not provide capital directly to entrepreneurs, but in partnership with QDB, they created SILA, a new angel investment network designed to grow the startup sector in Qatar by opening a new avenue of investment for entrepreneurs in this country. SILA is trying to address the equity gap between the seed and early business stages that drive to growth of new or small businesses by providing support from investment funds. SILA is emphasizing assistance to enterprises

from the desired knowledge-based economy that will help Qatar to diversify its development.

As with any new business, in Qatar entrepreneurs can be funded with personal savings, family and friends' investments, and seed, angel or venture capital, and then for growth of their businesses, entrepreneurs can access other funding such as credits and factoring. Most of the previously mentioned are seed or angel investment sources available from key stakeholders in Qatar. There are some venture capital firms, including the Draper Investment Company, Dar Al Tawreeq, Wamda, and Doha Venture Capital, that led the most active funds of venture capital in the country. Draper Investment Company is a Doha-based venture capital firm specialized in seed and early-stage financing solutions. Dar Al Tawreeq specializes in customized factoring and securitization solutions for businesses in the Middle East and North Africa (MENA) to meet industry and trade requirements. Wamda focuses on accelerating entrepreneurship ecosystems throughout the MENA region with a sector-agnostic investment vehicle, focused on partnering with high growth technology or technology-enabled startups. Finally, Doha Venture Capital is a partner of choice for high-growth disruptive companies, providing capital and access to Qatar's domestic and global network while ensuring sustainable financial returns. Another venture capital firm with years of tradition in Qatar is Jaida Capital, a choice for innovators and entrepreneurs building high-growth companies. In addition, Risin Ventures incorporated in 2020 in the Qatar Financial Centre as a promising venture studio which provides startup incubation, acceleration, funding, and training programs and services working in partnership with government and corporate bodies.

Box 2 Investments and financial regulations

It is important to mention that in Qatar as in many other countries there is legislation that regulates how to receive angel or venture capital funding investments. The Qatar Financial Centre Regulatory Authority (QFCRA) oversees it and it has its own legal system based on the common law with judges from England and other common law jurisdictions, and the Qatar Financial Centre (QFC) is the commercial arm of it. The QFCRA jurisdiction is restricted to agreements between foreign investors and Qatari nationals. In Qatar, to register a business the foreign participation is limited up to 49% unless it is a business in a specific industry listed in Qatar's Foreign Investment Law of 2010 that allows full foreign-owned companies with the approval of the Qatar Ministry of Business and Trade. Many of the Middle Eastern countries like Saudi Arabia, UAE, and Bahrain are starting to remove this principle of 51% ownership from nationals. Qatar's new Foreign Investment Law (2019) aims to terminate this major restrictive principle, allowing a foreign investor to invest now in all sectors of the economy up to 100% of the share capital of a Qatar-registered company. This should boost Qatar's attractiveness as an investment destination; however, in practice there is not yet a list of specific sectors that are permitted to be wholly foreign-owned; the new law is not being fully implemented and the Ministry is rejecting applications based on the old law and its list of priority sectors. Therefore, an entrepreneur in Qatar needs legal advice and representation to negotiate investment opportunities that eventually will end up with a shareholders' agreement to set responsibilities and rights

for both sides. Despite the legal and bureaucratic constraints to obtain an investment, Qatar's entrepreneurial ecosystem is very active in terms of financial access. The government established the Qatar Investment Authority as a sovereign wealth fund of the State of Qatar which, in line with Qatar National Vision 2030 and the Qatar Financial Centre, is one of the world's leading and fastest growing onshore business and financial centers that offers 100% foreign ownership and repatriation of all profits, plus a competitive 10% corporation tax.

The Qatar Investment Authority (QIA) mission is to support the development of a competitive Qatari economy, facilitating economic diversification and developing local talent. Its portfolio is focused on equity investments in the form of real assets, real estate, credit and fixed securities, foreign currencies, and derivatives. QIA typically enters less than two deals annually with an average startup valuation of more than 1 billion dollars, usually invested in rounds together with other funds like Kleiner Perkins, General Atlantic, Fuel Capital, and others. Along with the QIA equity investments, there are two other institutions relevant in the local ecosystem: TVM Capital Healthcare Partners and the International Finance Corporation arm of the World Bank Group. TVM Capital Healthcare Partners is a globally active specialist investment company with emerging market strengths that invests in companies that transform the way healthcare is delivered to make healthcare better, more cost-effective, faster, and more accessible. Therefore, it is a fund specialized in a sector that can be suitable for business projects involving healthcare solutions. Other institutions invest in a wider range of industries. The International Finance Corporation (IFC) is an international financial institution that offers investment, advisory, and asset-management services to encourage

private-sector development in less developed countries. As the private-sector arm of the World Bank Group, IFC aims to advance economic development by investing in for-profit and commercial projects for poverty reduction and promoting development. In 2012, IFC and Qatar Development Bank launched the SME Toolkit, an online platform that will help smaller businesses improve their performance while supporting the development of firms outside of Qatar's oil and gas sector. It is an example of the Qatari government's effort to support small and medium enterprises, especially those outside of the hydrocarbon sector.

For established small and medium companies seeking financing some of the above may be an option, but traditionally there are several banks offering enterprise financing such as HSBC, Masraf Al Rayan, Doha Bank, Barwa Bank, Al Khaliji Commercial Bank, International Bank of Qatar, Qatar International Islamic Bank, Qatar National Bank, Qatar Islamic Bank, and Commercial Bank of Qatar. In total there are 18 banks in Qatar regulated by the Qatar Central Bank that grants the licenses. The sector is dominated by local banks and it has shown stability and efficiency during recent years. The biggest commercial bank in the country is the Qatar National Bank with headquarters in the capital, Doha.

One emerging phenomenon is the crowdfunding platforms that provide non-traditional venues of access to capital. In many countries crowdfunding has demonstrated exponential growth as more people can become investors with smaller amounts of money while the entrepreneurs have found a source of support to meet their capital requirements for growth. Crowdfunding platforms take advantage of social media to help generate money for startups, innovative products or services, and social causes, among others. The blockade has fostered the need to promote and consume local products and services which can be highlighted and

supported in larger scale due to crowdfunding platforms. However, the alternative of crowdfunding platforms in Qatar remains underdeveloped and unregulated. Some foreign crowdfunding companies like Kickstarter have opened their platforms to projects in Qatar, but there is not active support of this alternative way to finance business venture projects. In fact, this type of financial source is not regulated yet in Qatar and it can be considered illegal, even though crowdfunding has a proven record in many countries of helping to scale entrepreneurial projects to the next level.

Table 2 Financial sources and success stories of Qatar

Source	Institutions	Success stories (sector)
Seed funding	Doha Tech Angels, QSTP, QDB, and QBIC	Droobi (Healthcare), Meddy (Healthcare), STA (ICT), Stellic (Education), Vetosis (Veterinary), S. Ishira (Perfumes), Event Developers (Advertising), Contactless (ICT), Embrace Doha (Consultancy), Oryx Lifestyle (Manufacture), Newline for Media (Advertising), and Netfix (Real State), Classtap (Sports), Sponix (ICT).
Angel funding	Angels Den, and SILA	*
Venture Capital	Draper Investment Company, Dar Al Tawreeq, Wamda, and Doha Venture Capital	Phonedeck (ICT), C2call (ICT), Kaatizone (Food and beverages), Plista (Advertising), Inventus Power (Energy), Tradeshift (ICT).
Equity Funding	TVM Capital Healthcare, and IFC (World Bank Group)	Amecath (Healthcare), Bourn Hall International (Healthcare), Cambridge Medical & Rehabilitation Center (Healthcare), Manzil Healthcare Services (Healthcare), ProVita International Medical Center (Healthcare),

Banking	HSBC, Masraf Al Rayan, Doha Bank, Barwa Bank, Al Khaliji Commercial Bank, International Bank of Qatar, Qatar International Islamic Bank, Qatar National Bank, Qatar Islamic Bank, and Commercial Bank of Qatar	*
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Source: Made by the author with information from public websites and personal interviews. *Information not available due to privacy contracts.

Government

Entrepreneurship support from Qatar’s government is highly pursued, but the rentier state system is creating a contradiction between the economic reform and the structural logic of the economy. It means that the State is providing security and high standards for living for its people, but following an entrepreneurial career represents risking some of those benefits and status; in addition, the expatriates that are the majority in Qatar depend on the immigration law to stay and to bring the talent from abroad in many cases. From the institutional point of view, it is evident that there are many government institutions with the objective to move the economy towards a knowledge-based economy as planned in the Qatar National Vision 2030. The problem is that Qatari nationals represent less than 15% of the population while the rest are expatriates that come mostly in response to a job offer and at the same time the law establishes certain rules to open a business in which in most cases the foreigner can hold only up to 49% of shares. In fact, the entrepreneurial intentions of the adult population in Qatar declined 59% between 2016 to 2017 but are recovering in recent years in accordance with the Global Entrepreneurship Monitor Qatar report (see Fig. 5). Nevertheless, there are more than 20 government institutions focused in different

areas that contribute to building together more attractive conditions for entrepreneurs in Qatar.

Box 3 Rentier State system

The concept of the rentier state has been one of the more frequent and functional descriptions of the economic environment in the GCC region (Ennis, 2013). There are three basic characteristics of a rentier state that can affect the economic environment and entrepreneurship within a country:

1. The economy relies on external revenue from the rent of non-reproducible resources rather than its productive capacity (Mahdavy, 1970)
2. The principal recipient of the external rent is the state's government, which in turn distributes the rent to its citizens (Ben Hassen, 2020).
3. This leads to a rentier mentality among nationals: a psychological condition with profound consequences for productivity where contracts are given as an expression of gratitude rather than as a reflection of economic rationale (Beblawi, 1990).

