SUPPORT MATERIAL

GLOBAL ENTREPRENEURSHIP

ENVIRONMENT AND STRATEGY

THIRD EDITION

NIR KSHETRI

ROUTLEDGE

Global Entrepreneurship

This third edition of a *Choice* Outstanding Academic Title improves coverage of the global environments in which entrepreneurs operate. In *Global Entrepreneurship: Environment and Strategy*, Nir Kshetri explores and illuminates the economic, political, cultural, geographical and technological environments that affect entrepreneurs as they exploit opportunities and create value in economies around the world.

Grounded in theory, the book begins by laying out the concepts, indicators and measurements that have unique impacts on entrepreneurs in different regions. This framework sets the scene for a close examination of global variations in entrepreneurial ecosystems and finance. Kshetri methodically examines entrepreneurship patterns in diverse economies through the lenses of economic system, political system, culture and religion, and geography (both by country and continent).

All new for this edition, *Global Entrepreneurship* offers case studies at the end of each chapter to illustrate relevant concepts to encourage broader reflection. Most of the case studies in this edition highlight the role of artificial intelligence in enabling and advancing entrepreneurial activities globally.

Nir Kshetri is Professor at Bryan School of Business and Economics, University of North Carolina-Greensboro, USA

Taylor & Francis
Taylor & Francis Group
http://taylorandfrancis.com

Global Entrepreneurship

Environment and Strategy

Third Edition

Nir Kshetri

Routledge
Taylor & Francis Group
NEW YORK AND LONDON

Designed cover image: Getty Images

Third edition published 2026
by Routledge
605 Third Avenue, New York, NY 10158

and by Routledge
4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Routledge is an imprint of the Taylor & Francis Group, an informa business

First edition published by Routledge 2014
Second edition published by Routledge 2019

ISBN: 978-1-032-93273-6 (hbk)
ISBN: 978-1-032-90017-9 (pbk)
ISBN: 978-1-003-56515-4 (ebk)

DOI: 10.4324/9781003565154

Typeset in Bembo
by Deanta Global Publishing Services, Chennai, India

Access the Instructor Resources: www.routledge.com/9781032900179

Contents

Taylor & Francis
Taylor & Francis Group
http://taylorandfrancis.com

Chapter 1

Global Entrepreneurship

The Current Status, Definitions, Types and Measures

This chapter's objectives are:

1. To demonstrate an understanding of the current Global Entrepreneurial Revolution.
2. To identify the major trends and forces shaping the Global Entrepreneurial Revolution.
3. To analyze various metrics in order to measure the determinants, performance and impacts of entrepreneurship in an economy.
4. To apply the tools and concepts learnt in the chapter to asses an economy's entrepreneurial performance and success.
5. To demonstrate an understanding of the international heterogeneity in the development of entrepreneurship and entrepreneurial capability.

1.1 A Global Entrepreneurial Revolution

Across the globe, entrepreneurs are launching businesses and pioneering innovation. The globalization of talent and financial resources has further propelled the rise of global entrepreneurship.[1] Successful entrepreneurial ventures are emerging not only in developed nations but also in some of the world's least developed regions. For instance, despite South Sudan ranking 215th out of 222 countries in gross domestic product (G.D.P.) per capita according to the Central Intelligence Agency's *The World Factbook*,[2] the nation has reported numerous successful entrepreneurial ventures, highlighting the innovative spirit of its people. The United Nations Development Program (U.N.D.P.) highlighted the inspiring story of Maka Scovia, an entrepreneur in Juba, South Sudan, who transitioned from a small fruit vendor to a successful business owner. Her journey underscores the transformative impact of resilience and the support provided by the Youth Enterprise Development and Capacity Building project. With an interest-free loan, financial training and mentorship, she expanded her ten-seat juice shop into a thriving business employing six people. Inspired by her success, employees like Arich Faisal have also started their ventures. Grateful for U.N.D.P.

DOI: 10.4324/9781003565154-1

and African Development Bank support, Maka envisions further growth, including new branches and a juice processing plant to drive youth and women's economic empowerment in South Sudan.[3]

The quality and quantity of entrepreneurial ventures, however, differ significantly across economies worldwide. The latest data from the World Bank indicates that the new business density, defined as the number of newly registered corporations per 1,000 working-age people (ages 15–64), varies significantly, with Liberia at 0.02 and the Cayman Islands leading with a density of 229.[4] The top ten companies in the *Forbes 2024 Global 2000 List*, which ranks the world's largest companies based on sales, profits, assets and market value, include six from the United States, three from China and one from Saudi Arabia, highlighting the dominance of these nations in the global business landscape.[5]

In 2023, Walmart generated nearly $640 billion in revenue, securing its position at the top of the global ranking of the hundred largest companies, with Amazon following closely behind. Furthermore, Walmart's workforce of about 2.3 million employees made it the largest company in the world by employee count.[6] On the other hand, the DAL Group, Sudan's largest private company,[7] reported annual revenue of $496.2 million in 2024.[8]

In global entrepreneurship, the increasingly important role of artificial intelligence (A.I.), especially generative A.I., is undeniable. Generative A.I. is revolutionizing entrepreneurship by enhancing productivity and enabling entrepreneurs to focus on their core skills. A.I. can serve as a "co-founder", assisting with tasks like writing emails, product development and idea generation. This technology also promotes experimentation, speeding up business processes and reducing costs. However, entrepreneurs should experiment quickly, not overly rely on proprietary datasets and embrace uncertainty. As A.I. levels the playing field globally, it increases competition but also offers opportunities for transformative growth.[9]

Unsurprisingly, generative A.I. is increasingly playing a significant role in entrepreneurship, not only in developed economies but also in emerging and developing regions. The rapid rise of generative A.I. in Africa is transforming entrepreneurship across various industries, including healthcare, Web3, agriculture and education. This growth is fueled by both local innovators and international companies contributing to the A.I. ecosystem. Grassroots entrepreneurship, alongside corporate investments, is driving A.I. advancements. Social entrepreneurship plays a key role in addressing local challenges, particularly by developing A.I. solutions that cater to regional needs and languages, fostering a more inclusive and impactful A.I.-driven entrepreneurial landscape in Africa.[10]

The increasing dominance of A.I.-based companies in the global entrepreneurial landscape is also noteworthy. While most top companies remain mainstays, A.I.'s influence is evident as Nvidia jumped over 100 spots to

110th in 2024, and Super Micro Computer debuted at 856th. Meanwhile, vaccine makers Pfizer and Moderna dropped in rankings post-COVID.[11]

1.1.1 Favorable Attitude toward Capitalism and Social Acceptance of Entrepreneurship

One important trend facilitating a global entrepreneurial revolution and growing entrepreneurial spirit concerns a favorable attitude toward free market capitalism. Note that capitalism is the foundation of entrepreneurship.

According to a Gallup poll conducted in 2010, 61% of Americans had a positive view of capitalism and about the same proportion had a negative view of socialism. In 2016, 60% in the United States had a positive view of capitalism, which is unchanged from 2010.[12] In 2022, the American public's perception of both "capitalism" and "socialism" has softened since 2019. Only 36% of U.S. adults now view socialism positively – either somewhat (30%) or very (6%) – down from 42% in May 2019. Negative views of socialism have risen, with 60% expressing a negative opinion, including 33% who view it very negatively. On the other hand, 57% of Americans still view capitalism favorably, although this is an 8 percentage-point decrease from the 65% recorded in 2019. These insights come from a Pew Research Center survey conducted between August 1 and 14, 2022, involving 7,647 participants.[13]

Having noted the above, it is also worth highlighting that capitalism as it exists today is not viewed favorably in many parts of the world. For instance, the 2020 Edelman Trust Barometer, conducted across 28 major markets, found that 56% of respondents agreed with the statement, "Capitalism as it exists today does more harm than good in the world". The proportion varied significantly, ranging from 35% in Japan, the lowest, to 75% in Thailand, the highest[14] (Figure 1.1).

1.1.2 Responses of Policy Makers

In response to the demands of various forces and as their own priority, policy makers in most countries are directing efforts to encourage entrepreneurship among local communities and promoting the creation of entrepreneurial societies. They have realized the potential contributions of entrepreneurship to economic growth and development. According to the World Bank's Business Ready (B-READY) Report published in 2024, two-thirds of global economies qualified as business-ready regarding their regulatory quality and half met the standard based on public service effectiveness.[15] Regarding gender-focused initiatives for women entrepreneurs, approximately 50% of the surveyed economies provide specialized programs, such as incubators and accelerators.[16]

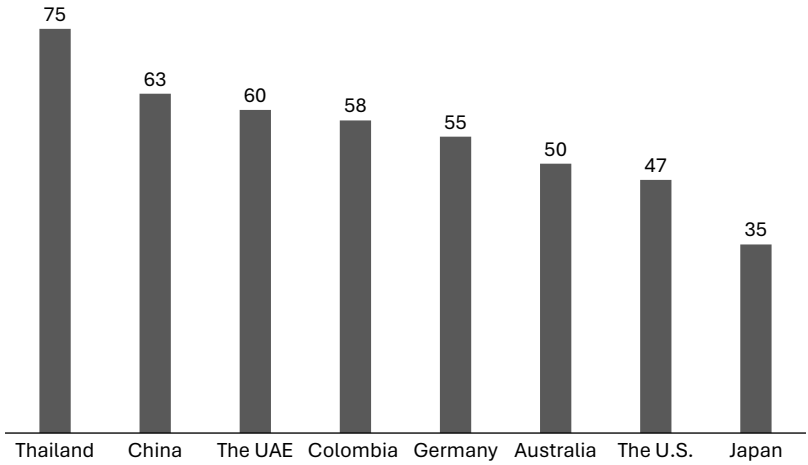

Figure 1.1 Percentage of the Population Agreeing with the Statement: "Capitalism as it exists today does more harm than good in the world"

Regulatory frameworks in 90% of economies prohibit anticompetitive agreements, supporting higher productivity and improved product quality (Market Competition). On the international trade front, 77% of economies recognize foreign electronic contracts, 75% accept foreign electronic signatures and 71% impose no restrictions on cross-border electronic payments (International Trade). In Public Services, 92% of economies have online tax portals, but only 4% offer all three B-READY electronic self-service tools – chatbots, e-forums and e-learning – on their websites. Additionally, 92% of economies have operational credit bureaus and registries.[17]

1.2 Various Types of Capitalism and Their Influences on Entrepreneurial Activities

Capitalism is the foundation of entrepreneurial opportunities. In capitalistic economies, the means of production are mostly privately owned and a market economy operates. That is, economic decisions are influenced by competition, supply and demand. However, it would be erroneous to conclude that only one form of capitalism exists. There are a number of variations in the way capitalism functions across the world.

At least four prevalent forms of capitalism have been identified: (i) entrepreneurial, (ii) big firm, (iii) state directed and (iv) oligarchic.[18]

1.2.1 Entrepreneurial Capitalism

Entrepreneurial capitalism is characterized by the presence of high-impact entrepreneurs with radical ideas in which small, innovative firms play a major role. Note that high-impact entrepreneurs are people involved in launching and growing of companies with an above-average impact on the creation of jobs and wealth.[19] Some examples include the founders of companies such as Twitter, Uber, Apple, Facebook, Yahoo, Microsoft and Google. These entrepreneurs possess capability to bring innovative products, services and business models that meet marketplace needs. The United States is viewed as a fertile place for high-impact entrepreneurs due to its pro-private sector culture and a smaller state sector compared to Western European countries.

1.2.2 Big Firm Capitalism

In a big firm capitalism, radical entrepreneurship tends to be absent and the economic growth is mainly driven by the government through the collaboration with big businesses. This form of capitalism is prevalent in Japan and some European countries. Japan has many innovative large firms, but the country has among the lowest per capita rate of entrepreneurial activities.

1.2.3 State-Guided Capitalism

Some developing countries such as China have found state-guided capitalism as a way to achieve economic growth (Chapter 8). In such a model, the government guides the market, typically by supporting a few industries that are expected to perform well. For one thing, the deep entrenchment in the economy allows the Chinese government to intervene quickly and produce desired outputs. The cash-rich Chinese government has also been pressuring as well as providing a wide range of incentives for its firms to expand overseas.