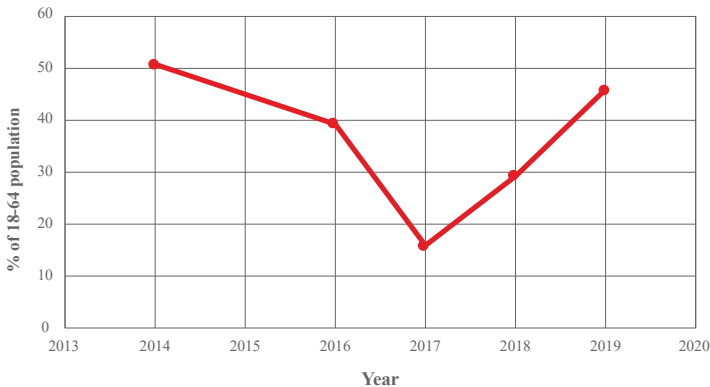


Fig. 5 Entrepreneurial intentions of adult population in Qatar (2014-2019)
Source: Global Entrepreneurship Monitor / Adults Population Survey

From the research side, the Qatar National Research Fund is a member of the Qatar Foundation as well and it fosters original, competitively selected research in engineering and technology, physical and life sciences, medicine, humanities, social sciences, and the arts. It has some research and innovation hubs to help in positioning Qatar as a global research and innovation nerve center with an ecosystem focused on developing ideas with impact. Even though the Qatar Foundation is a private not-for-profit organization, it has substantial government funding and, as has been clear on several occasions, it has an important role in many institutions, from education to science and development, that are interconnected through this foundation. One example is that the Qatar National Research Fund supports research initiatives that can come from the Qatar Science & Technology Park, both institutions are members of the Qatar Foundation. Additionally, as a research institute, the Ministry of Public Health has played a significant role in providing residents of Qatar with updated information related to the pandemic of COVID-19.

The Qatar Planning and Statistics Authority is competent in the development of the overall vision for the state, in cooperation with the concerned authorities. It is responsible for: the preparation of national development strategies; follow-up of their implementation, in coordination with the concerned authorities; preparation of studies and population policies related to such strategies; supporting the planning process in government agencies; working on linking development priorities to the state budget, and monitoring the progress of implementation of plans. It is also mandated to establish an integrated statistical system, to conduct, organize and supervise formal statistical operations, to implement various censuses and surveys, and to disseminate statistical data and products. It is relevant since it can help track the advance of the Qatar National Vision 2030. Also, the previously mentioned Qatar Science & Technology Park is part of Qatar Foundation

Research, Development, and Innovation (QF RDI), a free zone and Qatar’s hub for applied research, technology innovation, incubation, and entrepreneurship. A “free zone” in Qatar is for the establishment of wholly foreign owned companies that also have 20 years of corporate tax holidays, no individual income taxes, and no custom duties on imports; this delivers solutions for businesses while supporting Qatar’s continued growth and diversification. The Qatar Financial Center is also a free zone, and in accordance with the Qatar Free Zones Authority there is also Ras Bufontas near the Hamad Airport and Umm Alhoul adjacent to Hamad Port. One example of these free zones helping to attract FDIs is the recent announcement of an agreement signed in September 2020 by the Qatar Free Zones Authority to establish the first assembly factory for electric vehicles in Ras Bufontas, a 20 million euros joint venture of “Gaussin Advance Mobility Company” and “Al Attiya Motors and Trading Company.”

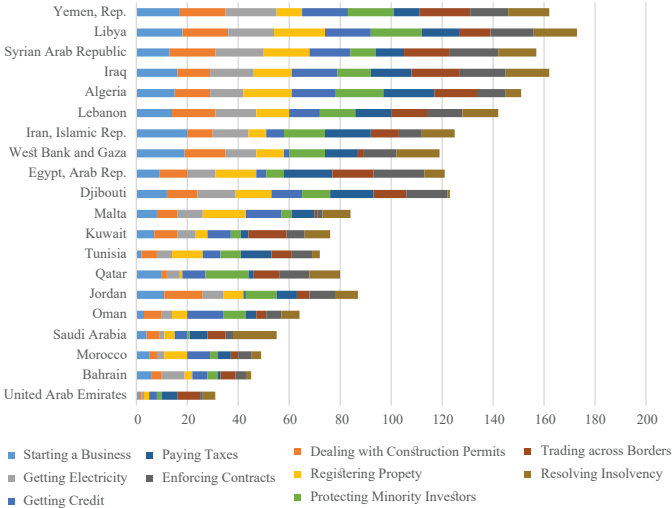


Fig. 6 Ease of doing business pillars (2019),
 Source: Made by the author with data from The World Bank library.

A key point to mention is that Qatar has the world's second easiest tax regime, which can be attractive for multinational companies and investors that come to this country. Nevertheless, the World Bank (2020) indicator of Ease of Doing Business ranks Qatar in 77th place among 190 nations this ranking means the regulatory environment is more conducive to starting and operating a local firm. Experts say that compared to other jurisdictions in the region, it is not as easy for small businesses to set up in Qatar as it is for big companies. Among the group of countries in the Middle East and North Africa (MENA) region, Qatar is placed 7th below United Arab Emirates (UAE), Bahrain, Morocco, Saudi Arabia, Oman, and Jordan. The methodology of the Ease of Doing Business ranking considers paying taxes as one of the 10 pillars in the regulatory environment (see Fig. 6) so, undeniably, the free zones are helping, but other MENA countries also have them. Recently, the UAE also permitted 100% foreign ownership of companies. In consequence, the pillars that Qatari government institutions need to emphasize are protecting minority investors, enforcing contracts, resolving insolvency, trading across borders, and starting a business. For example, the low level of the trading across borders pillar is explained by the blockade from neighboring countries but protecting minority investors can be regulated by the Qatar Financial Centre and contract enforcement can be handled by the Ministry of Business and Trade.

“There are some sectors where it is easier to start a business in terms of regulations, market opportunities, and investments. For example, anything linked to oil and gas, hospitality, real estate, or healthcare solutions is easier, yet bureaucratic, but with more benefits once approved by the local institutions.”

Government Official
Qatari National involved in FDI

Independently of which sector an entrepreneur chooses, all of them require permission from the Ministry of Business and Trade, also known as the Ministry of Commerce and Industry, since this institution is responsible for the regulation of trade and industrial activities in Qatar. Chemical and pharmaceutical sectors are among the most regulated sectors with 14 to 20 different approvals required to operate. A business with the right approval from this institution can be 100% foreign owned, otherwise the law mandates that a company established in Qatar requires that the majority of shares must be the property of a Qatari national. Someone opening a company in Qatar requires the support from the Qatar Chamber of Commerce and Industry as well, since it promotes and protects the interests of companies in the agricultural, industrial, and commercial sectors of the economy of the country providing administrative services, advice, and arbitration. Another relevant institution is the Ministry of Municipality and Environment (MME), that offers a service directly related to the public, to meet the many requirements of their daily life, and contributes through its subsidiary departments, municipalities, and centers, to the rapid development of the State of Qatar. This is in line with Qatar National Vision 2030 that aims to place the country among the developed countries, based on the pillars of human development, and economic, social, and environmental development.

Despite the different sectors, in Qatar the unemployment rate for 2019 was 0.09%, which in most of times is explained by noting that the population has a majority of expatriates that move with a prior job offer to this country. This means that finding specialized human capital can be a difficult task in Qatar, even though there are significant efforts to increase the labor force with good higher education regulated by the Ministry of Education and Higher Education, which is a government institution as well.

That is why the Qatar Foundation has supported nine international universities to establish a satellite campus in Qatar. Therefore, many business ventures require bringing in human capital as expatriates to join the work within their organization. The Ministry of Interior is the right institution to support the companies trying to bring people to work in Qatar.

“I only hire women because of respect to family traditions, but I am in the information technologies field, which is not very well developed in Qatar, so I am experiencing difficulties to find the right people and form a team. The problem is that beyond having to expatriate some people and the gender fact, the blockade is also constraining the process because for example I like how Egyptian people work in digital marketing and media, but I cannot bring them to Doha.”

Government Official and CEO of a startup
Female Qatari National

In some sectors, there are specialized institutions that support economic activities like the Qatar Tourism Authority, a government branch responsible for the formulation and administration of the rules, regulations, and laws relating to the development and promotion of tourism in Qatar. The Ministry of Transport and Telecommunications plays a significant role in transport and information technologies to build a knowledge-based economy that reflects the Qatar National Vision 2030. This Ministry organizes the land and maritime businesses, develops and improves transport services, and fosters a competitive environment that is conducive to investments, among other things. The work of the Ministry of Energy and Industry is focused on two main areas: utilizing Qatar’s energy resources and diversifying sources of income by widening the country’s industrial base. The Qatar Financial Center Authority is responsible for leading the expansion of Qatar’s financial services sector and for developing relationships

with the regional and global financial community. In the financial sector there are other government institutions collaborating to create a vibrant ecosystem including: Qatar Exchange Venture Market, Qatar Stock Exchange, Qatar Financial Markets Authority, and Qatar Central Bank.

In terms of foreign policy, the Supreme Council for Economic Affairs & Investment specializes in all matters relating to the economy, energy, investment of the state’s reserves, the development of public policies in the fields of economy, finance, and commerce. Companies that plan to import or export from Qatar need to contact the General Authority of Customs since it is the government authority responsible for monitoring importation and exportation of goods in and out of the State in accordance with the governing legislation in this regard.

Support organizations

Incubators / Accelerators	Associations	Consulting firms
<ul style="list-style-type: none"> • QU business incubator • QBIC • Digital Incubation Center • Qatar Sports Tech • QSTP • Center of Entrepreneurship Qatar FinTech Hub • Bedaya Center for Entrepreneurship and Career Development • Enterprise Qatar • Oasis500 • Flat6Labs • Risin Ventures 	<ul style="list-style-type: none"> • Entrepreneur’s Organization Qatar • Global Entrepreneurship Week Network • Qatari Businessmen Association • Qatari Businesswomen Association • Qatar Chamber of Commerce & Industry 	<ul style="list-style-type: none"> • Deloitte • PwC • EY • KPMG • Other SME’s (by areas of specialization e.g. business law, foreign trade, real estate, etc.)

Fig. 7 Support organizations operating in Qatar
Source: Made by the author with public data.

The support organizations in Qatar include incubators and/or accelerators, associations, and consulting firms (see Fig.7). These types of institutions provide guidance and expertise to the entrepreneurs on their journey to scale their business ventures. In Qatar you can find offices of the Big 4 consultancy firms: Deloitte, PwC, Ernst & Young, and KPMG. The Big 4 are the most important consultancy and auditory firms worldwide. Of course, there are local specialized consultancy firms like business law consultancies to help foreign entrepreneurs set up their business in Qatar. Regarding associations in Qatar there are at least five that can be relevant for entrepreneurs: Entrepreneur's Organization Qatar, Global Entrepreneurship Week Network, Qatari Businessmen Association, Qatari Businesswomen Association, and Qatar Chamber of Commerce & Industry. To be a member of the Entrepreneur's Organization you need to be the owner, founder, or majority stakeholder of a business earning a minimum of US\$ 1 million in revenue during the most recent fiscal year, so it is a very influential community of entrepreneurs. Global Entrepreneurship Week is a collection of tens of thousands of activities, competitions, and events in more than 170 countries each November aimed at making it easier for anyone, anywhere, to start and scale up a company. Qatar participates in the Global Entrepreneurship Week thanks to the sponsor, the Qatar Development Bank; GEW aims to inspire millions each year to explore their potential while fostering connections and increasing collaboration within their ecosystems to empower entrepreneurs and strengthen communities. The Businessmen and Businesswomen associations are two institutions that strengthen business growth through leadership, prosperity, information, communication, and governmental and community involvement serving as a strong catalyst that offers a solid foundation for the economic development of Qatar's private sector. The Qatar

Chamber of Commerce & Industry is an association whose main role is to organize business interests and represent the Qatari private sector locally and globally, as well as support the country's economic actors and productivity.