In recent years, some countries are shifting away from free-market reforms and adopting more command-oriented economic models. For instance, in Sudan, Egypt, Nigeria and Mexico (In Focus 1.1), the military has increasingly engaged in entrepreneurial activities, managing large-scale economic ventures and exerting significant influence in their respective economies. Following the military coup in Myanmar in February 2021, the armed forces sought to reestablish their dominance over both the economy and political sphere. They intended to restore the pre-2011 era of market control by military businesses and resume predatory economic behaviors among military elites and their associated cronies. In Sudan, the military manages an economic conglomerate that avoids both state oversight and taxation.[20]

IN FOCUS 1.1 MILITARY ENTREPRENEURS: THE MEXICAN ARMED FORCES' EXPANSION INTO BUSINESS AND INFRASTRUCTURE IN THE AGE OF LÓPEZ OBRADOR

Mexico, unlike most Latin American countries except Costa Rica, has had no military government for over 80 years. After decades of Institutional Revolutionary Party rule since 1929, Mexico transitioned to democracy in the late 1980s without military coups, establishing a strong civilian-military balance. In exchange for loyalty, some corruption among top officers was tolerated. The military only began expanding its political influence and business involvement in the 21st century. During Mexico's transition to democracy, the collapse of state networks that supported the drug trade led to instability and violence. With civilian security institutions failing due to corruption, the military's role expanded under Presidents Felipe Calderón and Enrique Peña Nieto, becoming central to the War on Drugs and increasing its economic influence under President Andrés Manuel López Obrador (A.M.L.O.). As the military's reputation for reliability grew in Mexico, it began to influence the economy. Since A.M.L.O. began his term in 2018, there has been a notable expansion in the military's economic involvement.[21]

The Mexican military's role in civilian services began in 2007, but under A.M.L.O., they emerged as major economic contributors. A.M.L.O.'s strategy to use the army for job creation and corruption control led to their involvement in key infrastructure projects like the new airport, Tren Maya and Banco del Bienestar. This approach has bolstered the military's economic influence and protected their budget from austerity cuts.[22]

Under A.M.L.O., Mexico's government has started competing with private businesses in consumer sectors, driven by his view that privatization was a neoliberal "fraud".[23] Note that neoliberalism faces criticism for "neoliberal fraud" because it claims to champion free markets and deregulation, but primarily serves elites and large corporations. Critics argue that while promoting economic freedom, these policies widen inequality, exploit vulnerable groups and prioritize profit over public welfare and sustainability, revealing a stark gap between rhetoric and reality. This strategy seeks to rectify market failures and has led some government and military figures to become entrepreneurs, although early outcomes are modest.[24]

1.2.4 Oligarchic Capitalism

In an oligarchic capitalism, a small group of individuals and families control the majority of the national wealth and power, in some cases with the support of corrupt politicians. This form of capitalism is thus associated with and facilitated by "politically embedded cronyism".[25] In this form of capitalism, entrepreneurs use political power, capital and social networks to maximize economic rewards. That is, a small group of wealthy people tend to maintain a grip over the country's economy, polity and society.[26] In some cases, oligarchic capitalism is characterized by a symbiosis of political and economic elites. That is, political elites such as rulers, elected officials, party leaders and bureaucrats are also economic elites or successful entrepreneurs. In such a system, state incumbents may generate and maintain uneven distribution of property rights, which favor a few private actors. There tends to be a limited role of societal groups.

This system may serve as a tactic of survival for a ruling regime. In some economies such as Ukraine in the 2000s, powerful oligarchs provided financial resources to the ruling elites, and in return, they exerted a strong influence on government policies. For instance, three top oligarchs[27] in Ukraine reportedly played key roles in supporting the former President Kuchma's regime. Some developing economies in Asia (e.g., India), Africa, Latin America (e.g., Colombia) and the Middle East have also exhibited characteristics of this form of capitalism. Despite the existence of certain elements of a market economy and political democracy, this form of capitalism lacks a true market system.

1.3 Variation in Entrepreneurial Activities across the World

While the general trend discussed above suggests a growth in entrepreneurial ventures worldwide, significant cross-country variation exists in entrepreneurial success and a number of features of entrepreneurship. This section sheds light on some of the important international differences in various aspects of entrepreneurial opportunities, behaviors and performance.

1.3.1 Gender Bias and Other Types of Disparities in Entrepreneurship

A large gender bias in access to resources and the participation rate of entrepreneurial activities is probably the most serious concern. Worldwide only 30% of small and medium-sized enterprises (S.M.E.s) that are formally registered are owned and run by women.[28]

The lack of gender equality in labor laws prevents women from working and earning more relative to men. As of 2024, 97 economies imposed

constraints on women, limiting their success in entrepreneurship (https://wbl.worldbank.org/en/data/exploretopics/wbl_rb). In many economies, women are not allowed to work at night or in certain jobs such as manufacturing, construction, energy, agriculture, water and transportation. These laws affect more than 2.7 billion women.[29]

It would be helpful to compare countries with different levels of gender equity in entrepreneurial performance. On the 2021 Mastercard Index of Women Entrepreneurs (M.I.W.E.), Bangladesh was rated lowest (65th) on the list. While women's engagement as business owners in Bangladesh was high, women entrepreneurs in the country encounter a great number of barriers and challenges. The lack of financial inclusion is a serious problem facing women entrepreneurs in the country. Other major challenges include the lack of women in business leadership and professional and technical positions, the lack of access to tertiary education, poor supporting conditions for S.M.E.s, low quality of governance and adverse cultural perception of women entrepreneurs.

Studies have found that women's low rate of participation in entrepreneurship is due to the lack of supports such as access to advice, money and training rather than the lack of basic traits. According to the International Finance Corporation (IFC), there is a $300 billion financing gap for women-owned small and growing businesses globally, with $92 billion of this gap specific to Latin America and the Caribbean.[30] An analysis of data from the cross-country Business Environment and Enterprise Performance Survey suggested that female-managed firms were less likely to obtain a bank loan than male-managed ones. Moreover, for the approved loan applications, female entrepreneurs were charged higher interest rates than their male counterparts.[31] A study of the United Arab Emirates' (U.A.E.) Dubai School of Governance showed that many aspiring female entrepreneurs in the Gulf Cooperation Council (G.C.C.) region lack confidence in business skills, which discourages them from seeking access to money. Moreover, lenders' low confidence in women's business skills leads to women's inadequate access to money in G.C.C. countries. Likewise, according to a Gallup Poll conducted in G.C.C. countries, women in these countries are less likely than men to have access to a mentor who can give them advice on managing a business.[32]

Other types of disparities – affecting people disadvantaged because of their social and economic backgrounds – are important too. Institutions in some economies have built-in biases that systematically favor the participation of certain segments of the population in entrepreneurial activities. For instance, in Indonesia's lucrative business sectors such as mines, palm oil plantations and oilfields, only influential people are granted a business license.[33] Likewise, observers have noted that potential entrepreneurs in India, who have graduated from a less well-known university or those who belong to a poor family, face difficulties in getting funding.[34]

1.3.2 *Effects of Political, Cultural and Other Broad Environmental Factors*

The 2023 Global Startup Index ranked the Czech Republic as the top destination for startups, thanks to low startup costs and favorable economic conditions. Finland and Sweden followed closely. Countries like the Philippines, Egypt and India ranked as the most challenging for startups due to high costs and poor quality of life. Despite strong infrastructure and market potential, the United States placed 17th. The report also highlighted employee well-being, with Finland leading in happiness and the Netherlands excelling in quality of life.[35]

As to the cultural context, desire for business ownership varies across countries. According to the 1997/1998 International Social Survey Programme's Module on Work Orientations/General Social Survey, the proportion of people who say they would prefer to be self-employed varied from 26.9% in Norway to 79.9% in Poland.[36] The same survey found that the proportion of self-employment varied from 6.1% in the then East Germany to 30.2% in Poland. According to the 2009 Eurobarometer Survey on Entrepreneurship, among the surveyed countries, the strongest preference for self-employment was in China and the weakest was in Japan: 71% Chinese and 39% Japanese preferred to be self-employed.[37] As Figure 1.2 demonstrates, the self-employment rate in Organisation for Economic Co-operation and Development (O.E.C.D.) countries varies widely, reflecting different economic structures, labor market conditions and entrepreneurial cultures.

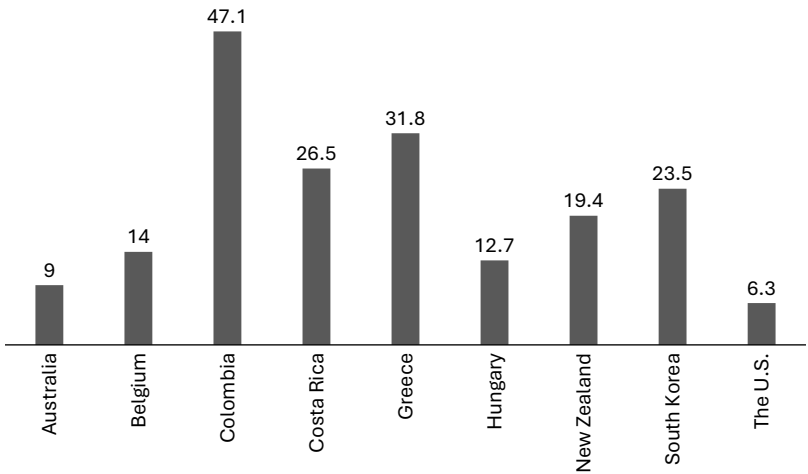

Figure 1.2 Self-Employment Rate in Selected O.E.C.D. Countries (2022)

People across the world also differ in the way they view entrepreneurs and entrepreneurship. In some societies, a negative societal perception of entrepreneurs leads to a lower propensity to engage in entrepreneurial activities. According to the 2009 Eurobarometer Survey, 49% of Europeans had a good opinion about entrepreneurs (Figure 1.2). The corresponding proportions for other professions were liberal professions (lawyers, doctors, architects, etc.), 58%; civil servants, 35%; top managers, 28%; bankers, 25%; and politicians, 12%. As shown in Figure 1.2, while the Western capitalist societies have a good opinion about entrepreneurs, some collectivist and post-socialist societies express a less favorable opinion.

1.4 Definitions and Types of Entrepreneurial Activities and Their Variations Worldwide

We follow the O.E.C.D.'s definition of entrepreneurship, entrepreneurial activity and entrepreneurs. Entrepreneurship is defined as the phenomenon associated with entrepreneurial activity.[38] Entrepreneurial activity is the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets. Entrepreneurs are those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets. Global entrepreneurship, on the other hand, can be defined as a discipline of study and practice focused on comparative analysis of entrepreneurship across economies with diverse environmental settings.

1.4.1 Productive, Unproductive and Destructive Entrepreneurship

Entrepreneurs tend to maximize their own wealth, power and prestige by means of entrepreneurial activities, which can have positive as well as negative effects on the society.

To consider the societal effects of entrepreneurial ventures, the concepts of productive, unproductive and destructive entrepreneurship are employed.[39] Pivotal to this view is the idea that a society's rules of the game determine the distribution of these various forms of entrepreneurship.

Free-market entrepreneurs rely on competition, supply and demand and engage in socially and economically useful activities, which help generate jobs and wealth and hence are productive. The most obvious examples are entrepreneurial activities that take place in high-growth industries, which create jobs and lead to technological innovations.

Unproductive entrepreneurial activities are those that contribute little or nothing to economic growth. Activities involving wealth distribution through political and legal channels such as lobbying are considered to be

unproductive entrepreneurial activities.[40] Some analysts consider entrepreneurial activities related to activities such as trades on crude oil as unproductive. For example, while global crude oil consumption stands at about 100 million barrels per day, the trading of petroleum futures, options and derivatives reaches over 5 billion barrels daily, illustrating the immense scale of financial transactions compared to real-world usage.[41]

Some observe that entrepreneurial activities of a large proportion of the world's billionaires are unproductive. A *Canberra Times* article commenting on the Forbes' list of 1,011 billionaires published in March 2010 put it best:

> Too few of the world's billionaires can claim to be honest-to-God productive entrepreneurs who have enlarged the economic pie by dint of hard work, imagination, risk taking and innovation although thankfully a useful proportion do populate the list. But a depressingly large number constitute a ragbag of monopolists, oligarchs gifted assets and profits by the state, mega-financial engineers or just family plutocrats. And once on the list you tend to stay there; there is little churn. The arteries of capitalism are hardening.

In destructive entrepreneurship, entrepreneurs are engaged in detrimental activities such as those related to criminal and quasi-criminal behaviors, which lead to net social loss. The idea here is that if the perceived benefits of engaging in illegal entrepreneurial activity exceed their costs, some entrepreneurs are likely to engage in destructive entrepreneurship. Some examples include activities involving illegal drug production, organized crime extortion and corruption. While lobbying is described above as an unproductive entrepreneurial activity, it can also be viewed as destructive entrepreneurship since a significant amount of resources are typically wasted by companies in lobbying efforts.[42] In many cases, the lobbying efforts are mostly directed toward acquiring a monopoly right. This type of entrepreneurship may be destructive since monopoly rights often lead to a welfare loss, which means that the losses to the society would outweigh the gains.[43]

1.5 Entrepreneurship Indicators

To explore the heterogeneity discussed above in more detail, in this section, we introduce several entrepreneurship indicators. There have been international efforts to develop and measure various entrepreneurship indicators. The O.E.C.D./EUROSTAT framework stands out as the most developed efforts to conceptualize, measure and compare entrepreneurial activities in O.E.C.D. countries. This framework for entrepreneurship indicators consists of three main building blocks: determinants, performance and impacts. Ahmad and Hoffmann provide a useful analogy to understand interrelationships among them*:* Assume that passengers would like to go from point

A to point B by time *t* (policy objective, Impact). There may be various means of transport available. Factors such as a car's engine size and fuel consumption rate are the determinants. During their journey, passengers are informed of their current status in direction and time by technologies such as speedometers and G.P.S. readings (the performance indicators). Note too that different passengers (policy makers) would like to go to different places and get there at different times (different impacts), using different modes of transport (determinant).[44]

Determinants of entrepreneurship are the factors that affect entrepreneurial performance. We discuss various determinants of entrepreneurship in terms of three categories: (a) regulatory framework; (b) values, culture and skills; and (c) access to finance, markets, research and development (R&D) and technology.

Entrepreneurial performance measures are the entrepreneurial actions that are instrumental in delivering the impacts of entrepreneurs and entrepreneurship. Put differently, target indicators used in measuring entrepreneurial performance tell the progress toward achieving the ultimate objectives. Indicators related to creation, survival and mortality rates of various types of firms are used to measure entrepreneurial performance. Birth and concentration rates of high-growth enterprises and gazelle enterprises could provide even better measures of entrepreneurial performance. O.E.C.D. defines high-growth enterprises as those with average annual growth rates (in employees or turnover) greater than 20% for over a three-year period, and with ten employees at the beginning of the observation period.[45] High-growth enterprises up to five years old are referred to as gazelles. Note that these performance indicators are only the means to achieve various entrepreneurial goals, rather than an end in themselves.