Finally, some business incubators offer seed funding to accepted projects. In addition to the previously mentioned Qatar Business Incubation Center, the Center for Entrepreneurship, and the Qatar Science & Technology Park, there are six other institutions relevant in the local entrepreneurial ecosystem. First, the Bedaya Center for Entrepreneurship and Career Development is a joint initiative between Silatech and Qatar Development Bank that provides youth with access to a wide range of services including career guidance, self-assessment, employability skills, development in employability and entrepreneurship, mentoring opportunities, volunteering, practical training, networking activities, and lecturers' programs. Second, the Digital Incubation Center was created to boost ICT innovation in Qatar, particularly among young people at the critical early stages of starting or growing a technology-related business. It has incubated more than 140 startups by entrepreneurs capable of harnessing emerging technologies to create innovative products, solutions, or services that will contribute to Qatar's digital economy. Third, Enterprise Qatar enables entrepreneurs and small and medium enterprises (SMEs) to achieve greater success by developing a positive ecosystem for startups and SMEs. It aims to create a healthy business-entrepreneurial ecosystem in Qatar; build bridges to Silicon Valley through mentorship, education, and financing, and accelerate the progress of thousands of local and regional entrepreneurs, transforming Qatar into a regional hub for technology entrepreneurial ventures.

Fourth, Oasis500, an accelerator that invests in tech and creative industries, is one of the first startup accelerators in the MENA region. Fifth, Flat6Labs is a regional startup accelerator program that fosters and invests in bright and passionate entrepreneurs with cutting-edge ideas. It provides seed funding, strategic mentorship, a creative workspace, a multitude of perks, and entrepreneurship-focused business training, and directly supports Qatar's startups through an expansive network of partner entities, mentors, and investors. Finally, the QDB is also founding partner of the Qatar Sports Tech, an accelerator of the sports industry whose companies have received 1.5 million USD in committed seed funding; it is transforming Doha into one of the leading sports hubs. In the second half of 2020, the QDB, in collaboration with EY, launched its incubator and accelerator program focused on financial technology (FinTech) startups and called the Qatar FinTech Hub (QFTH); it received more than 750 applications from over 72 countries. During the QFTH first presentation on a Demo Day on early 2021, 23 startup FinTechs sought seed funding and series A investments. In the fourth quarter of 2020, Risin Ventures appeared as a QFC-authorized incubator and accelerator platform for the startup community in Qatar, working towards making a significant impact in the Middle East's entrepreneurial ecosystem.

Box 4 Case study of Meddy

Company website: meddy.com

Foundation year: 2016

Founder: Haris Aghadi

Studies: Bachelor's in Information Systems from Carnegie Mellon University

Main support organization: Qatar Science & Technology Park

Description:

A one-stop online platform for users to search for doctors, submit and view recommendations, and book appointments. Currently more than 200,000 monthly users operating in Qatar and the UAE. Meddy is also a 500 Startups portfolio company. It was ranked 10th in the Forbes Middle East's 2017 "50 Startups to Watch in the Arab World." Meddy was also named 2016 Tech Startup of the Year; Startup of the Year at the 2016 Qatar Enterprise Agility Awards, and ICT Exporter of the Year at the 2018 Qatar IT Business Awards.

Box 5 Case study of Snoonu

Company website: snoonu.com

Foundation year: 2018

Founder: Hamad Mubark Al-Hajri

Studies: Executive MBA from HEC Paris in Qatar

Main support organization: Qatar Development Bank

Description:

Snoonu is the fastest growing tech company in Qatar with user-friendly Mobile and Web apps, providing a variety of restaurants, shops, and services with outstanding customer care and the fastest delivery. The app currently combines more than 3,000 partners and merchants, operating all over the country. With more than 100K monthly active users, Snoonu has become one of the major sales and marketing vehicles for the SMEs in Qatar.

Box 6 Case study of Alazizya Chemicals Factory (ACF Group)

Company website: acf.qa/

Foundation year: 2017

Founder: Saad Al-Matwi

Studies: Bachelor's in Business Administration from Carnegie Mellon University

Main support organization: Qatar Development Bank

Description:

ACF group has done immense research developing Construction Chemicals for the Construction Industry to cater to all types of construction needs of Qatar. ACF is an ISO 9001:2015; ISO 14001:2015 & OHSAS 18001:2007 accredited firm and is considered one of the leading business groups in the State of Qatar. ACF's contributions are recognized by major developments and expanding business sectors of the country.

Entrepreneurship competitions and sponsors

Participating in fairs, events, and competitions in which social interaction is possible is one of the most relevant practices aiming to acquire knowledge and, more importantly, to create a network of partners that can translate that knowledge. For that reason, some of the most relevant entrepreneurship competitions are repeated each year with improvements, and from them have emerged startups that are contributing to the economic development and some even disrupting markets; most of the competitions are sponsored by bigger companies or government in some cases. In Qatar for example, the consultancy firm EY sponsors the Ernst & Young's Entrepreneur of the Year Award, a unique global program

that supports entrepreneurs as they unlock their ambitions by recognizing entrepreneurial achievement among individuals and companies that demonstrate vision, leadership, and success. Some of the companies sponsoring entrepreneurship competitions are Qatar Air, Qtel, Qatar Gas, Qatar Petroleum, RasGas, Virgin, Intel, Visa, Google, Barwa, Jaidah, Katara, Vodafon, Exxon Mobile, Cisco, Shell, and iHorizons. Of course, these companies have a hidden interest in sponsoring competitions, which has to do with finding new solutions for their industries.

The Qatar Foundation in partnership with the Qatar Science & Technology Park offers the Arab Innovation Academy, a program considered the world's largest entrepreneurship program that teaches in 10 days how to turn an idea into a startup; they have helped to create 40 new startups. The QBIC has different programs in addition to incubation, such as the QBIC's Mix & Match program to connect aspiring entrepreneurs with potential partners, the QBIC's Lean Manufacturing program to develop and build the capacity of startups that are aiming to manufacture products and goods in Qatar, and the QBIC's Lean Fashion to create Qatar's next iconic fashion brand.

Some universities and education centers have themselves created entrepreneurship support initiatives in the forms of competitions, workshops, and training programs. Carnegie Mellon University Qatar hosts a competition, called Quick Startup, that is open to students from all universities in Qatar. Quick Startup is a training program for budding entrepreneurs that will be mentored by seasoned professionals. Students begin the program with nothing more than a concept and end with a business plan and investor pitch. The pitches are evaluated by a panel of judges who award prizes for the 1st, 2nd, and 3rd place ideas. The College of

the North Atlantic Qatar has the Business Gateway Competition, in which, to gain access to the pre-incubation hub, potential participants need to complete a draft business plan and successfully present their business case to a selection panel. The prospective entrepreneurs also need to justify the market potential for their proposed business idea and produce samples of the product or service to be offered. The Qatar Finance and Business Academy has the initiative Azm, which includes several remote training programs and activities. The HBKU's Innovation Center provides multifaceted educational and training opportunities for QF students and staff through seminars, workshops, boot camps, and more.

Part 3: Ecosystem dynamics

This chapter provides an overview of the entrepreneurial ecosystem dynamics in terms of human capital, investments, companies, and industries leading Qatar’s economic activities. It presents data analytics and economic analysis of key indicators related to monitoring of entrepreneurship support mechanisms following the Ecosystem Lifecycle Model (see Box 7). The evidence shows that Qatar has characteristics and challenges typical of an ecosystem in the activation phase. The chapter also highlights the importance of measuring impactful entrepreneurship initiatives in both public and private sectors.

Specifically, for Qatar’s entrepreneurial ecosystem, entrepreneurs and key stakeholders are starting to catch up on how to attract resources and learning the know-how to scale different businesses models, such as the latest global opportunities. The ecosystem performance in Qatar is limited by gaps in resources such as startups, talent, capital, and investors from top ecosystems. Although the evidence is not conclusive and supported with enough data specific to measure the ecosystem performance, some other key indicators and in-depth interviews with experts explain the success factor gaps. Additionally, the Qatari government is allocating time and effort to achieve the Qatar National Vision 2030, which is essentially to foster investment in world-class infrastructure, build efficient delivery mechanisms for public services, create a highly skilled and productive labor force, and of course, support the development of entrepreneurship and innovation capabilities. Therefore, the QNV 2030, compared with the Ecosystem Lifecycle Model, prioritizes the development of funding, talent, market reach, startup experience, and policies that would improve Qatar’s entrepreneurial ecosystem and move it forward to the next phases.

For more information, see Ecosystem Lifecycle Analysis at <https://startupgenome.com/article/ecosystem-lifecycles#:~:text=The%20Ecosystem%20Lifecycle%20Model%20is,issues%20at%20the%20right%20time>.

Box 7 Ecosystem Lifecycle Model

The Ecosystem Lifecycle Model is an objective model that helps governments measure their ecosystem, prioritize its gaps, and define focused action plans that maximize impact rather than disperse their limited resources. The model emphasizes the development of ecosystems through four phases: activation, globalization, attraction, and integration. Each phase has a different set of characteristics, challenges, and objectives.