Entrepreneurial impacts reflect the value created by entrepreneurs and entrepreneurship and are the ultimate objectives that policy makers want to accomplish. Various objectives such as job creation, economic growth, poverty reduction and the formalization of the informal sector have been identified.

In this section, we mainly focus on the determinants and impacts of entrepreneurship.

1.5.1 Entrepreneurial Impacts Indicators

1.5.1.1 Job Creation

Regional and national-level studies have found that entrepreneurship is positively related to job creation. A high proportion of net job creation in the United States is attributable to startup ventures that are less than five years old. Likewise, a comparison of different regions across Germany

indicated that in the 1990s, regions with higher startup rates experienced higher employment growth.[46]

Job creation has been a critical policy challenge faced by many governments, especially in emerging economies. In fact, unavailability of job opportunities for young citizens is an important factor that contributed to the toppling of governments in many Arab countries. For instance, in the 2000s, the proportions of the youths that neither worked nor studied ranged from 21% in Jordan to 49% in Yemen.[47] The situation has not changed in two decades. According to a U.N. survey, the Arab region recorded a 12% unemployment rate in 2022, marking the highest rate globally.[48] For citizens in the Arab world, especially for those under 30, addressing the lack of quality jobs is arguably no less important than human rights, the rule of law and political freedoms.[49]

1.5.1.2 Economic Growth

High economic growth rates of economies such as Ireland, Taiwan and Singapore can be attributed to entrepreneurial activity.[50] Various measures of entrepreneurship are found to have positive effects on economic growth. The Global Entrepreneurship Monitor (G.E.M.) has found that national entrepreneurial activity – as measured by the share of people actively involved in starting a new venture and/or managing a business less than 42 months old – has significant positive correlation with subsequent economic growth rate. G.E.M. data also suggest that there are no countries with high levels of entrepreneurship and low levels of economic growth.[51] A possible indicator of entrepreneurship is the number of competitors since the introduction of a new product or the startup of a new firm. In this regard, a study of manufacturing firms in the United Kingdom indicated that an increase in the number of competitors positively affected economic growth as measured by total factor productivity growth.[52]

Using the share of S.M.E.s as a measure of entrepreneurship, researchers have found similar results. A study of manufacturing industries conducted in 13 European countries indicated that a higher share of small businesses led to higher output growth in subsequent years. The results indicate that industries with a high share of small enterprises relative to the same industries in other countries performed better in terms of output growth during the subsequent three to four years.[53]

1.5.1.3 Formalization of the Informal Sector

Significant entrepreneurial activities take place in the informal economy (also referred to as undeclared, shadow, black or underground economy). Informal economic sectors encompass direct subsistence workers (self-employed, unpaid family workers and domestic servants who are usually the

lowest paid workers), informal salaried workers and informal entrepreneurs. In some economies such as Georgia, the informal economy also includes those with double employment. That is, most workers in the informal sector receive formal wages and also engage in nonreported income-generating activities, in most cases at the formal employment workplaces.[54]

Various potential advantages to formal sector participation include police and judicial protection (and less vulnerability to corruption and the demand for bribes), access to formal credit institutions and the ability to use formal labor contracts.[55] Formal sector participation also leads to greater access to a wider marketplace including foreign markets that would allow these businesses to specialize and make them more productive and competitive. Most informal businesses pay lower wages and have lower growth rates than formal ones. They also have poorer safety records, are less likely to pay taxes and are targets of corrupt government officials.[56]

According to economist Hernando de Soto, there are two main barriers to poor people's access to the formal economy. The first barrier is associated with unreliable record-keeping systems in developing countries. Second, individuals in these countries face an environment of distrust and uncertainty that can lead to their unwillingness to give information about themselves and their transactions to their own governments and other actors. For instance, the information can be used against them, which increases their vulnerability.[57] Various sources of uncertainty include burdensome regulations, defective policies and procedures. Corruption, bureaucracy, red tape and a lack of simple legal rules tend to discourage entrepreneurs from registering their businesses. Factors such as high tax rates and the absence of monitoring and compliance of both registration and tax regulations also decrease the attractiveness of formal registration.[58] A high proportion of entrepreneurial firms in developing countries thus remain informal, because formalization entails significant costs.

Although precise estimates regarding the size of the informal economy are hard to come by, various attempts have been made to estimate the size of informal sectors as a proportion of G.D.P. and total employment. In general, the proportion of informal economy tends to be higher if a country is economically less developed.

Hernando de Soto, who is well known for his work on informal and unofficial economy, argues that the lack of formal title to unregistered houses, small business assets and other properties costs the world economy US$9 trillion in "dead capital".[59] These assets have owners but no formal documentation. Accounting for the gains that have been lost due to the failure to register their assets, which have instead accrued to the formal economy counterparties, a recent revised estimate of the loss to owners of assets without formal documentation has been put at US$20 trillion.[60]

A large informal sector would reduce a country's development potential and act as a constraining factor to fight against poverty. Formalization,

on the other hand, can encourage and stimulate entrepreneurial activities. Studies have also shown that people who have a formal title to their property are likely to invest up to 47% more in businesses.[61]

1.5.1.4 Poverty Reduction

Entrepreneurial activities contribute to poverty reduction through a number of mechanisms. One of the most important ways in which entrepreneurship would help poor people get out of the poverty trap is through job creation.[62] In this regard, it is worth noting that in developing countries, the private sector accounts for about 90% of jobs, and poor people consider self-employment and availability of jobs as the two most important ways to improve their lives. There is more. Entrepreneurial activities lead to higher degree of availability and low prices of goods and services consumed by poor people. A further mechanism whereby entrepreneurship can contribute to poverty reduction is through increased taxes. Taxes to corporations and commercial transactions are the main sources of government revenues, which can be invested in health, education and other public goods targeted to the poor.[63] In addition, increased taxes would also allow direct income transfers to poor households through government aids.

While some developing economies have experienced significant economic growth, the lack of mechanisms to trickle down the benefits to the poor represents a fundamental challenge facing them. The benefits of economic growth in most developing economies are highly concentrated and disproportionately distributed to the well-connected and wealthiest individuals. For instance, while Indonesia's G.D.P. growth rate has been substantial, there has been relatively little job growth and only wealthy elites have benefited from the economic growth.[64]

Likewise, in 2024, India's 100 wealthiest tycoons collectively achieved a historic milestone, with their combined wealth exceeding 1 trillion dollars for the first time.[65] According to a report by Oxfam, India's wealth inequality remains stark. In 2021, the top 1% of the population controlled over 40.5% of the nation's total wealth. The number of billionaires in India rose sharply from 102 in 2020 to 166 in 2022, while a significant portion of the population struggled to afford basic necessities for survival.[66]

1.5.2 Determinants of Entrepreneurship

A study conducted in European countries found that very little of the difference in a worker's propensity to engage in self-employment is explained by observable characteristics of the worker.[67] This means that various aspects of the business environment such as government regulations, societal perception of entrepreneurship and access to finance and other resources affect individuals' ability and willingness to engage in entrepreneurial activities. As

noted earlier, key determinants of entrepreneurship include (a) regulatory framework; (b) values, culture and skills; and (c) access to finance, markets, R&D and technology.

In Chapter 2, we discuss these factors as key elements of an entrepreneurial ecosystem with special emphasis on the roles of policy and regulation and illustrate them with a number of success stories. Since the lack of finance is arguably often the biggest roadblock for potential entrepreneurs to materialize the goal of starting their own businesses, in Chapter 3, we undertake an in-depth treatment of the various sources of entrepreneurial finances and their variation across the world.

In Chapters 4–10, we examine the above key determinants of entrepreneurship in the contexts of a range of economies such as O.E.C.D. countries (Chapter 4), the Former Soviet Union and Central and Eastern Europe (Chapter 5), the G.C.C. (Chapter 6), Africa (Chapter 7), China (Chapter 8), India (Chapter 9) and Latin America (Chapter 10). In the Appendix, we make use of these factors to analyze two developing world-based entrepreneurial firms.

1.5.2.1 Regulatory Framework

Government policies and actions affect the costs, risks and barriers to competition faced by entrepreneurial firms and hence the range of opportunities that are potentially profitable. While there have been a lot of complaints about high tax rates in some economies, studies have shown that there are other bigger obstacles. In some countries, poor infrastructure, burdensome regulation, contract enforcement difficulties, crime and corruption can amount to over 25% of revenues or over three times what firms pay as taxes.[68] While there are a variety of mechanisms by which laws, regulations and policy would affect a country's entrepreneurial performance, this section focuses on three major aspects: corporate bankruptcy laws, labor regulations and property rights.

1.5.2.1.1 CORPORATE BANKRUPTCY LAWS

Corporate bankruptcy laws are among the most discussed issues. This issue is important as the average time taken by bankruptcy proceedings is less than two years in industrialized countries compared to 4.5 years in South Asia. U.S. corporate bankruptcy law has been a role model for many countries. In an attempt to provide reorganization opportunities for corporations experiencing financial difficulties, dozens of countries are upgrading their regulative institutions. For instance, since 2002, the United Kingdom has passed a series of Enterprise Acts, which aim to make it easier for failed entrepreneurs to enjoy a fresh start. China's new bankruptcy law adopted

in 2007 has made restructuring of insolvent firms easier. Some Islamic countries, which still have a negative view of bankruptcy, are also adopting more lenient bankruptcy laws. The U.S. Department of Commerce's Commercial Law Development Program reported that it advised G.C.C. economies such as Oman, Bahrain and the U.A.E. on new draft insolvency laws.[69]

According to the World Bank, during 2004–9, 59% of industrialized economies improved corporate bankruptcy laws. The proportions for developing countries were 33% in East Asia, 22% in Latin America, 16% in the Middle East and 13% in South Asia.[70] Inefficiency in legal systems and retributive attitudes toward the debtor have made the adoption of American corporate bankruptcy law difficult in developing countries.

1.5.2.1.2 LABOR REGULATIONS

Some labor regulations limit businesses' capacity to grow and compete in the global economy. In India, for instance, companies with more than 100 employees require government permission to dismiss workers. In order to fire a worker in Burkina Faso, an employer is required to re-train a worker, find them another job and pay severance package equivalent to 18 months' wages.[71] Similarly, firing workers is almost impossible in Venezuela. Furthermore, many employees in the country want nationalization of their companies so they can become government employees, who have better perks and a higher level of job security than most private firms.[72]

1.5.2.1.3 PROPERTY RIGHTS

Clear property rights would allow entrepreneurs to use the assets as collateral and thus increase their access to capital. Especially for entrepreneurial firms that rely heavily on intellectual property (I.P.), they face a unique challenge in economies with weak I.P. protection laws and enforcement mechanisms. In most industrialized countries, duties and obligations to one's former employer, confidentiality clauses and noncompete agreements would prohibit a departing worker from taking valuable information with them. Observers have noted that such agreements are ineffective in some economies such as Russia. For instance, an employee in the Russian Internet advertiser, System.ru, reportedly took the firm's entire client database to a newly formed rival.[73] In this regard, strong property rights allow an existing company to prevent other entrepreneurs from starting their own ventures using the I.P. developed by the former. Conversely, young startups that own strong property rights can be in a position to compete against established companies.

1.5.2.2 Values, Culture and Skills

Values, culture and skills are composed of many different elements. One economy may outperform another on some elements but fall behind on others. For instance, according to Ernst & Young's (E.Y.) G20 Entrepreneurship Barometer 2013 (www.ey.com/gl/en/services/strategic-growth-markets/ey-g20---entrepreneurship-culture), the United States was found to have the best entrepreneurship culture overall.

However, it is argued that Europe outperforms the United States on some components of values, culture and skills. For instance, some have noted that advantages of Europe over the United States include a more stable workforce, relatively less hostility to immigrants and a large number of high-quality engineering schools.[74]

Societies differ in their orientation toward failure. The stigmatization of entrepreneurial failure involves the negative labeling or perception of failure in entrepreneurship. According to the E.Y. G20 Entrepreneurship Barometer 2013, in the G20 economies, only about a quarter viewed business failure as an opportunity to learn compared to 43% in the United States (Ey.com, 2013).[75] A U.K.-based Internet entrepreneur noted: "In the UK, there is a stigma against business failure among the general public, whereas in the US it's almost a badge of honor" (Singleton, 2008).[76] Likewise, some describe China's culture as "success-obsessed", which is incompatible with the prevalence of failure in startup ventures.[77] Thus, intrinsic costs of failures vary across societies with different degrees of stigmatization of failure.

1.5.2.2.1 THE IMPACT OF CULTURE AND VALUES ON ENTREPRENEURIAL PATTERNS ACROSS SOCIETIES

The underlying values and culture of a society affect the entrepreneurial patterns. First, societies across the world vary in their propensity to take risks. In the Arab world, for instance, large corporate bureaucracies are found to be risk averse. The lack of a tradition of private entrepreneurship in many of the economies in Former Soviet Union and Central and Eastern European countries is arguably related to an underdeveloped risk-taking culture in the absence of local norms and social networks providing support for such a culture.[78] Managers with experience in state-owned enterprises in these economies tend to be risk averse.

In some societies, family and social obligations act as barriers to productive entrepreneurship. Entrepreneurs are expected to provide jobs and even redistribute their wealth and income to the members of their extended family and to the society. For instance, accumulating a huge amount of wealth is still a delicate subject in China, and some people in the society expect entrepreneurs to provide socialist benefits. Some Chinese entrepreneurs are

thus still sensitive to the society and the Communist Party that resist ideas related to the ownership of private property.

The concept of high- and low-context cultures would help us understand the international differences in entrepreneurial orientation.[79] In high-context cultures such as those of Asia and the Middle East, which are characterized by relational and collectivist values, people prefer to enter well-established institutions and organizations. For instance, in Japan, employment in large corporations is viewed as more prestigious and respected than in the United States. Thus, in Japan, more educated and qualified people tend to gravitate toward careers in large corporations. Likewise, a survey conducted in 2010 indicated that 52% of Arab population in the 15–29 age group preferred government employment over a private sector job. Moreover, 45% of aspiring entrepreneurs in the region preferred a public sector job.[80]

Cultural differences are also linked to differences in personal characteristics between entrepreneurs and people with other occupations. For instance, a comparative study of Japan and the United States showed that entrepreneurs in Japan had significantly different personal characteristics than managers of large corporations. Silicon Valley entrepreneurs, on the other hand, showed less personality differences with managers from large corporations.[81]

Religions and ethical systems are also linked to entrepreneurial performance. For instance, Confucianism, some forms of Christianity and Judaism arguably play roles in shaping habits and values that promote economic success including the belief that people can influence their destinies. For instance, it is argued that the Jewish faith is learning-based, not rite-based, which encourages a belief in progress and personal accountability.[82]

1.5.2.2.2 ENTREPRENEURIAL SKILLS

Economies worldwide exhibit a high degree of heterogeneity in terms of education systems' ability to prepare students for entrepreneurship. This is important as a study conducted with self-employed individuals enrolled in a Peruvian microfinance program indicated that even a little entrepreneurship training can significantly enhance the business performance.[83] A related point is that entrepreneurial firms face difficulty in finding skilled talent. Especially, S.M.E.s are reported to face difficulties in finding and retaining skilled and highly qualified personnel.

For instance, researchers have found that one reason for Chinese graduates' lack of preparedness to entrepreneurship concerns the Chinese education system that is traditionally based on rote learning. A number of surveys have indicated that while critical thinking is encouraged in the West, this aspect is not emphasized in China. The lack of skills and experiences to manage various types of entrepreneurial ventures has hindered Chinese companies' international expansion activities. For instance, China is reported to

have a large number of venture capitalists interested in funding U.S. start-ups, but they lack skills and experience to manage venture investments.[84]

The lack of entrepreneurial education and training has also been a matter of concern in developing economies. In Africa, entrepreneurship education is rarely part of mainstream curricula for children. Business training typically begins at the tertiary level, and less than 10% of the continent's youth advance to that stage of education.[85] Western universities are identifying opportunities to address this gap by offering tailored entrepreneurship programs and expanding their presence in Africa. European business schools are increasingly engaging with Africa to support entrepreneurship and entrepreneurial development, responding to the continent's youthful population, abundant resources and entrepreneurial talent. Schools like HEC Paris and Frankfurt School of Finance and Management offer tailored entrepreneurship programs, such as master's degrees and M.B.A.s, to address challenges like limited access to education and funding. These initiatives emphasize practical skills and global networking to help entrepreneurs expand their reach and foster innovation in sectors like agribusiness, technology and energy. Collaborations with local institutions and entrepreneurs aim to build ecosystems that encourage sustainable business growth, entrepreneurship, job creation and economic progress, while acknowledging the need for localized approaches to tackle Africa's unique challenges.[86]

1.5.2.3 Access to Finance, Markets, R&D and Technology

1.5.2.3.1 ACCESS TO MARKETS

Access to and demands of an entrepreneurial firm's products in the domestic and foreign markets are critical factors determining the attractiveness of entrepreneurial activities. In addition to private demand, procurement regulations and policies that give priority to new companies in government contracts for goods and services would create better opportunities for potential entrepreneurs.

On the other hand, the lack of antitrust laws in some economies leaves anticompetitive conducts entirely unregulated. In such economies, one or a few dominant firms misuse their market power, in some cases by forming anticompetitive collusion or anticompetitive mergers, which create entry barriers to new firms and deter entrepreneurship.

According to *Business Ready 2024*, some economies perform poorly in Market Competition due to antitrust laws that fall short of good regulatory practices. On the plus side, antitrust enforcement in Africa is evolving rapidly, with countries updating competition laws, enhancing enforcement in key sectors like digital markets and introducing stricter merger control regimes. Egypt and Morocco have revamped their merger policies, shifting to premerger reviews and simplifying procedures, while imposing

significant penalties for noncompliance. Similarly, regional entities like Common Market for Eastern and Southern Africa (COMESA) and The African Continental Free Trade Area (AfCFTA) are refining competition laws, integrating broader considerations like public interest and sustainability and fostering collaboration among African nations to address market dynamics and digital economy challenges. These developments highlight the continent's proactive approach to modernizing antitrust regulations.[87]

1.5.2.3.2 ACCESS TO FINANCE

Entrepreneurs need capital in all phases of business life. A critical practical challenge that most potential entrepreneurs face is the ability to acquire the capital, from access to early seed funds to access to the stock markets. In general, initial wealth is positively related to an individual's entry into entrepreneurship.[88] When there is limited credit availability and the entrepreneurs' initial capital requirements are substantial, low-wealth households face higher barriers to starting an entrepreneurial venture.

Unavailability of bank loans in many developing economies is partly due to improper management of assets rather than unavailability of funds. Banks in many developing countries have adopted too conservative lending policies as reflected in the liquidity ratio of liquid assets to total deposits. They tend to maintain high proportions of their assets in liquid forms such as cash, deposits with other banks, central bank debt and short-term government securities. Access to finance is thus a more serious obstacle in less developed economies than developed ones.

Access to credit is a significant barrier to achieving goals and addressing unexpected challenges for individuals and small businesses alike. This issue is especially pressing in developing economies. For instance, in Pakistan – a country of 241 million people – fewer than 2 million have access to formal credit. By comparison, 82% of adults in the United States had access to credit as of 2022, and 64% of U.K. adults held a credit card as of November 2023.[89]

Entrepreneurs rely on a variety of funding sources to support their entrepreneurial activities. There are important differences across economies in terms of the availability and sources of finances. S.M.E.s account for less than 4% of the total loans of three of China's four largest banks. Consequently, most of the entrepreneurial funding in China is reported to come from unofficial, informal and even illegal channels. According to China's central bank, 89% of people and 57% of enterprises in Wenzhou city have borrowed money from such channels, who reportedly pay interest rates as high as 10% for 30 days, which translates to 214% for a year.[90] Quoting a Wenzhou businessman, an *Economist* article explained that there were 100,000 people in Wenzhou city who could raise as much as 1 billion yuan (US$150 million) each within 48 hours.[91]

1.5.2.3.3 R&D AND TECHNOLOGY

Access to technology greatly facilitates entrepreneurial activities. According to a report of the Internet Innovation and the Small Business and Entrepreneurship Council, a small business startup can save over US$16,000 by using high-speed broadband. For instance, high-speed broadband allows working from home rather than in the office, reducing costs associated with travel and office space. Similarly, due to lower startup costs for an online shop-front, Internet-based technologies can provide small firms the opportunity to overcome the limitations of size and compete more effectively and/or in larger markets with bigger-sized establishments. According to a European Union–commissioned study on internationalization of S.M.E.s, a firm's e-commerce adoption is positively correlated with its chance of being active in export or import markets.

Access to technology is limited in many developing and least developed countries due to unavailability and the lack of affordability of ICT hardware, software and services. For instance, limited access to reliable electricity and essential services has hindered broadband expansion in Africa. By 2021, only a third of the continent's 1.34 billion population across 54 countries had broadband access.[92]

Finally, R&D would provide opportunities for high-quality entrepreneurship and enhance an entrepreneurial business's competitiveness. R&D would help create new inventions and innovations, which can be used to develop new products, services or processes. Firm- and country-level studies have linked R&D activities with high entrepreneurial performance. A comparison of East Asian economies indicated that successful entrepreneurial economies had a higher R&D performance.[93] At the firm level, the probability of successfully launching a new product increases with an increase in R&D investment. R&D activities affect performances of new and existing firms via different mechanisms, and perhaps in different contexts. Since most startups are less likely to have a direct access to large R&D facilities, they often rely on employees who have gained R&D-related knowledge and experience with previous employers. In this way, while existing firms engage in R&D activities to improve existing products, startups benefit from knowledge spillovers and the existing stock of knowledge by combining in new and innovative ways to launch new products.[94]

One reason many low-income countries struggle with entrepreneurship is their limited investment in research and development activities. For instance, data from the World Bank reveals that African nations allocated an average of just 0.45% of their G.D.P. to research R&D in the early 2020s, significantly lagging behind the global average of 1.7%.[95] Africa significantly trails behind other regions in registered patents, with only 1,330 patents filed by residents in 2017, in stark contrast to Asia's 592,508. Additionally,

in Africa, patents are more commonly registered by nonresidents than by local residents.[96]

Countries exhibit substantial variation in the primary sources of R&D funding, with some relying predominantly on government investment, while others see the private sector as the main contributor. For instance, in Saudi Arabia, government funding constituted the largest share of R&D spending in 2023, amounting to SR12.12 billion or 53.6% of the total. The private sector contributed SR9.31 billion, while the higher education sector received SR1.17 billion.[97] On the other hand, in nations like the United States, the private sector often dominates R&D investment. In 2021, U.S. government agencies, excluding the Department of Defense, allocated approximately $1.5 billion to A.I. research and development, while the European Commission dedicated around €1 billion (approximately $1.05 billion) annually to similar efforts.[98] In stark contrast, companies globally invested over $340 billion in A.I. research during the same year,[99] most of which came from the United States, underscoring the dominant role of the private sector in driving advancements in artificial intelligence. This disparity highlights differences in economic structures, policy priorities and levels of industrial development globally.

1.6 Becoming a Successful Entrepreneur in Different Countries

While entrepreneurial traits such as a high need for achievement, innovative thinking, creativity, breakthrough ideas, high risk-taking propensity, perseverance and flexibility are more or less universal for becoming a successful entrepreneur, the ability to fit to the environment is no less important. The success of an entrepreneur interested in starting entrepreneurial venture in multiple countries may hinge on the ability to learn and adapt to the unique environmental contexts, overcome the challenges and take advantage of the various international differences. For instance, an entrepreneur needs to have a good understanding of the market and market dynamics; knowledge about customers' needs and wants; the ability to acquire financial resources and recruit people with appropriate knowledge, skills and experience; and manage them. An entrepreneur who successfully manages these factors in one institutional setting does not necessarily mean that he/she can do so in other settings.

In some cases, the fact that important ingredients are missing in the economy means that entrepreneurial firms need to take extra efforts and measures. For instance, due to the lack of entrepreneurial education in India, the country's successful companies invest heavily in employees through extensive training and development in firm-specific skills. One study found that firms in the country's I.T. industry provide 60 days of formal training to newly hired employees and they are paid during the period. Some firms go

even further. For instance, Tata Consultancy Services is reported to have a seven-month training program for science graduates in order to convert them into business consultants, and every employee in the company gets 14 days of formal training annually.[100]

In some societies, entrepreneurial successes have to be achieved within a culture that is hostile to capitalism and entrepreneurship. While small-scale entrepreneurs may not be in a position to change such perception, large organizations, either singly or in cooperation with other organizations or the government agencies, can take measures to change negative social image associated with entrepreneurs and entrepreneurship. In many emerging economies, a market economy does not function well. In these economies, institutional rules related to entrepreneurship tend to be incomplete, ambiguous and sometimes conflicting with one another. In countries with underdeveloped market economy, some entrepreneurs also take initiatives to create new market institutions. Such entrepreneurs are also known as institutional entrepreneurs.

Financing sources that are common in industrialized countries such as bank loans or personal and business credit cards are not readily available in most developing countries. In such cases, alternative sources such as informal financing may be more appropriate. Entrepreneurs can also take advantage of special sources such as subsidized government financing in some countries.

Relevant cultural, religious and spiritual networks also help increase market access for some entrepreneurs. Some examples include entrepreneurs utilizing the Mouride Brotherhood in Senegal and the Gambia, and Indian Sikhs.[101] Many followers of the Mouride Brotherhood, with roots in Senegal's Touba, for instance, work as street vendors selling sunglasses, bags and souvenirs and in other small-scale entrepreneurial activities in Western countries such as Italy, France, Spain and the United States. Mouridism preaches the responsibility to look after others within the Brotherhood. The followers of the Brotherhood, abroad and at home, donate to the Brotherhood, which in turn provides business loans and other help to other followers. Likewise, studies conducted among immigrants living in Europe, the Americas and Australia have indicated that diaspora-based networks from China, India, Pakistan, South Korea, Sri Lanka, Vietnam and other parts of the world help immigrants from their countries of origin to access resources and develop business ideas as well as facilitate market access.[102]

Finally, the true success of an entrepreneurial activity, irrespective of wherever it has been carried out, can only be assessed by the impact it has upon the society, the economy and the environment. Entrepreneurial activities need to be performed in such a way that they minimize negative impacts and maximize positive impacts on the society, the economy and the environment.