Activation	Globalization	Attraction	Integration
<ul style="list-style-type: none"> • Limited startup experience. • Low startup output (1,000 or fewer startups). 	<ul style="list-style-type: none"> • Output of 800 to 1,200 startups (depending on population). • Series of exits trigger national (or regional) resource attraction (startups, entrepreneurs, talent, investors). 	<ul style="list-style-type: none"> • Usually more than 2,000 startups (depending on population). • Usually, unicorns and exits above \$1billion. • Billion-dollar triggers produce global resource attraction • Very few success factor gaps remain. 	<ul style="list-style-type: none"> • More than 3,000 startups. • Global resource attraction produces a high and self-sustainable degree of global connectedness and flow of knowledge into the ecosystem.
<p>Activate entrepreneurial-minded people and grow a more connected local community that helps each other. Pick one or two startup subsectors (e.g. FinTech, or AgriTech) that build on local economic strengths and develop focused programs to accelerate ecosystem growth and develop pockets of success leading to sizable exits.</p>	<p>Focus on increasing global connectedness with founders of top ecosystems, the success factor that defines an ecosystem's scale-up potential and supporting startups to increase their early global market reach, which realizes an ecosystem's scale-up potential.</p>	<p>Use global resource attraction to significantly expand the size of the ecosystem and fill remaining gaps, removing barriers to immigration, and directing attraction through well-designed policies programs.</p>	<p>Integrate the ecosystem within the global, national, and local flows of resources and knowledge inside and outside of the startup ecosystem, optimizing laws and policies to sustain its competitiveness and growth, and spreading its benefits (e.g. culture, source of competitiveness, capital, innovation) to other sectors of the economy and parts of the nation.</p>

Employment and motivations

In cooperation between QDB and the Ministry of Administrative Development, Labor and Social Affairs, the Entrepreneurship Leave Program (ELP) program gives Qatari entrepreneurs a career break, on condition of devoting their full time to develop their businesses according to the agreed plan with QDB. This is a unique program that gives Qatari residents an advantage over non-Qatari since it reduces the perceived risk of quitting a stable job with a fixed income and benefits. Therefore, the proportion of Qatari population that are employers or business owners should be higher than the same proportion among the non-Qatari population.

During 2019, the Planning and Statistics Authority registered 7,048 employers, of which 4,064 were Qatari people and 2,984 non-Qatari (see Fig. 8). The number of Qatari employers is notably higher, but the total non-Qatari population is 10 times bigger than the Qatari population, and thus the ratio of employers to total population is 0.15% for non-Qatari and 3.8% for Qatari. It means that the ecosystem conditions of Qatar are not as attractive for non-Qatari residents as they are for Qataris to become entrepreneurs, which can be explained by the legal framework (restrictive immigration policies and ease of doing business) and/or by the market reach (ability to access early customers in an ecosystem's local and culturally similar markets). In addition, foreigners can come to reside in Qatar only if they have a job offer, so only 8% of the non-Qatari population above 15 years old is economically inactive (see Fig. 9). The Qatari economically inactive population is 48%, and Qataris occupy government or management positions (11%) or are professionals (31%), making it difficult to have talented people becoming entrepreneurs. About 95% of the economically inactive

non-Qatari population are housewives (56%) or students (39%) while the Qatari economically inactive population are mostly students (46%) and housewives (30%) (see Fig. 10). More than half of the economically active non-Qatari population (70%) are either craft workers (35%), plant/machine operators and assemblers (15%), in elementary occupations (20%). The expatriate workers in Qatar constituted on average about 95.5% of the total workforce during 2014 – 2019.

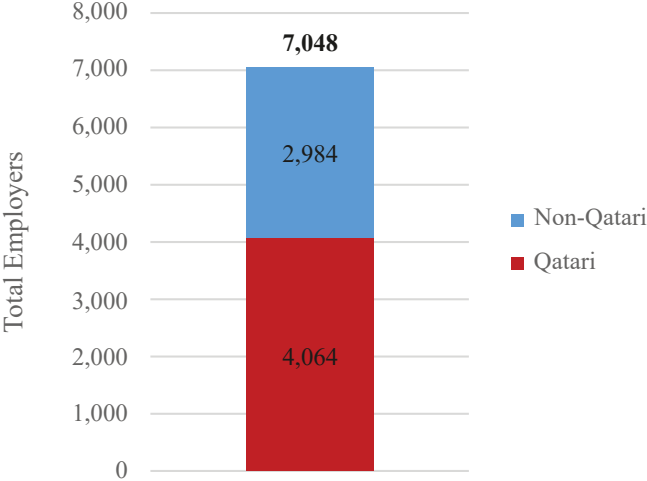


Fig. 8 Economically active population by nationality and employment status (2019), Source: Made by the author with data from Planning and Statistics Authority

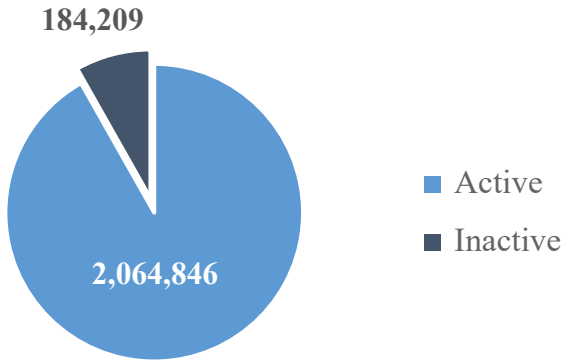


Fig. 9 Economically active/inactive non-Qatari population (2020)
 Source: Made by the author with data from Planning and Statistics Authority

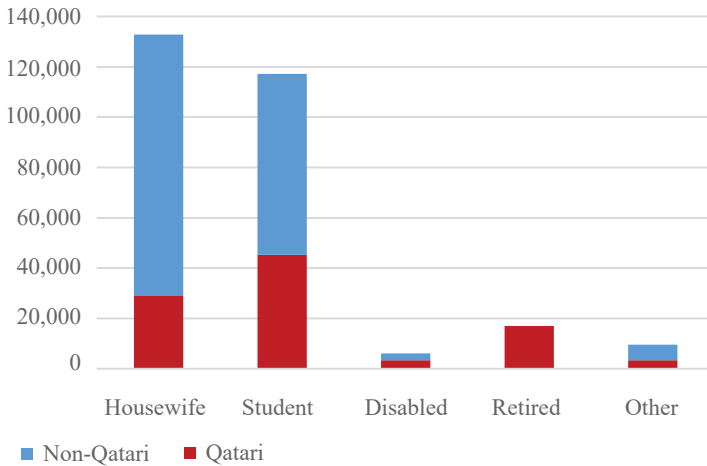


Fig. 10 Economically inactive Qatari and non-Qatari population by reason (2019), Source: Made by the author with data from Planning and Statistics Authority

In terms of motivations, the Qatari residents prefer to work in the public sector rather than in the private sector, mainly because of perceived low wages, additional hours of work, and the social status of the private sector (see Fig. 11). Somehow, there is a success factor gap because the segment of the population (Qatari) that has better opportunities and should be more entrepreneurial is not doing it as much as it could, and the other segment (non-Qatari) faces greater challenges to become entrepreneurs. In accordance to individual data collected by the Global Entrepreneurship Monitor, Qatar leads among the participating MENA countries in the percentage of 18-64 population who agree with the statement that in their country, successful entrepreneurs receive high status, and ranks second for where most people consider starting a business as a desirable career choice; both indicators are also higher than in the United States, where Silicon Valley is located and ranked first in startup ecosystems, and above Israel, the sixth startup ecosystem (see Fig. 12).

Qatari unemployed with secondary education
(15 years & above)

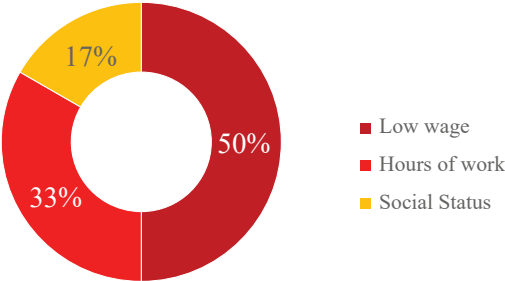


Fig. 11 Reasons for not being willing to work in private sector of Qatari unemployed (2020),Source: Made by the author with data from Planning and Statistics Authority

Qatar has the biggest percentage of 18-64 population who see good opportunities to start a firm among the MENA countries and USA, and is the second after Saudi Arabia in percentage of population who believe they have the required skills and knowledge to start a business (see Fig. 13). The constraint is on the percentage of the 18-64 population who agree that they see good opportunities but would not start a business because of fear of failure. Qatar has a fear of failure rate that is below the average among the MENA countries, above its closest neighbors (UAE, Saudi Arabia, and Oman) and above the global average; the fear of failure increased 38.5% from 2018 to 2019. Regarding perceived opportunities, Qatar has the highest rate among MENA countries and even compared to USA, and its perceived capabilities are below only Saudi Arabia. Qatari policies should aim to reduce this fear of failure rate and it may increase entrepreneurial activities.

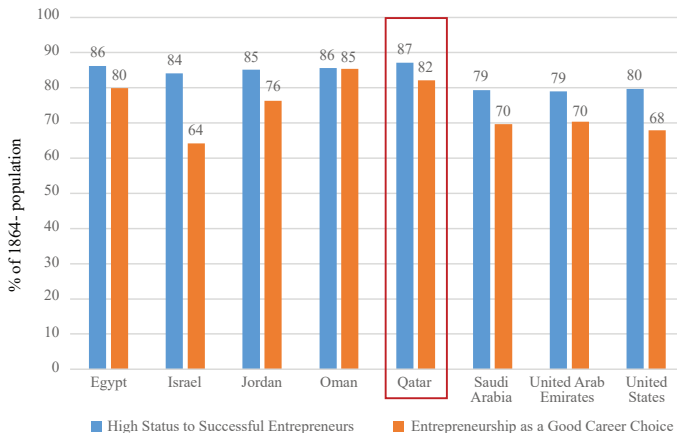


Fig. 12 Entrepreneurial attitudes of individuals starting businesses by MENA countries (2019), Source: Made by the author with data from Adult Population Survey from GEM publicly available

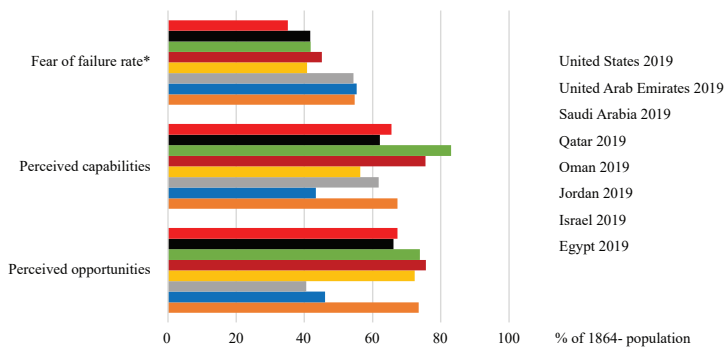


Fig. 13 Entrepreneurial behavior of individuals starting businesses by MENA countries (2019), Source: Made by the author with data from Adult Population Survey from GEM publicly available

Graduates profile

A deeper analysis of the ecosystem data and interviews with experts in Qatar helps to clarify whether the country is producing enough talent to match the business opportunities. One way to measure talent output is the number of graduates from universities. In Part 2, this study describes the key stakeholders in terms of education, identifying two public universities (Qatar University and Community College), and the most relevant private universities, some of them brought to Qatar by the Qatar Foundation following the QNV 2030. In the last five years, the number of private universities increased while the public universities remained unchanged. However, the number of students enrolled in public universities between 2013 and 2018 grew 42.3%, while enrollment at private universities grew only 25% (see Fig. 14).