1.7 Creating an Entrepreneurial Economy and Society

Policy makers keen to improve entrepreneurial outcomes can take various measures. Policy interventions can be oriented to create rewards for productive entrepreneurial activity and levy penalties for unproductive or destructive ones. An improvement in the legal system in areas such as contract and property rights and favorable tax policy is a promising way to stimulate productive entrepreneurial activity. There is also a need to infuse and nurture a value system and culture in which creating jobs is encouraged more than getting a job.

Various entrepreneurial outcome indicators discussed above can be improved by encouraging foreign multinationals to engage in local procurement, sourcing and collaborating with local suppliers, distributors and retailers to create value and increase efficiency in the supply chain. For instance, Nestle sources milk locally from nearly 150,000 Pakistani farmers. A study on Unilever in Indonesia shows that by supporting such linkages the company created approximately 90 additional jobs for each direct job created in the company.[103] Evidence from economies such as China and Taiwan indicates that linkages to multinational corporations could provide an efficient channel to gain access to technical know-how.[104]

The most promising entrepreneurial activities are those that encourage the participation of the most underrepresented population segment and produce positive impacts on the economy, the society and the environment. To take an example, female entrepreneurs in Mali use solar energy to dry mango products and market them.[105] Government support to such activities could significantly contribute to creating a successful entrepreneurial society. In particular, reducing gender disparity in access to resources can lead to better entrepreneurial outcomes. One study found that agricultural productivity can be increased by as much as 20% in Sub-Saharan Africa if women's access to land, seed and fertilizer, and other resources, is increased to the same level as men's.[106]

Research has also indicated that individuals who have gained access to training and education are likely to have an improved entrepreneurial orientation. For instance, it was found that over 70% of students that participated in the Young Enterprise entrepreneurship program developed positive attitudes toward starting their own businesses. Likewise, half of the trainees that graduate from the International Labour Organization's training program start a new business.[107]

In light of the various benefits that can arise from the formal sector, policy makers should formulate strategies to formalize the informal sector. Formalization of the informal sector is likely to contribute in a significant way to poverty alleviation. The Peruvian economist De Soto, for instance, describes poor people as small entrepreneurs, who have been stuck in a

poverty trap because their wealth is informal. While formalization of the informal wealth may likely face opposition from businesses and national elites, a strong government, public funding, an efficient bureaucracy and substantial legal changes may help accomplish this goal.[108]

Not all firms are created equal. In order to achieve higher rates of economic growth and jobs creation, policy incentives need to be established to encourage high-quality or high-expectation companies instead of just any businesses. One way to achieve this would be to reduce incentives and support for the establishment of low-quality companies. Some have suggested that the government should act like a venture capitalist and encourage only innovative companies.[109]

Finally, the impacts of entrepreneurship should extend beyond economic outcomes and also focus on social aspects. Entrepreneurs contribute to societal well-being by tackling local challenges, generating employment opportunities and fostering social change. Through their ventures, they drive improvements in education, healthcare and sustainability, creating more inclusive growth and reducing inequalities, especially in emerging and developing economies. Social entrepreneurship, in particular, is key to addressing pressing social issues and promoting positive community development.

A key concept is Social and Solidarity Economy (S.S.E.), which involves economic activities prioritizing social and environmental goals over profit, where citizens collectively work for economic democratization. It encompasses terms like "social economy" and "solidarity economy" and seeks to reassert social control over the economy, linking it to society and nature. While some S.S.E. organizations address specific community needs, others aim to transform economic systems based on values like democracy, equity, cooperation and human rights. S.S.E. emphasizes ethical economic practices, democratic governance, reciprocity and active citizenship.[110] In 2023, the social economy represented approximately 7% of global G.D.P. and contributed up to 10% of employment in some countries.[111] Brazil's solidarity economy is highly advanced, having developed significantly since the late 1990s in response to global economic changes and reduced formal employment opportunities. The movement was formalized in 2003 with the establishment of the Brazilian Forum on Solidarity Economy and the appointment of a National Secretary of Solidarity Economy. As of 2023, Brazil hosts over 120 local solidarity economy forums and 27 state forums, with ongoing collaboration between these forums, working groups and the government to enhance the movement.[112]

1.8 Concluding Comments

Entrepreneurs contribute to the national economy in several ways. Some of the important mechanisms associated with entrepreneurs' role in generating

wealth and income include creating jobs, providing competition to the existing businesses, helping to improve productivity by bringing innovations in product and process, introducing new goods and services, reducing prices of existing products, advancing technological development and enhancing the competitive position of an economy.

While societal, governmental and economic environments for entrepreneurship have dramatically improved and entrepreneurial activities have exhibited an explosive growth rate worldwide in recent years, significant international differences exist with respect to the availability and structure of entrepreneurial opportunities as well as the impacts, performance measures and various determinants of entrepreneurship.

Considerable variation across population segments can be observed in the willingness and abilities to pursue and respond to entrepreneurial opportunities. In some economies, a large gender gap in the participation in entrepreneurial activities exists, which can be attributed to differential access to resources, differential societal expectations and differential opportunities for men and women. It is thus essential to design appropriate policy intervention in light of the fact that increased female participation in entrepreneurial activities has a strong positive impact on the society and the economy of any country.

Unaffordability and unavailability of Internet and broadband have hampered entrepreneurial activities in some developing and least developed countries. However, improving connectivity and decreasing Internet and broadband prices provide hope for underprivileged potential entrepreneurs from these countries.

1.9 Discussion Questions

1. Why is it important to formalize the informal sector?
2. What are the various forms of capitalism? Give an example of a country, which has a prevalence of each form of capitalism.
3. What is oligarchic capitalism? How does it affect a country's economic development?
4. What is destructive entrepreneurship?
5. How are the indicators related to determinants, entrepreneurial performance and entrepreneurial impacts related?
6. How can unproductive and destructive entrepreneurship be discouraged?
7. Please select an economy that is among the most friendly to small businesses and another economy that is among the least friendly to small businesses. Do some research on determinants of entrepreneurship in these countries and compare them. What conclusions can you draw?

1.10 End of the Chapter Case: Challenges and Opportunities for Women Entrepreneurs: Insights from the Mastercard Index

Since 2017, the M.I.W.E. has measured the variations in economic, financial, political and cultural environments across economies concerning women entrepreneurs.[113] Mastercard's fifth annual Index of Women Entrepreneurs study, conducted in 2021, examined 65 global economies to assess the impact of targeted support for women-led businesses on sustainable economic growth.[114]

The United States led the world in supporting female entrepreneurship with a score of 69.9, followed closely by New Zealand and Canada. Among the 65 countries in the index, Bangladesh received the lowest score (32.5), with Egypt and Malawi following closely behind (Figure 1.3). This highlights the disparities in support for women entrepreneurs globally. The M.I.W.E. reveals that women in certain Middle Eastern, African and Asian economies, including Egypt, Saudi Arabia and Japan, face more challenges in advancing as business leaders and skilled professionals compared to their global peers.[115]

The M.I.W.E. assesses women's economic and entrepreneurial conditions using three pillars: the outcomes of women's advancement, access to knowledge and financial resources and the supporting entrepreneurial ecosystem.

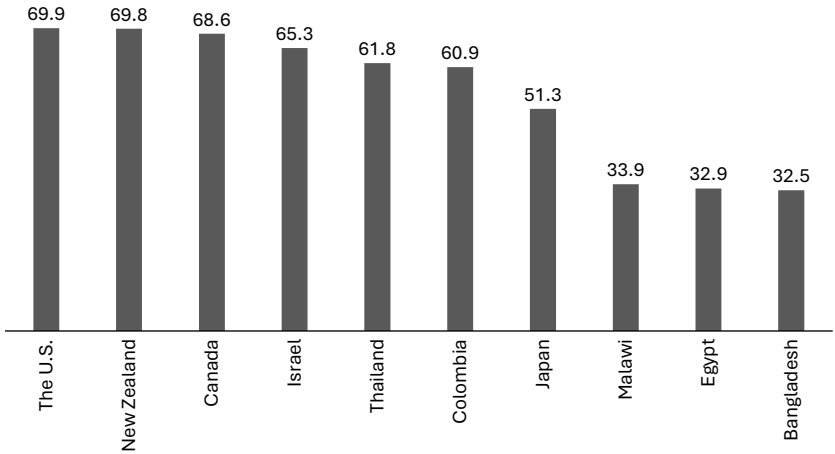

Figure 1.3 M.I.W.E. for Selected Countries

1.10.1 Women's Advancement

The component on women's advancement is measured using four indicators: labor force participation, business leadership roles, entrepreneurial activity rates and the extent of gender-based disparities in these areas, all reflecting women's professional and economic progress.

Less than half (43%) of working-age women in Bangladesh participate in the labor market, compared to 80% of men (Bangladesh Bureau of Statistics). Among those employed, a vast majority (96.6%) are engaged in informal work, often characterized by home-based, seasonal and low-paying jobs.[116]

1.10.2 Access to Financial Resources and Knowledge

The M.I.W.E. assesses women's access to financial resources and knowledge, examining factors like entrepreneurial finance, gender bias in financial services and financial inclusion. It also evaluates government support for S.M.E.s, considering policies and programs that promote business growth. These indicators help measure women's ability to advance professionally and economically, providing a comprehensive view of their entrepreneurial landscape.

Women entrepreneurs in underperforming countries such as Bangladesh face several barriers across these key indicators, including limited access to financial resources. For instance, while the Bangladesh Bank mandates that at least 10% of the credit guarantee scheme be allocated to female entrepreneurs, only 2%–3% of this allocation is actually realized in practice.[117]

1.10.3 Supporting Entrepreneurial Ecosystem

The supporting entrepreneurial ecosystem is a critical measure of female entrepreneurship progress within an economy. It evaluates competitiveness through indicators like institutions, policies and economic factors, replacing the discontinued "ease of doing business" index. It also incorporates entrepreneurial attitudes and perceptions, such as perceived opportunities, business capabilities and government effectiveness. Additionally, entrepreneurial conditions like infrastructure, intellectual property protection and access to skilled employees are essential to fostering growth, particularly for women entrepreneurs.

1.10.4 Conclusion

The M.I.W.E. underscores the persistent disparities in economic and entrepreneurial opportunities for women across different regions. While advanced economies like the United States, New Zealand and Canada excel in supporting female entrepreneurship, countries like Bangladesh face

significant barriers due to limited financial inclusion and a weak entrepreneurial ecosystem. Addressing these gaps through targeted interventions in finance, education and policy could unlock significant economic growth and gender equity globally.

Notes

1 Ford, B., & Spence, M. (2022, March 21). *The explosion of global entrepreneurship*. General Atlantic. https://www.generalatlantic.com/media-article/the-explosion-of-global-entrepreneurship/
2 Central Intelligence Agency. (n.d.). *Real GDP per capita: Country comparisons*. The World Factbook. https://www.cia.gov/the-world-factbook/field/real-gdp-per-capita/country-comparison/
3 U.N.D.P. (2024, June 5). *From fruit vendor to CEO: Maka's inspiring journey*. United Nations Development Programme. https://www.undp.org/south-sudan/news/fruit-vendor-ceo-makas-inspiring-journey
4 World Bank. (n.d.). *Entrepreneurship database*. World Bank. https://www.worldbank.org/en/programs/entrepreneurship
5 Murphy, A., & Schifrin, M. (2024, June 6). *Forbes 2024 global 2000 list: The world's largest companies ranked*. Forbes. https://www.forbes.com/lists/global2000/
6 Dyvik, E. H. (2024, July 4). *Top companies in the world by revenue 2023*. Statista. https://www.statista.com/statistics/263265/top-companies-in-the-world-by-revenue/
7 Africa Center. (2022, June 22). *Africa media review for June 22, 2022*. Africa Center. https://africacenter.org/daily-media-review/africa-media-review-for-june-22-2022/
8 RocketReach. (2024). *DAL Group information*. https://rocketreach.co/dal-group-profile_b5d58bc4f42e3aab
9 Brown, S. (2024, January 17). *How generative AI is changing entrepreneurship*. MIT Sloan. https://mitsloan.mit.edu/ideas-made-to-matter/how-generative-ai-changing-entrepreneurship
10 Kshetri, N. (2024). Empowering African development: The transformative potential of artificial intelligence across sectors. *IEEE IT Professional*, *26*(4), 97–103.
11 Murphy, A., & Schifrin, M. (2024, June 6). *Forbes 2024 gobal 2000 list: The world's largest companies ranked*. Forbes. https://www.forbes.com/lists/global2000/
12 Newport, F. (2016). *Americans' views of socialism, capitalism are little changed*. http://news.gallup.com/poll/191354/americans-views-socialism-capitalism-little-changed.aspx.
13 Pew Research Center. (2022, September 19). *Modest declines in positive views of 'socialism' and 'capitalism' in U.S.* https://www.pewresearch.org/politics/2022/09/19/modest-declines-in-positive-views-of-socialism-and-capitalism-in-u-s/
14 Edelman. (2020). *20th annual Edelman Trust Barometer: Global report*. https://cdn2.hubspot.net/hubfs/440941/Trust%20Barometer%202020/2020%20Edelman%20Trust%20Barometer%20Global%20Report-1.pdf
15 Pankiw, S. (2024, October 29). *Business Ready 2024: Outlining a path to global prosperity*. U.S. Chamber of Commerce. https://www.uschamber.com

/international/business-ready-2024-reforming-global-business-to-achieve-prosperity

16 International Bank for Reconstruction and Development / The World Bank. (2024). *Business Ready 2024*. https://openknowledge.worldbank.org/server/api/core/bitstreams/08942fab-9080-4f37-b7be-ef61c9f9aed9/content

17 International Bank for Reconstruction and Development / The World Bank. (2024). *Business Ready 2024*. https://openknowledge.worldbank.org/server/api/core/bitstreams/08942fab-9080-4f37-b7be-ef61c9f9aed9/content

18 Baumöl, W. S., Litan, R. E., & Schramm, C. J. (2007). *Good capitalism, bad capitalism, and the economics of growth and prosperity*. Yale University Press.