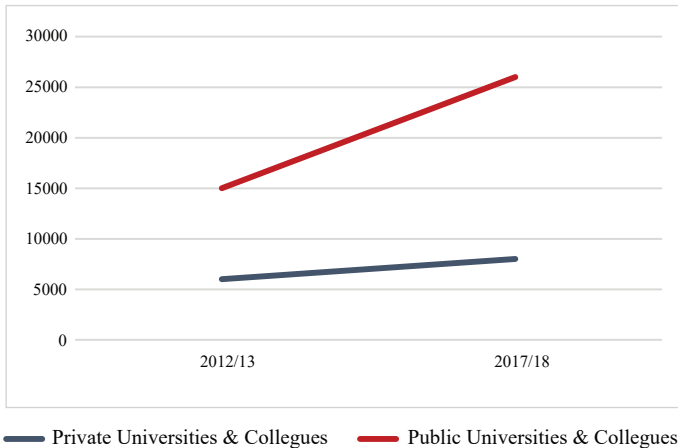


Fig. 14 Number of students enrolled in universities by sector (2012/2013– 2017/2018), Source: Made by the author with data from Planning and Statistics Authority

In addition to the student enrollment in universities, it is relevant to know which universities are fostering better entrepreneurial intentions among their students and/or preparing the technical talent needed for the emerging companies in the country. To date, there is not available information about entrepreneurial intentions among university communities, but the Global University Entrepreneurial Spirit Students’ Survey (GUESSS) promises to collect information in its next edition sponsored by HEC Paris in Qatar, a member of Qatar Foundation. On the other hand, the registers of the number of university graduates show an increase during the last five years of 60.2% with almost three-quarters coming from public universities (70%). Among these graduates from public universities, the majority are from the Faculty of Science & Art (27%) and the minority from the Faculty of Pharmacy (1%) (see Fig. 15). For the remaining 30% of graduates from private universities there is not available disaggregated data, but we know that 50% of them were from

universities and colleges of the Qatar Foundation, followed by the College of the North Atlantic with 31% and the remaining 19% are from the remaining universities and colleges (see Fig. 16).

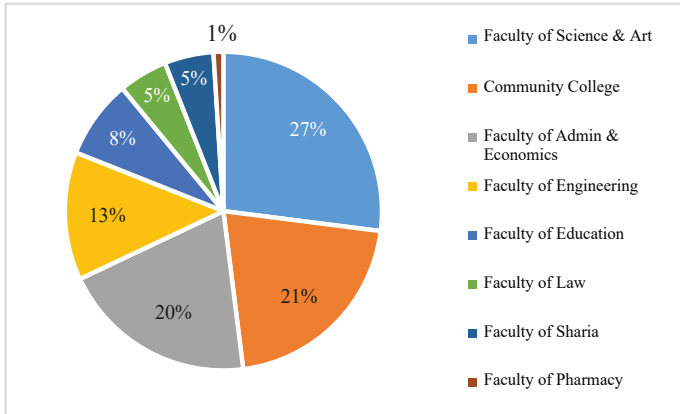


Fig. 15 Percentage distribution of graduates from public universities by college (2017/2018), Source: Made by the author with data from Planning and Statistics Authority

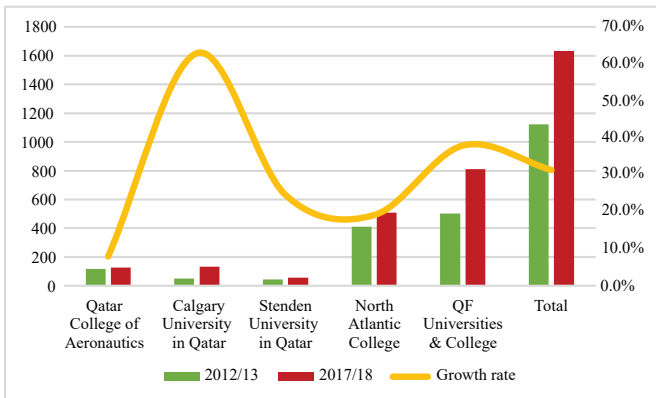


Fig. 16 Number of graduates from private universities by college (2012/2013 - 2017/2018), Source: Made by the author with data from Planning and Statistics Authority

Average salaries by industry

Education is relevant because it is linked with higher salary opportunities, at least when the person is an employee. Some key aspects such as education level, economic activity, and years of experience affect those salaries. For entrepreneurs, salary levels have effect in two ways: first, directly on its motivations because pursuing an entrepreneurial career requires sacrifices in the short and medium terms, sometimes quitting the opportunity to receive a fixed monthly salary or receiving less than the average is part of the journey, and second, in the development of the business plan to calculate an investment quotation and make the decision to start the business or not. Each industry requires different technical talent and human resources to develop its economic activities and consequently an analysis of the average gross monthly salaries is relevant to have an accurate calculation of the required working capital to reach the breakeven point before running out of social capital.

The average salaries in Qatar range from 2,044 QAR (minimum wage is 1,000 QAR) to 17,935 QAR (highest average, actual maximum salary is higher) including housing, transport, and other benefits. The salaries can vary drastically among economic activities (see Table 3). The highest identified salary is in legal and accounting services while the lowest is in security and investigation services. In the factory and manufacturing sector the average gross monthly salary is highest for director/management levels like director of manufacturing or production manager. By following these salary ranges you can identify that a manufacturing business will require more social capital than a business service for example. Also, in Qatar, men earn 5% more than women on average across all career fields. Hence, it can affect the total early-stage entrepreneurial activity rate for men and women. In

accordance with GEM data in 2019, the female 18-64 percentage of the population who are either a nascent entrepreneur or owner manager of a new business, divided by the equivalent percentage of their male counterparts, has been increasing in the last five years and it is now twice what it was in 2014.

In addition, the education industry reports the highest annual increase in salaries (8%) followed by travel (7%) and information technology (6%), while energy reports the lowest increase (1%) (see Fig. 17). It is interesting considering that the inflation rate was negative (-0.67%) in 2019 and it follows a decreasing trend since 2016. It means that the internal consumption is being stimulated, contributing to the market reach.

Table 3 Average gross monthly salaries by economic activity (Value QAR.)

Economic activity	Gross monthly salary
Economic activity Factory and Manufacturing	10,700
Production Engineer	14,100
Motion picture, video, and television programme production, sound recording and music publishing	6,514
Computer programming, consultancy, and related activities	12,150
Financial service activities, except insurance and pension funding	11,237
Activities auxiliary to financial service and insurance activities	9,595
Real estate activities	11,239
Legal and accounting activities	17,935
Activities of head offices; management consultancy activities	16,845
Architectural and engineering activities; technical testing and analysis	15,316

Advertising and market research	7,911
Other professional, scientific, and technical activities	4,298
Veterinary activities	5,426
Pharmaceutical activities	5,978
Rental and leasing activities	4,417
Employment activities	3,009
Travel agency, tour operator, reservation service and related activities	5,823
Security and investigation activities	2,044
Services to buildings and landscape activities	2,644
Office administrative, office support and other business support activities	4,540

Source: Made by the author with data from Planning and Statistics Authority (2019)

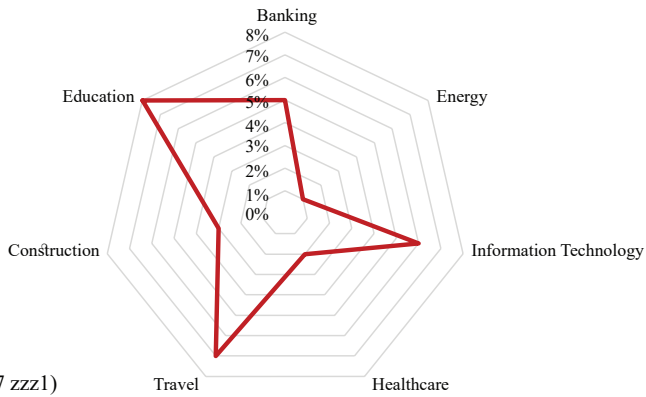


Fig. 17 zzz1)

Fig. 17 Annual salary increment rate by industry (2020)

Source: Made by the author with data from Planning and Statistics Authority and Salary Explorer

Main startups

Among the top 11 most relevant startups operating in Qatar (see Table 4), the majority are based on digital and information technologies. QBIC has been identified as a common supporter of three of them (Q-Cab, eGrab, and Saman). Nevertheless, QSTP and other key stakeholder institutions can be related to many of them, but the information available is not sufficient for the listed startups. The most accurate measure of startups' development is the funding rounds they have had; nevertheless, most of the investment tickets remain classified and we know that the Venture Capital ecosystem is just starting to activate as well, as stated in Chapter 2.

Table 4 Top 11 startups operating in Qatar

Startup	Description	Awards/Grants
Q-Cab	Q-Cab is a mobile application that allows its users to search for and book karwas driving around their area. The app works like Uber.	100,000 QAR by QBIC
Urban Point	Urban Point is a growing mobile marketplace that connects trendy consumers with quality businesses in Doha by promoting valuable offers.	Digital Startup of the Year 2019 by Qatar's Ministry of Transport and Communications. Qatari startup of the year 2018 by Al Jazeera Entrepreneur. Top MENA startup 2017 by WEF.
eGrab	eGrab is the right mobile app for users who love to do grocery shopping in the comfort of their homes.	Funded by QBIC
MaktApp	MaktApp is a SaaS startup that offers a Cloud Business Administration Software for office management.	Cloud Service Provider of the Year 2018 by Ministry of Transport and Communications

Meddy	Meddy is a startup platform that helps users in Qatar to find the best doctors in Qatar.	Tech Startup of the Year 2016 and ICT Exporter of the Year 2018 by Qatar IT Business awards.
Doha Delivery	Doha Delivery is a one-stop-shop for locating restaurants and delivery menus in Doha.	*Information not available.
Fi Technologies	Fi Technologies is a unique Wi-Fi advertising platform that provides free Wifi Hotspot networks for coffee shops, parks, and clinics, etc.	SME Excellence List 2016 by QDB. Reyada Silver Award 2017.
Snoonu	Snoonu is the fastest delivery application in Qatar offering on-line shopping and food ordering services.	Most resilient project in Qatar 2020 by QDB.
Samam	Samam is a smart safety (IoT) and natural gas shut-off system that detects and reacts immediately through an app.	Funded by QBIC and QSTP
Airlift	Airlift provides automated delivery services powered by its own intelligent control software and hardware to disrupt the on-demand logistics market.	Smart Logistics Solution of the Year 2018 by Qatar IT Business Awards.
Airlift Bonocle	Bonocle is the next-gen assistive technology device for the visually impaired, the aim is to co-exist with the visually impaired in classrooms and workplaces while enjoying similar, if not identical, access to digital content.	World Summit Award 2020 "Inclusion & Empowerment"

Source: Made by the author with data gathered from the news.

Main industries/sectors

“Tourism, real estate, agriculture and hydrocarbon-related businesses are among the most attractive sectors in Qatar. Investors see lower risk in these sectors which are more traditional.”

Entrepreneur and angel investor

Qatari resident, 48 years

The share of Qatar’s GDP has been shifting, construction contributed 2.1% in 2016 and then in 2019 it contributed -0.2%, while services has been growing from 0.7% to 1.2% in the last year. Nevertheless, the most relevant sector in Qatar is the hydrocarbon sector but its contribution has been declining every year (see Fig. 18). These contribution transformations are due to the transitions that the State of Qatar went through to implement the QNV 2030, in terms of a broad urban development movement in infrastructure, with both public and private investments, which promoted and stimulated the activities of the construction sector. Also, the FIFA World Cup 2022 has played a major role in these results.

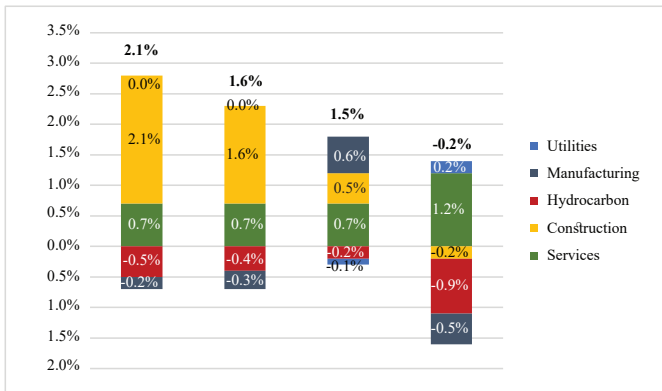


Fig. 18 Contributions of the GDP’s sectors to its growth (2016-2019)

Source: Made by the author with data from Planning and Statistics Authority

When Qatar’s blockade started in late 2017, the country was immersed in a crisis to satisfy the domestic demand of basic goods, and soon it had to invest in local production of food, utilities, and services, among others. The government is aware that the oil and gas reserves will be exhausted in some years and they need to take advantage now of the wealth created to transform the economy to a knowledge-based economy. The conjunction of both situations, blockade plus oil and gas dependency, reinforced the nationalism and collaboration among residents. The country is now self-sustainable thanks to the investments in priority sectors and the emergence of local entrepreneurs that saw the opportunity and took advantage of it. Now that the end of the blockade has been announced, the State of Qatar is more competitive and local entrepreneurs can benefit from its internationalization. Manufacturing and services will grow in the coming years, while construction will decline after the FIFA World Cup 2022.

Number of companies by size and sector

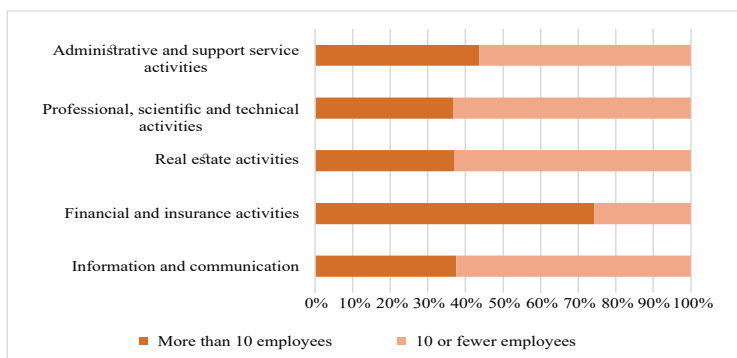


Fig. 19 Distribution of establishments by size and main economic activity (2019), Source: Made by the author with data from Planning and Statistics Authority

In Qatar there are more than 15,000 registered firms across different sectors, about 35% are in the business services (5,113 establishments), and 40.9% are firms with more than 10 employees. Within the business services, the administrative and support activities represent the majority (65.5%). The financial and insurance activities have the biggest share of firms with more than 10 employees (74.3%) (see Fig. 19). Considering that startups are created with an average of three founders, the financial and insurance activities show an opportunity for entrepreneurs. The FinTech sector is an emerging market that some countries in the region are exploiting with emerging startups. For example, Bahrain has within a short period of time established itself as an innovative Fintech hub, building on its track record as a financial centre, and adopting enabling regulations. Bahrain ranks first in the MENA region and second globally in terms of Islamic finance regulation, according to the Global Islamic Report. QDB's Qatar FinTech Hub created in 2020 aims to develop the Fintech industry in Qatar, in accordance with the Qatar National Fintech Strategy created by Qatar Central Bank (QCB), and to contribute and reiterate Qatar's position as a leading international FinTech hub in the region, as outlined in Qatar's National Vision 2030.

Foreign direct investment

The outflows of investors residing in Qatar to obtain foreign investment assets abroad during the period 2017-2019 are higher than the inflows from non-resident investors abroad to acquire domestic assets in national companies in Qatar; the net foreign direct investment account has achieved a deficit during the same period as shown in Fig. 20. It is explained because of the regulation of the investment of non-Qatari capital in the economic y, i.e., the 13th law of 2000. This law establishes that foreign

investors can only invest in certain cases and in most cases, they must have a Qatari partner that holds at least 51% of the shares of the firm. The ownership rule is changing for some priority sectors with the creation of free zones supported by the Ministry of Commerce and Industry and Qatar’s new Foreign Investment Law (2019). The priority sectors represent opportunities, especially for non-Qatari residents, because it is easier to invest and create companies. Among the priority sectors are:

- Consultancy
- Technical Services
- Information Technologies
- Cultural, Sports and Leisure services
- Logistic Services
- Agriculture
- Manufacture
- Health
- Tourism
- Natural Resources Development
- Mining and Energy

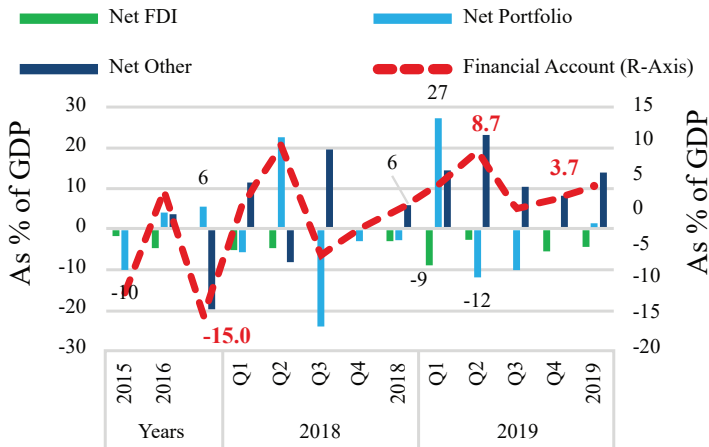


Fig. 20 Performance of the financial account (2015-2019)
Source: Made by Planning and Statistics Authority with QCB data

Exports and imports

The State of Qatar is fighting to end the dependency of the economy on hydrocarbons, so it's trying to move towards a knowledge-based economy and the QNV 2030 is part of the strategy to make it happen. Nevertheless, as shown in Fig. 21, hydrocarbon goods represent the most important exports of Qatar (up to 86%) followed by chemical substances at approximately 8%, and manufactured goods, machinery, and others at about 6%. The most important imported goods are machinery at 40%, followed by chemical and hydrocarbon products at 16%, manufactured goods at 14%, food commodities at 14%, and the remaining groups at about 19%.

Qatar's most important trading partner is the USA with 19% of the total, followed by China with 12%, then Germany, UK, India, Turkey, and Oman with a total of 27%. The rest varies among European countries (17%), Latin American countries (13%), and Asian countries (12%). For Qatar's export destinations, Japan and South Korea were the biggest in 2019 with 35% of the total exports, followed by India and China with 25%, and then Singapore with 8% and European countries with 10%, with the remaining 23% being distributed among nearby trading partners including GCC countries and the rest of the Arab countries. Nevertheless, now that the blockade is coming an end, it is expected that Qatar's foreign trade will increase to a bigger positive balance because it exports more than it imports goods. In 2020, the exports were more than twice as big as the imports and represented one third of the country's outflow benefiting its economy.

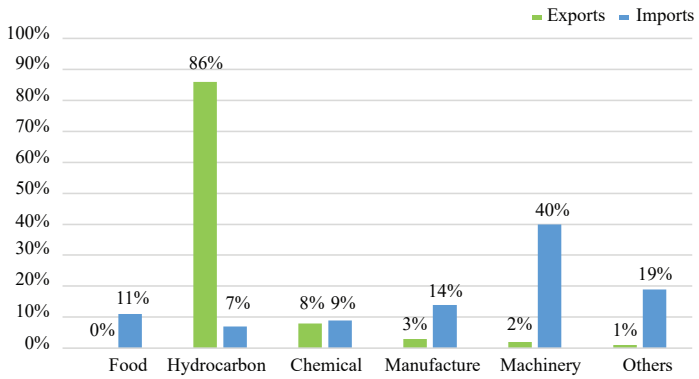


Fig. 21 Foreign trade by commodity group (2019)

Source: Made by the author with data from Planning and Statistics Authority

Part 4: Barriers to entrepreneurship

Experts' perspectives

Every year the Global Entrepreneurship Monitor (GEM) consortium gathers data through two questionnaires and local teams of researchers by country. As mentioned in Chapter 2, in Qatar the QDB is the leading sponsor and is responsible for it. One of these surveys is the National Experts' Survey (NES) that measures the Entrepreneurial Framework Conditions (EFCs) through the perspective of 36 stakeholders of the ecosystem every year. For years, the EFCs have been quantitative measures associated with the conditions or factors of the entrepreneurial ecosystems around the world and since the survey follows a strict methodology, it allows comparisons between countries and across time. **Table 5** presents a comparison between the 12 EFCs of Qatar and the USA in 2019, and Table 6 presents the evolution of the EFCs in Qatar from 2016 to 2019. The values correspond to the average responses of the 36 experts consulted each year for each dimension and is based on 9-point Likert scales, 9 being the highest value.