19 Morris, R. (2011). *GEM endeavor 2011 high impact entrepreneur entrepreneurship repor*t. http://gemconsortium.org/docs/295/gem-endeavor-2011-high-impact-entrepreneurship-report

20 Sayigh, Y., & Meddeb, H. (2024, August 19). *The military and private business actors in the Global South: The politics of market access*. Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2024/08/the-military-and-private-business-actors-in-the-global-south-the-politics-of-market-access?lang=en

21 Sayigh, Y., & Meddeb, H. (2024, August 19). *The military and private business actors in the Global South: The politics of market access*. Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2024/08/the-military-and-private-business-actors-in-the-global-south-the-politics-of-market-access?lang=en

22 Sayigh, Y., & Meddeb, H. (2024, August 19). *The military and private business actors in the Global South: The politics of market access*. Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2024/08/the-military-and-private-business-actors-in-the-global-south-the-politics-of-market-access?lang=en

23 Murray, C. (2024, July 18). Mexico challenges 'neoliberal privatisation'. *Financial Times*. https://www.ft.com/content/390b64d0-77fc-452c-b41a-0105f006f61c

24 Murray, C. (2024, July 18). Mexico challenges 'neoliberal privatisation'. *Financial Times*. https://www.ft.com/content/390b64d0-77fc-452c-b41a-0105f006f61c

25 Adly, A. I. (2009). Politically-embedded cronyism: The case of post-liberalization Egypt. *Business and Politics*, *11*(4). www.bepress.com/bap/vol11/iss4/art3

26 EMF (Emerging Markets Forum). (2009). India 2039: An affluent society in one generation. www.emergingmarketsforum.org/papers/pdf/2009-EMF-India-Report_Overview.pdf

27 According to Plato, "oligarchy" is governance by a small group of people. In Plato's approach, oligarchs are different from nobles in terms of legality. Whereas nobles are few but rightful rulers, oligarchs rule in an unlawful way. In the contemporary literature, an oligarch is a large business owner controlling sufficient resources to influence national policymaking and/or judiciary to further his/her economic interests.

28 World Bank. (2018). *Women entrepreneurs finance initiative*. www.worldbank.org/en/programs/women-entrepreneurs

29 World Bank. (2018, March 29). *Women, business and the law 2018*. https://live.worldbank.org/women-business-and-law-2018-report-launch

30 Berg, R. C., Rubio, J., & Laske, N. (2024, March 8). *Catalysts of change: How entrepreneurs are transforming Latin America*. https://www.csis.org/analysis/catalysts-change-how-entrepreneurs-are-transforming-latin-america

31 Muravyev, A., Schaefer, D., & Talavera, O. (2008). Entrepreneurs' gender and financial constraints: Evidence from international data. http://ideas.repec.org/p/kse/dpaper/11.html
32 Bugshan, F. (2012). Lack of mentors may hinder Women's entrepreneurship in GCC. *Gallup Poll Briefing*, *15*, https://news.gallup.com/poll/155204/Lack-Mentors-May-Hinder-Women-Entrepreneurship-GCC.aspx.
33 Frazier, D. (2012). *Indonesia minister: 'We need four million entrepreneurs'*. www.forbes.com/sites/donaldfrazier/2012/05/14/indonesian-minister-we-need-four-million-entrepreneurs/
34 Gandhi, G. (2010, February 16). *Indian entrepreneurs need a hug: Google's Gandhi*. http://blogs.wsj.com/india-chief-mentor/2010/02/16/indian-entrepreneurs-need-a-hug-google%E2%80%99s-gandhi/
35 Lefe, A. (2023). *The 2023 Global Startup Index*. Business Name Generator. https://businessnamegenerator.com/learning-hub/the-global-startup-index/#The-Five-Most-Challenging-Countries-in-Which-to-Launch-a-Startup
36 Blanchflower, D. G., Oswald, A., & Stutzer, A. (2001). Latent entrepreneurship across nations. *European Economic Review*, *45*(4–6), 680.
37 ECEI (European Commission Enterprise and Industry). (2010). *Eurobarometer Survey on Entrepreneurship*. ECEI.
38 Ahmad, N., & Hoffmann, A. N. (2008, January). A framework for addressing and measuring entrepreneurship. *OECD Statistics Working Paper*. www.olis.oecd.org/olis/2008doc.nsf/LinkTo/NT000009FA/$FILE/JT03239191.PDF
39 Baumol, W. J. (1990). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Political Economy*, *98*(5), 893–921.
40 Karabegović, A., & McMahon, F. (2008). Economic freedom in North America.www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/articles/EconomicFreedominNorthAmerica2008.pdf
41 Oxford Institute for Energy Studies. (n.d.). *Energy quantamentals: Who is who in financial barrels?* https://www.oxfordenergy.org/publications/energy-quantamentals-who-is-who-in-financial-barrels/
42 Baumol, W. J. (2008). *Mega entrepreneurs: Active molders and creators of key institutions*. Mimeo, Berkley Center for Entrepreneurial Studies, New York University.
43 Murphy, K. M., Shleifer, A., & Vishny, R. W. (1993). Why is rent seeking so costly to growth? *American Economic Review*, *83*(2), 409–414.
44 Ahmad, N., & Hoffmann, A. (2008). A framework for addressing and measuring entrepreneurship. OECD Statistics Working Paper No. 2. https://ssrn.com/abstract=1090374
45 De Backer, K. (2008). *Definition and measurement of high growth enterprises: The OECD – EUROSTAT entrepreneurship indicator programme*. INNO-Views Policy Workshop, Brussels. Retrieved November 17, 2008, from www.proinno-europe.eu/extranet/upload/deliverables/1_1_De_Backer_WS06_Brussels7962.pdf
46 Audretsch, D. B., & Fritsch, M. (2002). Growth regimes over time and space. *Regional Studies*, *36*, 113–124.
47 Bains, E. (2009, June 26). Qatar tackles region's jobless youth. *MEED: Middle East Economic Digest*, *53*(26), 26–27.
48 United Nations. (2022, December 30). Arab region registers world's highest unemployment rate, UN survey finds. *UN News*. https://news.un.org/en/story/2022/12/1132112

49 Dyer, P., & Yousef, T. (2007). *Will the current oil boom solve the employment crisis in the Middle East?* Arab World Competitiveness Report, World Economic Forum, 31. http://belfercenter.ksg.harvard.edu/files/AWCR%203.pdf
50 Stangler, D., & Litan, R. E. (2009, November). Where will the jobs come from? *Kauffman Foundation Research Series: Firm Foundation and Economic Growth*.
51 Reynolds, P. D., Bygrave, W. D., Autio, E., Cox, L., & Hay, M. (2002). *Global Entrepreneurship Monitor 2002 executive report*. Babson College/London Business School.
52 Nickell, S. J., Nicolitsas, D., & Dryden, N. (1997). What makes firms perform well? *European Economic Review*, *41*, 783–796.
53 Carree, M., & Thurik, A. R. (1998). Small firms and economic growth in Europe. *Atlantic Economic Journal*, *26*(2), 137–146.
54 Country Specific Information. http://lnweb90.worldbank.org/eca/eca.nsf/1f3aa35cab9dea4f85256a77004e4ef4/ae1f227d6ac1b39085256a940073f4eb?OpenDocument
55 *Economist*. (2009). Reforming through the tough times, 71.
56 *Economist*. (2009). Reforming through the tough times, 71.
57 Casey, M. (2016, March 9). Could blockchain technology help the world's poor? www.weforum.org/agenda/2016/03/could-blockchain-technology-help-the-worlds-poor?utm_content=buffer913be&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer
58 Klapper, L., Amit, R., & Guillén, M. F. (2010). *Entrepreneurship and firm formation across countries* (pp. 129–158). www.nber.org/chapters/c8220
59 De Soto, H. (2000). *The mystery of capital*. Basic Books.
60 Casey, M. (2016). Could blockchain technology help the world's poor? www.weforum.org/agenda/2016/03/could-blockchain-technology-help-the-worlds-poor?utm_content=buffer913be&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer
61 *Economist*. (2009). Reforming through the tough times.
62 Smith, W. (2005, August 3). *Unleashing entrepreneurship, the Brookings Blum roundtable: The private sector in the fight against global poverty, Session I: Facilitating entrepreneurship's contribution to development*. www.brookings.edu/global/200508blum_smith.pdf
63 Smith (2005, August 3). *Unleashing entrepreneurship, the Brookings Blum roundtable: The private sector in the fight against global poverty, Session I: Facilitating entrepreneurship's contribution to development*. www.brookings.edu/global/200508blum_smith.pdf
64 Malhotra, H. B. (2009, September 22). *Oligarchic capitalism may take hold in India*. www.theepochtimes.com/n2/content/view/22829/
65 Karmali, N. (2024, October 9). *India's 100 richest 2024: Fortunes of Indian tycoons jump 40% blowing past $1 trillion*. Forbes Asia. https://www.forbes.com/sites/naazneenkarmali/2024/10/09/indias-100-richest-2024-fortunes-of-indian-tycoons-jump-40-blowing-past-1-trillion/
66 Sebastian, M. (2023, January 16). Richest 1% own 40.5% of India's wealth, says new Oxfam report. *BBC News*. https://www.bbc.com/news/world-asia-india-64286673
67 Fonseca, R., Michaud, P., & Sopraseuth, T. (2007). *Entrepreneurship, wealth, liquidity constraints, and start-up costs*. www.law.illinois.edu/publications/cllpj/archive/vol_28/issue_4/fonsecaarticle28-4.pdf
68 Smith, W. (2005, August 3). *Unleashing entrepreneurship, the Brookings Blum roundtable: The private sector in the fight against global poverty, Session I: Facilitating*

entrepreneurship's contribution to development. www.brookings.edu/global/200508blum_smith.pdf
69 commerce.gov. (2010, April 27). *Fact sheet-outreach to Muslim-majority countries. The U.S. Department of Commerce*. www.commerce.gov/news/fact-sheets/2010/04/27/fact-sheet-outreach-muslim-majority-countries
70 *Economist*. (2010). Making a success of failure, 68.
71 *Economist*. (2004, September 11). Measure first, then cut, 372 (8392).
72 Molinski, D., & Shirouz, N. (2009, December 26). Venezuela's president threatens Toyota. *GM*. http://online.wsj.com/article/SB10001424052748704039704574615990386867578.html?mod=WSJ_hpp_MIDDLTopStories
73 Baumgartner, E. (2001, June 25). Private enterprise. *Business Eastern Europe*, 4.
74 Basta, V. (2017). *Venture investing in the US and Europe are totally different industries*. https://techcrunch.com/2017/06/07/venture-investing-in-the-us-and-europe-are-totally-different-industries/
75 Ey.com. (2013). *The power of three: The EY G20 Entrepreneurship Barometer 2013*. http://www.ey.com/GL/en/Services/Strategic-Growth-Markets/EY-G20 – Entrepreneurship-culture
76 Singleton, A. (2008, January 15). T*he stigma of failure is bad for Britain*. http://blogs.telegraph.co.uk/alex_singleton/blog/2008/01/15/the_stigma_of_failure_is_bad_for_britain
77 ST (SeedInvest Technology). (2016). *Future of crowdfunding in Chin*a. https://www.seedinvest.com/blog/crowdfunding/futureofcrowdfundinginchina
78 Warner, M., & Daugherty, C. W. (2004). Promoting the 'civic' in entrepreneurship: The case of rural Slovakia. *Journal of the Community Development Society*, *35*(1), 117–134.
79 Hall, E. T. (1976). *Beyond culture*. Anchor Press.
80 Silatech. (2010, November). The Silatech index: Voices of young Arabs. *Gallup*, 16. http://sas-origin.onstreammedia.com/origin/gallupinc/media/poll/pdf/Silatech.Report.2010.Nov.pdf
81 Ohe, T., Honjo, S., Oliva, M., & Macmillan, I. C. (1991). Entrepreneurs in Japan and Silicon Valley: A study of perceived differences. *Journal of Business Venturing*, *6*(1991), 135–144.
82 Pease, S. L. (2009). *The golden age of Jewish achievement* (1st ed.). Deucalionn.
83 Karlan, D., & Valdivia, M. (2006). Teaching entrepreneurship: Impact of business training on microfinance clients and institutions, Yale University, typescript; Munshi, K. (2007). *From farming to international business: The social auspices of entrepreneurship in a growing economy*. NBER Working Paper No. 13065.
84 Tozzi, J. (2012, May 17). *China's next export: Venture capital*. www.businessweek.com/articles/2012-05-17/chinas-next-export-venture-capital
85 Junior Achievement Africa. (n.d.). *Entrepreneurship programs*. Junior Achievement Africa. Retrieved December 6, 2024, from https://ja-africa.org/entrepreneurship-programs/#:~:text=Unfortunately%2C%20few%20children%20receive%20entrepreneurship,reach%20that%20level%20of%20education
86 Murray, S. (2023, November 26). Europe's business schools target Africa's entrepreneurs: Expansion on continent focuses on a young, ambitious demographic hungry for skills. *Financial Times*. https://www.ft.com/content/71c87a0d-7703-4944-9fb0-700c17d9f72c
87 Nagy, T., & Khedr, N. (2024, September 3). *Antitrust enforcement is on the rise in Africa*. White & Case. https://www.whitecase.com/insight-our-thinking/africa-focus-summer-2024-antitrust-enforcement