Table 5 Entrepreneurial framework conditions for Qatar and the USA in 2019

Entrepreneurial Framework Condition	Qatar	USA	Differences
Financing for entrepreneurs	3.2	3.5	-0.3
Governmental support and policies	3.5	2.8	0.7
Taxes and bureaucracy	3.5	3.0	0.4
Governmental programs	3.5	2.7	0.8
Basic school entrepreneurial education and training	3.1	2.5	0.6
Post school entrepreneurial education and training	3.6	3.2	0.4
R&D transfer	3.1	2.7	0.4

Commercial and professional infrastructure	3.4	3.4	0.0
Internal market dynamics	3.4	2.9	0.5
Internal market openness	3.0	2.8	0.3
Physical and services infrastructure	4.1	4.1	0.0
Cultural and social norms	3.0	4.2	-0.6

Source: Made by the author with data from the Global Entrepreneurship Monitor: National Experts' Survey

As observed in Table 5, the highest value for Qatar is on physical and services infrastructure. The consulted experts agree that it is easy to access physical resources such as roads and transportations, communication systems (internet, phone, etc.), and basic services (gas, electricity, water, etc.), mainly because the costs don't represent a constraint for businesses creation and development. It can also be explained by the fact that the construction sector has been growing in recent years because more expatriates are coming to Qatar, and with the FIFA World Cup 2022 Qatar expects to receive 1.2 million visitors which is almost 50% of the current population. Currently, construction sites are visible all-around Doha. In contrast, the lowest value is on internal market openness. This result is explained because of the difficulties to enter the Qatari market; further analysis is provided in the next section. Qatar is a market of 2.5 million people (small compared to other countries) of which about 15% are nationals and the rest are expatriates, but non-Qataris face greater challenges in becoming an entrepreneur. Other low values are basic school entrepreneurial education and training, and R&D transfer, which can be limiting to the entrepreneurial activities. Both results are surprising since Qatar's National Vision 2030 is putting a special effort on education and science development, while the main target is the outcome of human resources and innovation initiatives to support the transition towards a knowledge-based economy.

Meanwhile, Table 5 also compares Qatar with the USA since the latter hosts 11 of the top 30 startup ecosystems worldwide in accordance with the Global Startup Ecosystem Report (2020) (Silicon Valley, New York city, Boston, Los Angeles, Seattle, Washington DC, Chicago, Austin, San Diego, Atlanta, and Denver-Boulder). Qatar is a much smaller country than the USA, with 85.6% of the country's population living in the capital city, Doha (2.38 million). Amazingly, Qatar is below the USA only on two EFCs: financing for entrepreneurs, and cultural and social norms. With respect to finance the country is already working on attracting foreign investments with new regulations and building a Venture Capital ecosystem. The cultural and social norms have been improving since the blockade in 2017 because suddenly, from one day to the next, they needed to start producing goods to satisfy the local demand and consume locally. The blockade, according to experts, fostered a culture of nationalism and collaboration. Most of the institutions are committed to the QNV 2030 too, helping to increase the perception of beneficial cultural and social norms. In addition, the biggest lead over the USA is in governmental programs which is reasonable because the government has a strong intervention as explained on Chapter 2. In summary, in accordance with the perceptions of experts, Qatar has all the required entrepreneurship conditions to become a leading ecosystem in the short term if it continues going in the right direction in terms of attracting investors and entrepreneurs, and improving local policies affecting businesses.

Table 6 Comparison of entrepreneurial framework conditions for Qatar in 2016, 2017, 2018, and 2019

Entrepreneurial Framework Condition	2016	2017	2018	2019	Difference between 2019 and 2016
Financing for entrepreneurs	2.7	2.6	3.1	3.2	0.5
Governmental support and policies	3.3	3.4	3.8	3.5	0.2
Taxes and bureaucracy	2.8	3.0	3.5	3.5	0.6
Governmental programs	3.2	3.2	3.6	3.5	0.2
Basic school entrepreneurial education and training	2.7	2.6	3.7	3.1	0.4
Post school entrepreneurial education and training	3.5	3.0	4.0	3.6	0.1
R&D transfer	2.6	2.6	3.5	3.1	0.5
Commercial and professional infrastructure Internal market dynamics	3.1	3.1	3.4	3.4	0.3
Internal market dynamics	2.7	3.1	3.8	3.4	0.8
Internal market openness	2.4	2.6	3.2	3.0	0.7
Physical and services infrastructure	3.9	3.8	4.3	4.1	0.2
Cultural and social norms	3.2	2.9	3.7	3.6	0.4

Source: Made by the author with data from the Global Entrepreneurship, Monitor: National Experts' Survey

Moreover, a reflection of Qatar's progress towards the QNV 2030 can also be seen in these EFCs if we analyze its evolution over time. The QNV 2030 was officially launched in 2008 as a plan to achieve sustainable development, and it has been becoming more relevant as time passes and more recently with the blockade. **Table 6** shows that evolution affecting the entrepreneurial ac-

tivities since 2016. A decline is visible in 2017 when the blockade started, but the conditions started evolving rapidly. The biggest improvement from 2016 to 2019 has been in internal market dynamics, followed by internal market openness. Although the latter remains as the lowest perceived, in general all the conditions have improved over time and they are expected to hold the same trend in the following 10 years.

Using a qualitative approach in addition to the GEM experts, 17 additional in-depth interviews were conducted and categorized. In both samples, 50% of the experts agreed that the government policies are the main factors constraining the entrepreneurial activities in Qatar, followed by 11% of experts' responses highlighting constraints with labor costs, access to talent and regulation. The comments about the government policies refer to restrictive migration laws for entrepreneurs who will enter and bring talent to work at their companies. As well, they mentioned bureaucracy and lack of policies to address the real needs of businesses. Most of the comments confirm the findings discussed in Chapter 2. An example of it would be the following quote:

“Implement structural and legal reforms entrepreneurship by reducing cost, business disruptions and legal gaps.”

Expert in economics

Male non-Qatari resident, 46 years

Additionally, it is important to mention that education has been highlighted by 22% of the experts as the most relevant factor helping to foster entrepreneurial activities in Qatar. In second place with 15% are the government programs. In fact, all the efforts of the Qatar Foundation are reflected in these opinions, because it means that stakeholders are noticing the importance of education, science,

and technology, and how the country has managed to invest, for example, to create Education City with nine satellite campuses of international universities. One of the academic experts commented the following:

“Education centers training institutes, universities should be introduced. Encourage students to start business from universities studies in support and resources from institutes.”

Entrepreneurship researcher

Female non-Qatari resident, 38 years

Legal, bureaucratic, and regulatory frameworks

The business creation and registration process in Qatar remains very complex and bureaucratic, and it is recommended to hire legal support services established in the country that are familiar with the legislation. That is why it is ranked below the UAE, Bahrain, Morocco, Saudi Arabi, Oman, and Jordan among the MENA countries and 77th worldwide in the Ease of Doing Business WB indicator. In summary, to open a business in Qatar, there are 9 steps that entrepreneurs need to follow:

Step 1: Decide the type of business society

There are eight types of societies: Single person company, Limited Liability Company (LLC), Public shareholding company, Simple partnership company, Joint venture company, Joint partnership company, Limited shares partnership company, and Holding company.

Step 2: Start the registration process

The registration and legalization process starts in the Ministry of Economy and Commerce by filing the New Company Registration form.

Step 3: Approve the commercial name

Choose and get approval for the commercial name from the Department of Registration and Commercial Licenses of the Ministry of Economy and Commerce.

Step 4: Approve the commercial activity

The competent authority needed to approve the commercial activity in most of the cases is the Ministry of Commerce and Industry. Others could be the Ministry of Energy and Industry, Ministry of Transport and Communications, Ministry of Public Health, and Ministry of Education and Higher Education, among others. It depends on the nature of the business activity.

Step 5: Opening a bank account

The entrepreneurs need to choose a bank account and submit a letter as depositary of the social capital expressing the interest and amount planned for deposit. Once the bank entity admits the letter, an account will be opened in the name of the business society.

Step 6: Public documentation

Authenticate the public documentation of the legal constitution of the business society in the Ministry of Justice.

Step 7: Register the business society

Register the business society with the Chamber of Commerce and Industry of Qatar.

Step 8: Obtain the commercial registration

Obtain the commercial registration in the Ministry of Economy and Commerce.

Step 9: Obtain the license

Obtain the municipality license in the Ministry of Municipality and Urban Planning.

As in other countries, intellectual property protection rights are important for entrepreneurs. Qatar, like many others, respects the Agreement of Marrakech in which the World Trade Organization was established. This agreement states the aspects of intellectual property protection related with commerce. The Qatari Trademark Law does not allow registration of a trademark in the name of more than one applicant and prohibits registration of goods such as alcoholic beverages or pork meat. It follows the international classification of goods and services. To start a registration process, the individuals and businesses may submit a request to the Intellectual Property Protection Department at the Ministry of Commerce and Industry. In 2017, the Ministry of Economy and Commerce launched an online trademark registration service which has been gradually implemented. To complete a registration takes an average of 12 months.

In Qatar, starting a business normally takes an average of nine days to complete the registration with competent authorities

and institutions. The average within the MENA countries is 20 days, so it is less than half the time to start a business in Qatar but as much as double in comparison with UAE, Oman, and the USA (top ecosystem). As shown in Fig. 22, among the Qatar neighbor countries, it is below the average of Yemen, Saudi Arabia, Israel, and Egypt, and above that of UAE, Oman, and Bahrain. These legal, bureaucratic, and regulatory framework conditions are relevant for the entrepreneurial ecosystem to move to the phase of attraction in which the ecosystem expands, filling success factor gaps by removing barriers to attracting well-designed policies. With it, non-Qatari residents should be more interested in getting involved in entrepreneurial activities despite the differences in perceived support for Qatari residents.