88 Hurst, E. (2003). *Liquidity constraints, household wealth and entrepreneurship*. http://faculty.chicagobooth.edu/erik.hurst/research/final_entrepreneurship_JPE_sept2003.pdf
89 Ansari, O., & Javaid, M. (2024, August 6). Access to credit: The silent issue hampering growth and development in emerging economies. *World Economic Forum*. https://www.weforum.org/stories/2024/08/access-to-credit-slowing-growth-and-development/
90 *Economist.com*. (2011, March 10). Let a million flowers bloom. www.economist.com/node/18330120
91 *Economist.com* (2011, March 10). Let a million flowers bloom. www.economist.com/node/18330120
92 African Wireless Communications. (2021, September 6). *Why is broadband connectivity still a problem in Africa?* African Wireless Communications. https://www.africanwirelesscomms.com/news-details?itemid=4049&post=why-is-broadband-connectivity-still-a-problem-in-africa-641403
93 Amsden, A. H. (1991). Diffusion of development: The late industrializing model and greater East Asia. *The American Economic Review*, *81*(2), 282–289.
94 Acs, Z., Braunerhjelm, P., Audretsch, D., & Carlsson, B. (2009). The knowledge spillover theory of entrepreneurship. *Small Business Economics*, *32*(1), 15–30.
95 Kariuki, T., Mutimura, E., & Kadzamira, G. (2023, November 9). Innovative approaches for unlocking R&D funding in Africa. *World Economic Forum*. https://www.weforum.org/stories/2023/11/innovative-approaches-for-unlocking-research-and-development-funding-in-africa/
96 Madden, P. (2020, January 23). Figure of the week: Patent policies and their effects on African innovation. *Brookings*. https://www.brookings.edu/articles/figure-of-the-week-patent-policies-and-their-effects-on-african-innovation/
97 Narayanan, N. (2024, December 4). Saudi Arabia boosts R&D spending to $6bn in 2023 amid Vision 2030 push. *Arab News*. https://www.arabnews.com/node/2581035/business-economy
98 Nature Editorial. (2024, December 6). More-powerful AI is coming. Academia and industry must oversee it – together. *Nature*. https://doi.org/10.1038/d41586-024-03911-3
99 Ahmed, N., Wahed, M., & Thompson, N. C. (2023). The growing influence of industry in AI research: Industry is gaining control over the technology's future. *Science*, *379*(6635), 884–886. https://doi.org/10.1126/science.ade2420
100 Cappelli, P., Singh, H., Singh, J., & Useem, M. (2010). The India way: Lessons for the U.S. *Academy of Management Perspectives*, *24*(2), 6–24.
101 Kaplan, S. (2009). Faith and fragile states. *Harvard International Review*, *31*(1), 22–26.
102 Kitching, J., Smallbone, D., & Athayde, R. (2009). Ethnic diasporas and business competitiveness: Minority-owned enterprises in London. *Journal of Ethnic & Migration Studies*, *35*(4), 689–705.
103 Clay, J. (2005). *Exploring the links between international business and poverty reduction: A case study of Unilever in Indonesia*. Oxfam GB, Novib, Oxfam Netherlands, and Unilever.
104 United Nation Commission on the Private Sector Development. (2004). *Unleashing entrepreneurship: Making business work for the poor*. Report to the Secretary-General of the United Nations, UNDP.
105 afdb.org. (n.d.). Africa Commission Realising the Potential of Africa's Youth. www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents

/Report%20of%20the%20Africa%20Commission-Realising%20the%20Potential%20of%20Africa%27s%20Youth.pdf
106 afdb.org. (n.d.). Africa Commission Realising the Potential of Africa's Youth. www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Report%20of%20the%20Africa%20Commission-Realising%20the%20Potential%20of%20Africa%27s%20Youth.pdf
107 afdb.org. (n.d.). Africa Commission Realising the Potential of Africa's Youth. www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Report%20of%20the%20Africa%20Commission-Realising%20the%20Potential%20of%20Africa%27s%20Youth.pdf
108 Schaefer, P. (2009, August 18). A $9 trillion question: Did the world get Muhammad Yunus wrong? *Foreign Policy*. www.foreignpolicy.com/articles/2009/08/18/a_9_trillion_question_did_the_world_get_muhammad_yunus_wrong?page=0,0
109 Shane, S. (2008). *The* illusions *of* entrepreneurship: *The* costly myths that entrepreneurs, investors, *and* policy makers live. Yale University Press.
110 United Nations Economist Network. (2023). *Social and solidarity economy: New economics for sustainable development*. https://www.un.org/sites/un2.un.org/files/social_and_solidarity_economy_29_march_2023.pdf
111 World Economic Forum. (2023, November 10). *Why the impact economy is a top priority for Brazil*. https://www.weforum.org/agenda/2023/11/social-economy-brazil/
112 United Nations Economist Network. (2023). *Social and solidarity economy: New economics for sustainable development*. https://www.un.org/sites/un2.un.org/files/social_and_solidarity_economy_29_march_2023.pdf
113 Mastercard. (2022, March). *The Mastercard Index of Women Entrepreneurs: How targeted support for women-led business can unlock sustainable economic growth*. https://www.mastercard.com/news/media/phwevxcc/the-mastercard-index-of-women-entrepreneurs.pdf
114 Mastercard. (2022, March). *The Mastercard Index of Women Entrepreneurs: How targeted support for women-led businesses can unlock sustainable economic growth*. https://newsroom.mastercard.com/news/media/phwevxcc/the-mastercard-index-of-women-entrepreneurs.pdf
115 Mastercard. (2022, March). *The Mastercard Index of Women Entrepreneurs: How targeted support for women-led businesses can unlock sustainable economic growth*. https://newsroom.mastercard.com/news/media/phwevxcc/the-mastercard-index-of-women-entrepreneurs.pdf
116 Jahan, N. (2024, October 9). *Boosting women's labour force participation: Opportunities and challenges in Bangladesh*. https://voxdev.org/topic/labour-markets/boosting-womens-labour-force-participation-opportunities-and-challenges#:~:text=Currently%2C%20less%20than%20half%20(43,Statistics%20%5BBBS%5D%202023a)
117 Akhter, S. (2024, April 14). Few opportunities, many barriers for women in Bangladesh: Rubana Huq. *New Age*. https://www.newagebd.net/post/new%20age%20business%20magazine/232616/few-opportunities-many-barriers-for-women-in-bangladesh-rubana-huq

Chapter 2

The Entrepreneurial Ecosystem and Its Components

This chapter's objectives are:

1. To demonstrate an understanding of entrepreneurial activities from an ecosystem perspective.
2. To appraise the relative importance and interrelationships among some of the key elements in an entrepreneurial ecosystem.
3. To describe the roles of the government and other actors in bringing changes in an entrepreneurial ecosystem.
4. To identify various types of flows across different entrepreneurial ecosystems.
5. To analyze the determinants of productivity in an entrepreneurial ecosystem.
6. To identify some ways to change an entrepreneurial ecosystem.
7. To assess the roles of entrepreneurship support programs such as coworking spaces, incubators, accelerators and scale-up hubs.

2.1 Introduction

Entrepreneurship as a whole has much to learn from an understanding of a natural ecosystem. An ecosystem can be defined as a biological environment that consists of living or biotic components (e.g., animals and plants) as well as nonliving or abiotic physical components (e.g., air, soil, water and sunlight) with which the living organisms interact.[1] The study of an entrepreneurial ecosystem involves complex relationships of entrepreneurial firms with key players, contexts and ingredients such as government agencies, industry and trade associations, consumers, investors, financial institutions, capital markets, national culture as well as natural and geographic factors. Each of these components influences and is influenced by the entrepreneurial ecosystem.

Before turning to the focus of this chapter – key elements of an entrepreneurial ecosystem – it is essential to first discuss the importance of developing a good entrepreneurial ecosystem. A good entrepreneurial ecosystem

DOI: 10.4324/9781003565154-2

values creativity, innovation and excellence; facilitates partnerships among key players; and enables the development of good ideas and technologies to reach the market. Such an ecosystem can attract latent high-tech entrepreneurs and other types of high-expectation entrepreneurs because people see a chance to build successful companies. A good entrepreneurial ecosystem also attracts local and foreign investments. All these lead to a noticeable role in promoting economic and social development locally, regionally and nationally.

The concept of an entrepreneurial ecosystem provides a practical and holistic approach to understanding the development of the entrepreneurial climate. For instance, policy makers can take actions to align incentives to foster a productive and successful entrepreneurial ecosystem, which nurtures entrepreneurial behavior and enhances entrepreneurship productivity. Likewise, entrepreneurial firms, singly and collectively, take measures to create an entrepreneurial environment that allows them to take calculated risks and become successful.

2.2 Comparing Natural and Entrepreneurial Ecosystems

2.2.1 Productivity of an Entrepreneurial Ecosystem

Ecosystem productivity provides the most appropriate starting point for the treatment of entrepreneurial activities from the ecosystem perspective. One way to measure productivity in an ecosystem is to look at the rate of synthesis of organic materials (e.g., leaf litter and woody material),[2] which principally takes place through photosynthesis by primary producers (e.g., trees and sea grass). Ecosystem productivity determines the population size of herbivores, omnivores, carnivores and other organisms that the ecosystem can support. A related concept is the carrying capacity, which is the maximum population size of a species that can be sustained by the environment given the supply food, water and other necessities. Put differently, carrying capacity is the environment's maximal load.[3]

The productivity of an entrepreneurial ecosystem may be measured by the extent to which financial, material, human and knowledge resources are used to achieve positive entrepreneurial impacts such as job creation, economic growth and poverty alleviation. An increase in productivity leads to a higher carrying capacity of an entrepreneurial ecosystem, which means more job creation, higher incomes and higher standards of living.

Vietnam's entrepreneurial environment has faced criticism for low productivity. Despite a rise in entrepreneurial activity, venture capital investments as a percentage of gross domestic product (G.D.P.) remain behind those in more established startup hubs in Southeast Asia, such as Singapore and Indonesia. While the Vietnamese private sector contributes a significant

share of new businesses, these are often concentrated in low productivity and low value-added sectors like wholesale and retail trade. Startups that are knowledge-intensive or technology-driven, which are highly sought after for their growth potential and disruptive capabilities, are still scarce.[4]

In the natural ecosystem, the rate of photosynthesis is high in the presence of a proper amount and combination of temperature, carbon dioxide, water, sunlight and nutrients (e.g., coral reefs and rain forest). A wrong combination of these factors may lead to a low rate of or no photosynthesis (e.g., unavailability of water in deserts, very low temperature on the tundra and lack of nutrients in the open ocean).[5] This process has a parallel in an entrepreneurial ecosystem. An effective entrepreneurial ecosystem is characterized by the existence of lively and active networks of individuals and organizations to facilitate entrepreneurial activities. For instance, financial institutions provide early-stage funding for sensible ventures. Educational institutions provide the required talents. Local government agencies such as the municipality provide supports for entrepreneurs. Entrepreneurship is culturally supported. That is, being an entrepreneur is viewed as a respected career choice. Moreover, business failure is not viewed negatively. There are also a number of entrepreneurial role models and successful entrepreneurs, who provide advice, support and mentoring to new entrepreneurs.

A common problem with some of the entrepreneurial ecosystems is the lack of the right combination of key ingredients. For instance, many young technology firms with promising ideas lack financial resources to implement their projects. Likewise, as noted in Chapter 1, China reportedly has a large number of venture capitalists interested in funding U.S. startups; they lack skills and experience to manage venture investments.

2.2.2 *Diversity in an Entrepreneurial Ecosystem*

Diversity has an important role and function in an ecosystem. A diverse ecosystem containing varied terrain (e.g., caves, mountains, forests and bodies of water) and inhabited by a wide range of native species of flora and fauna is likely to be healthy and has a higher probability of containing species that are likely to have a strong ecosystem effect. Each species, irrespective of their size and type, has an important role to play and thus boosts ecosystem productivity. Diversity can also increase the efficiency of resource use.[6] Species diversity generally enhances the health of an ecosystem, which is less likely to be seriously damaged by calamities and natural disasters such as extreme weather situations.

The health and productivity of an entrepreneurial ecosystem depend on the diversity of entrepreneurial firms. Mature and healthy entrepreneurial ecosystems are characterized by size, product, market, industry, technological and structural diversity of entrepreneurial firms. Firms of each type are

likely to have a niche in the entrepreneurial ecosystem that would help keep the entrepreneurial system healthy, resilient and productive. Diversity also allows entrepreneurial firms to establish alliances with other firms that could be complementors.