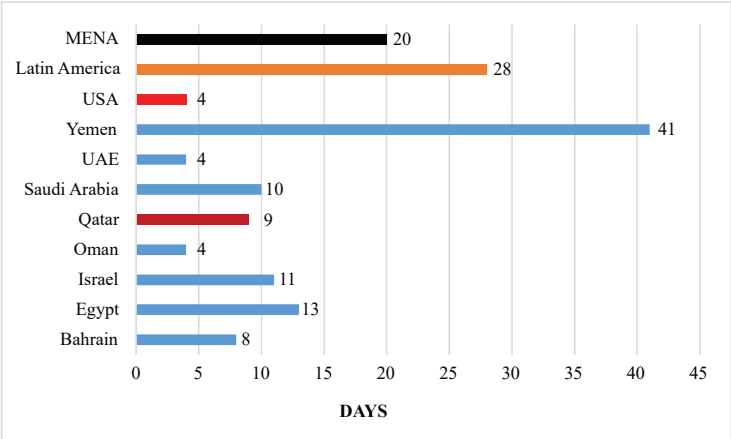


Fig. 22 Time required to start a business (days), Source: Made by the author with data from World Bank, Doing Business project (2019)

Part 5: Recommendations

Qatar's entrepreneurial ecosystem is between the activation and globalization phases. It can soon be in the attraction phase and produce more innovative startups if the right actions are taken in strategic areas. This study took into consideration experts' interviews, and data collected by the GEM, PSA, and other public sources. It cannot determine exactly whether Qatar is a successful entrepreneurial ecosystem or not, but it accomplishes the objective of identifying the key stakeholders, and the conditions that are fostering the entrepreneurial activities and the ones that do not, to recommend policies and strategies. The factor mentioned by many, government policies, includes the role of regulatory framework, fiscal policy, and taxation, and special considerations to match the opportunities for economic competition between new and existing businesses. For the case of Qatar, there is a strong government intervention, and an example is the implementation of the Qatar National Vision 2030 that each institution is trying to follow-it is a game changer "activating" the ecosystem. It is natural in emerging economies since government policies play a big role in the entrepreneurial ecosystems around the globe, because they can control and influence other factors that impact entrepreneurship, such as helping to create and develop institutions and key players (Villegas-Mateos, 2020; Kantis and Federico, 2012). One of the interviewed experts suggests the following to activate the ecosystem:

"Since today's youth are the potential entrepreneurs of the future, understanding their perception about contextual factors can be a contribution to the development of the literature."

Business Management expert
Male non-Qatari resident, 39 years

Nevertheless, the efforts to foster entrepreneurial activities in Qatar should be refocused more in value-added businesses. These can be identified as innovation- or technology-based ventures such as opportunity-driven entrepreneurial activities at early stages. Also, the regulations and legal framework need attention; some quantitative indicators like the time to start a business show Qatar at a good level, but the qualitative data highlight issues with difficult immigration policies, investment restrictions, long times for registration, and unnecessary expenses to operate in certain sectors of the economy. In addition, the blockade that Qatar went through with its neighbor countries was beneficial for some sectors, according to experts that participated in the study, because it pushed the local market to satisfy consumer demands and some businesses grew while other new businesses emerged. Qatar is a market of 2.2 million people; it is small but the high income per capita helps to incentivize consumption. The blockade ended at the beginning of 2021 with the FIFA World Cup coming up in 2022. Therefore, Qatar is a promising ecosystem that would attract more entrepreneurs and investments if it continues improving the base conditions for businesses as explained on chapter 4.

In summary, this report concludes with the following five recommendations to make of Qatar a leading entrepreneurial ecosystem:

1. Start by addressing the local condition constraints for entrepreneurial activities which are mainly related with bureaucratic processes and restrictive immigration and business laws. Its not just making new laws, its also implementing them and opening equal conditions for everyone, men and women, Qataris and non-Qataris.

2. While doing the previous, there must be a special effort from government and investors to collaborate closer to understand the needs of both sides. This is going to help startups, scaleups and SMEs to grow faster with existing conditions, and to attract more FDI. At the beginning it will require investment in the foundations to build angel and mentors networks, host bigger events, and develop talented people.
3. Qatar must consider an ecosystem branding strategy. The FIFA World Cup 2022 can serve as a trampoline to boost the visibility of the country worldwide and show potential investors and entrepreneurs that settling in Qatar is a good choice. The location, the taxes, the easy access to international markets and success stories will help to do it well.
4. The Qatari government is very straight forward in its development plan stated in the QNV 2030 established in 2008, but now, with the current world economic situation, the different institutional stakeholders need to strengthen their networks and collaborations and aim to specialize in some specific sectors rather than trying to cover them all at the same time. For example, the FinTech sector in Qatar is an emerging sector and one example of how together with a similar goal, the stakeholders can build greater things. FinTech in Qatar is growing very fast and is attracting international startups and investors, so in 2020 QDB in joint with EY launched the Qatar FinTech Hub with its incubation and acceleration programs.
5. Start measuring the development of the strategy. Several key indicators and datasets are missing or are difficult to access, the most relevant are seed funding and venture capital indicators because the number and amount of investments at early stages are comparable as ecosystem success rates.

Implications

The findings of this study suggest that entrepreneurial finance is among the weakest condition, not because projects cannot get funded but because investors sometimes don't understand the startup dynamics or there are other legal restrictions. As mentioned before, this condition and the cultural and social norms are the two weakest, but also the ones that are currently targeted for improvements. It is up to the government to continue understanding the entrepreneurial process and urgently create and implement a national policy that helps funding startups, reduce requirements to open a business with a fair treatment to non-Qataris including facilitating wholly foreign businesses in all sectors, and reduce costs and bureaucracy.

“I recommend making banking institutions provide loans to startup enterprises (expat as well as Qatari) without the need for a personal guarantee.”

Economics & Business expert
Male non-Qatari resident, 26 years

This report aims to create consciousness of the role of all key stakeholders in Qatar's Entrepreneurial Ecosystem and to congratulate all involved that directly or indirectly contributed to the research. It also encourages readers to take a more active role if they can contribute from their position to improve some of the mentioned conditions and ask for help if needed. It certainly highlights the role of government in certain needed actions, but also the private sector needs to organize and deal with the current status while conditions keep improving. Hopefully, the end of the blockade will accelerate some processes. The education sector and the actors in that sector need to increase their networks and

help to foster an entrepreneurial culture among their students, independently of the institution. We invite you to participate in the next edition of the Global University Entrepreneurial Spirit Students' Survey (GUESSS) that is led by HEC Paris in Qatar and is open to all universities in the country.

References

Acs, Z., Szerb, L., Lafuente, E., & Lloyd, A. (2018), *Global Entrepreneurship and Development Index 2018*. Springer International Publishing, New York.

Beblawi, H. (1990). *The rentier state in the arab world*. In Luciani, G. (Ed.), *The Arab State*, Routledge, London, pp. 85-98.

Ben Hassen, T. (2019). *Entrepreneurship, ICT and innovation: state of Qatar transformation to a knowledge-based economy*. In Alkhateeb, H. (Ed.), *Qatar . Political, Economic and Social Issues*, Nova Publisher, New York, pp. 193-209.

Ben Hassen, T. (2020). The entrepreneurship ecosystem in the ICT sector in Qatar: local advantages and constraints. *Journal of Small Business and Enterprise Development*, 27(2), 177-195. <https://doi.org/10.1108/JSBED-04-2019-0119>.

Cavallo, A., Ghezzi, A., Colombelli, A., & Casali, G. L. (2018). Agglomeration dynamics of innovative startups in Italy beyond the industrial district era. *International Entrepreneurship and Management Journal*, 1–24.

Ennis, C.A. (2013). *Rentier 2.0: Entrepreneurship promotion and the (Re) imagination of political economy in the gulf cooperation council countries*. Unpublished PhD thesis, University of Waterloo, Ontario.

Global Startup Ecosystem Report (2020). *Rankings 2020: Top Startup Ecosystems*. Startup Genome and Global Entrepreneurship Network. Available at <https://startupgenome.com/report/gser2020>.

Isenberg, D. (2011). *The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship*. Presentation at the Institute of International and European Affairs.

Isenberg, D. J. (2010). The big idea: How to start an entrepreneurial revolution, *Harvard Business Review*, 88 (6), 41–50.

Kantis, H.D. & Federico, J.S. (2012). *Entrepreneurial ecosystems in Latin America: the role of policies*. International Research and Policy Roundtable, (Kauffman Foundation), Liverpool.

Kebaili, B., Al-Subyae, S.S. & Al-Qahtani, F. (2017). Barriers of entrepreneurial intention among Qatari male students. *Journal of Small Business and Enterprise Development*, 24(4), 833-849.

Mahdavy, H. (1970). *The patterns and problems of economic development in rentier states: the case of Iran*, in Cook, M.A. (Ed.), *Studies in the Economic History of the Middle East*, School of Oriental African Studies/Oxford University Press, London, pp. 428-467.

Mason, C., & Brown, R. (2014). Entrepreneurial ecosystems and growth-oriented entrepreneurship. *Final Report to OECD*, Paris, 30(1), 77–102.

Nasser Al-Khalifa, A. B. (2018). *Global Entrepreneurship Monitor: Qatar National Report 2017*. Qatar Development Bank.

PitchBook (2020). *Venture Capital, Private Equity and M&A Database: Qatar Overview*.

PSA (2020). *Census of Population, Housing, and Establishments*

2015. Planning and Statistics Authority. Available at <https://www.psa.gov.qa/en/statistics1/StatisticsSite/Census/Pages/default.aspx>.

Villegas-Mateos, A. (2020). Regional entrepreneurial ecosystems in Chile: comparative lessons. *Journal of Entrepreneurship in Emerging Economies*, 13 (1), 39-63. <https://doi.org/10.1108/JEEE-11-2019-0168>.

World Bank. (2020). World Bank Open Data. Ease of Doing Business Index. Available at: <https://www.doingbusiness.org/en/data/doing-business-score>.

Appendix

Methodology note

To develop the report, we followed a mixed method approach. First, n=17 in-depth semi structured interviews were conducted with key stakeholders of Qatar's entrepreneurial ecosystem selected based on their reputation and years of experience. Seven of the interviewees were Qatari residents and the rest non-Qatari. In total four were women, and one of them was non-Qatari. Some interviews were conducted online while others face to face due to the COVID-19 restrictions, and all the people in the sample currently reside in Doha. Among the selected people there are government officials, entrepreneurs, consultants, entrepreneurs and academics, some of them with double or triple occupations. Additionally, n=44 experts responded the National Experts' Survey of the Global Entrepreneurship Monitor in 2018, and for this research we analyzed the open-ended responses collected from them as qualitative data about their perceptions of Qatar's ecosystem. We tried to make the qualitative analysis as objective as possible making few assumptions, so we used statistical software to analyze the cause and effect relations. Finally, to study the ecosystem dynamics of Qatar, GEM's Adult Population Survey was analyzed to complement the report and a bigger quantitative database of the NES; furthermore, other secondary data sources with key macroeconomic indicators were consulted such as the Planning and Statistics Authority, Pitch Book, The World Bank, and the Global Startup Ecosystem report.



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