In order to illustrate this phenomenon, we consider South Korea. In the early stage of development, government-sponsored schemes encouraged the growth of "chaebols" (family-owned conglomerates) such as Hyundai and Samsung, which helped transform the economy. The combined sales of South Korea's four major family-controlled conglomerates – Samsung, SK, Hyundai Motor and LG – totaled 980.5 trillion won (US$729 billion) in 2023, representing 40.8% of the nation's nominal G.D.P. Additionally, the top 30 business groups in South Korea reported combined sales of 1,845 trillion won in 2023, accounting for 76.9% of the G.D.P.[7]

Chaebols have created entrepreneurial opportunities for small and medium-sized enterprises (S.M.E.s). S.M.E.s make most of the parts for Korean carmakers such as Hyundai, Kia and Daewoo. The chaebols support S.M.E.s in a variety of ways – direct and indirect, formal and informal. For instance, several of the biggest chaebols have launched in-house lending programs that support the financing needs of their S.M.E. partners. For instance, in 2017, Samsung announced a plan to launch a US$445 million fund to provide interest-free loans for a year to small businesses in its supply chain.[8]

Chaebols and S.M.E.s have distinct roles in the country's economic growth and job creation. S.M.E.s are major contributors to the country's job creation. S.M.E.s account for 99% of the companies and 88% of the manpower in South Korea.[9] Compared to big firms in the country, South Korean S.M.E.s are, however, inefficient as measured by operating profits as proportions of sales and value added per worker.[10]

2.2.3 Poor-Quality Species and Parasites and Their Effects

In a natural ecosystem, prevalence of poor-quality species is one of the main causes of low productivity and destruction of the ecosystem. This phenomenon has a striking and interesting parallel to the functioning of the entrepreneurial ecosystem. Easy availability of government money, which is distributed without carefully looking at the efficiency, depth and quality of entrepreneurial ideas, will encourage the formation of many low-quality firms. This situation will have a negative impact on the pace and rate of deal flow for private equity investors. That is, venture capitalists or private equity investors are less likely to receive business proposals/investment offers. One might cite many examples to illustrate this point. One example is Canada's government-sponsored Labor Fund Program started in the 1990s, which was largely unsuccessful. The program was mostly managed by people with

little knowledge and experience in venture capital. Investment decisions were driven by political processes rather than merit-based considerations. Moreover, the fund was much bigger in terms of size than the private venture capital market. Consequently, private venture capitalists were intimidated and scared off by the Labor Fund Program.[11]

Another example is Malaysia's BioValley, a US$150 million complex started by the government to attract firms in the biotechnological industry. The proposed cluster lacked the necessary organic development and became a target of criticism and mockery as the "Valley of the BioGhosts".[12] A dilemma was apparent: whether to develop a qualified workforce first, or establish biotech companies.[13] The BioValley was far from completion even a decade after the scheduled completion date of 2005. There were too many biotech graduates but too few biotech firms by then.

Other high-profile but unsuccessful government-funded programs include Dubai's entrepreneurial hub, Australia's BITS (Building on Information Technology Strengths) program and the European Union's (E.U.) European Investment Fund (which was started in 2001 with an endowment of more than €2 billion (about US$2.8 billion)), Japan's Tsukuba Science City and Egypt's "Silicon Pyramid".[14] In this regard, just like ecosystem productivity can be increased by replacing poor-quality species with nutritious grasses, the quality of an entrepreneurial ecosystem can be improved by encouraging high-growth enterprises.

Even worse is the fact that formal and informal institutions in some economies promote the growth of parasitic entrepreneurs. A journalist noted that parasitic entrepreneurs in Egypt produced low-quality goods, which were sold to the state, and they did not pay taxes.[15] Parasites can bring marked changes in the dynamics of the ecosystem by directly or indirectly modifying the environment of other organisms. Research in natural ecosystems has indicated that parasites' actions lead to increased mortality and reduced fecundity of the host population. In an entrepreneurial ecosystem, resources and opportunities that enable the parasitic entrepreneurs to pursue their economic goals are likely to scare off high-quality challengers.

2.2.4 *Feedback Systems*

Ecosystems contain feedback mechanisms that function to maintain the various elements of the system in an equilibrium state. The interaction among various elements of the ecosystem exhibits dynamic exchange processes, which are associated with the circulation of energy or materials. A negative feedback loop tends to slow down a production process in an ecosystem, whereas the positive feedback loop tends to accelerate it.

As entrepreneurs participate in developing and learning in the entrepreneurial ecosystem, they develop an understanding of what must be done to succeed in the environment. The nature and quality of entrepreneurial

ecosystems determine the feedbacks that potential and actual entrepreneurs receive as well as their actual experiences. Entrepreneurial success stories provide positive feedback in the entrepreneurial ecosystem. Moreover, positive feedback systems tend to have a perpetual cycle, which can lead to a further improvement in entrepreneurial performance. High levels of corruption in the government, the proliferation of low-quality entrepreneurial firms and parasitic entrepreneurs, on the other hand, are associated with a negative feedback system, which discourages entry in entrepreneurship and reduces levels of productive entrepreneurial activities.

2.3 The Essential Elements of an Entrepreneurial Ecosystem

In this section, we first briefly revisit the three key determinants of entrepreneurship noted in Chapter 1, which constitute key ingredients that affect the quality of an entrepreneurial ecosystem: (a) regulatory framework; (b) values, culture and skills; (c) and access to finance, markets, research and development (R&D) and technology. Here are some additional examples that demonstrate how these factors are linked to the entrepreneurial ecosystem.

(a) Regulatory framework: First, the existence of a legislative framework that is comprehensible, sensible and stable is the most important prerequisite for the development of a good entrepreneurial ecosystem. A well-developed system of legal and commercial rules and enforcement mechanisms (e.g., commercial code, property law, intellectual property rights protection, bankruptcy legislation, contract law, consumer law) contribute to the development of a high-quality entrepreneurial ecosystem. In top business-friendly countries, starting a business involves only a few steps, which can be completed in a few days and costs little for the entrepreneurs. Especially important for many developing economies are rules and procedures to start a business. For instance, one study indicated that a ten-day reduction in the time taken to start a business can lead to a 0.4% point increase in G.D.P. growth.

(b) Values, culture and skills: As to the values and culture in some parts of the world, entrepreneurs are associated with negative images. While entrepreneurs are considered as members of the privileged class in many countries, they are arguably regarded as "déclassé" or ascribed a lower or inferior social status in some economies such as France, Germany and Sweden.[16] Moreover, observers have noted that in countries such as Sweden and the United Kingdom a business failure is considered as a family disgrace. An Internet entrepreneur noted: "In

the U.K., there is a stigma against business failure among the general public, whereas in the U.S. it's almost a badge of honor".[17]

Likewise, despite the high level of entrepreneurial intentions among Arab youths, entrepreneurs have a negative social identity in Arab culture. A 2009 Gallup Poll found that about half of young Arabs viewed entrepreneurs as individuals who think only about profits. The proportions of youth with such a viewpoint were 82% in Lebanon, 72% in Kuwait and 72% in Palestine.[18] Arab societies are also described as exhibiting a fairly high degree of hostility toward entrepreneurship education. For instance, when an advisor to the Egyptian Education minister initiated some of the educational reform measures, traditionalists labeled his attempts as "Westernization" of the curriculum.[19]

There is an observation that needs to be made regarding the possibility that entrepreneurship-related values may change over time. For instance, due primarily to increased media coverage of successful startups, the stigma of failure is decreasing in Japan. Consequently, more and more young people are pursuing entrepreneurial opportunities.[20]

Young people in Japan have grown up in a world where new companies such as Airbnb, Uber, and Facebook are acting as innovation powerhouses. This phenomenon is drastically different from that of their parents' generation when large companies such as Sony and Nintendo generated most of the innovations.[21]

An upshot is that entrepreneurs have been able to raise as much as US$100 million privately. This is unprecedented for Japan.[22]

(c) Access to finance, markets, R&D and technology: Availability of capital influences not only the ability of firms to enter new markets, but also the ability to compete with incumbent firms.[23] In many developing countries, financial institutions' unavailability of funds and/or unwillingness to lend to small businesses has led to unfavorable entrepreneurial ecosystem conditions. For most potential entrepreneurs in these countries, a village loan shark is the only available source of capital, whose interest rate is 200%–300% a year.[24] Well-developed consumer markets bring entrepreneurial opportunities and help the entrepreneurial ecosystem. In some cases, demanding customers force businesses to be more innovative and thus play a critical role in stimulating entrepreneurial activity. A customer can also make it easier to carry out entrepreneurial and innovative activities by communicating its plans, expectations and intentions. New technologies may create richer and more favorable contexts and conditions in which to develop entrepreneurial ventures.

(d) Natural and geographic conditions: In addition to the three factors already mentioned, a fourth factor must be considered: natural and geographic conditions, which are important, not only in the natural ecosystem but also in entrepreneurial ecosystems. Geographic factors

such as climate, distance to coastline, landlockedness, availability and type of natural resources, land features (e.g., terrain and topography, the proportions of arable land and land area in the tropics), accessibility to transportation routes, proximity to attractive customers and suppliers affect the pattern and potential for entrepreneurial ventures.

2.3.1 Iceland's Evolving Data Center Industry: From Crypto Mining to A.I. Growth

Some entrepreneurial firms and policy makers have utilized a geographic location as a value proposition. For instance, Iceland has positioned itself as an ideal location for data centers, leveraging its affordable, renewable energy and naturally cool climate. In the 2000s, Data Islandia, an Iceland-based company, announced plans to develop Iceland as the world's data storage center. Data Islandia was responding to the needs of businesses to archive data to comply with various regulations. The company's unique selling propositions included cool climate, geothermal energy and secure remoteness.[25] Iceland's average annual temperature is 4°C.[26] Renewable energy sources such as hydroelectric and geothermal power plants are used to meet the project's energy needs. Iceland generates more power per capita than any other country. Almost the entire power supply in the country is generated from hydro and geothermal sources, which provide long-term sustainability.

While Iceland has huge renewable energy reserves, the country's remote island location means that the direct export of these reserves to foreign markets has been difficult and expensive. This means extremely energy-intensive processes which can be performed in the country such as aluminum smelting, which involves extracting aluminum from its oxide alumina, and data centers are better ways of exporting its energy resources.[27] In addition, the country's cool climate can be considered as an asset given that over a quarter of data centers' operating costs in the United States are spent on cooling.[28] In 2017, data centers worldwide used about 7% of the global electricity supply.[29]

Emerald Networks' submarine cable system, which is a 5,200 km, 100 gigabits-per-second undersea cable connecting North America and Europe via Iceland, would further facilitate Iceland's efforts to develop itself as the world's data center. In an attempt to encourage investments in data centers and other technology projects, the government has reduced duties on imports of equipment.

2.3.1.1 The Surge of Data Centers: A Focus on Crypto Mining and Its Criticisms

The number of data centers in Iceland surged. However, critics contend that the majority of these centers are focused on crypto mining, especially

on Bitcoin mining rather than connectivity or services.[30] A 2018 KPMG report revealed that 90% of the nation's data center capacity was dedicated to cryptocurrency mining and cautioned that this percentage was likely to increase.[31] Crypto mining is viewed as an inefficient use of the country's precious green energy resources.

Bitcoin mining requires little beyond inexpensive power, leading many crypto data centers to prioritize cost over security and traditional features. This vulnerability was exploited in the 2018 "Big Bitcoin Heist", where a gang stole 600 servers valued at nearly $2 million from facilities across Iceland.[32]

2.3.1.2 Growing Demand from A.I. Services

Although major Silicon Valley technology giants haven't opened their data centers in Iceland, the country was able to attract a number of smaller data operations that also focused on noncrypto activities. In 2018, the telecommunications and I.T. firms Opin Kerfi, Vodafone Iceland, *Reiknistofnun Bankanna* (RB) – the I.T. Service Center for the Icelandic Financial Market – and Korputorg Real Estate Ltd announced a plan to construct a modern and high-tech data center in Reykjavík.[33]

As of 2015, Verne Global, a provider of advanced data center solutions, had a 44-acre campus in the city of Keflavik. Verne Global's clients included the German automaker BMW.[34] Verne arrived in Iceland prior to the Bitcoin boom, initially focusing on high-performance computing, which the company claims naturally evolved into a focus on artificial intelligence (A.I.). Chief Operations Officer Mike Allen stated, "We've eschewed the whole Bitcoin thing, just because of this negative".[35] Since 2016, it has had customers focused on training large language models.[36]

By 2020–21, the Icelandic data center industry recognized the rapid growth of A.I. services. In 2022, there was a noticeable increase in requests from customers, primarily startups and high-tech companies closely connected to A.I. By 2023, the demand exploded, and the significant growth is continuing.[37]

2.4 Nurturing Startups: The Ecosystem of Coworking Spaces, Incubators and Accelerators

This section explores the pivotal role of startup culture in shaping entrepreneurial ecosystems. It highlights how key drivers, such as coworking spaces, incubators and accelerators, contribute to creating an environment that fosters innovation, collaboration and growth for emerging businesses.

2.4.1 Startup Culture

A "startup" is usually a young firm working on new innovations, seeking fast expansion and developing scalable products adaptable to different situations.[38] According to Joe Procopio, Chief Product Officer at Growers, if a company is seeking external funding from venture or angel investors, it should identify itself as a startup. This designation is also advantageous when attempting to introduce a new idea or product to challenge established industry players. Additionally, any small team working on developing a novel business model can appropriately be referred to as a startup.[39]

Many factors have been identified as defining features of a startup culture. Silicon Valley's culture represents a quintessential example of what defines startup culture.[40] Silicon Valley culture is marked by a blend of openness and competitiveness, where the duality of sharing and self-interest coexists.[41] This openness includes welcoming new market entrants and sharing ideas with the community.[42] Sharing one's knowledge and experiences is highly valued, as is the appreciation for and expectation of feedback and self-reflection.[43] Silicon Valley firms appreciate the role of collaboration in a mutually beneficial process known as "growing up together", and many successful entrepreneurs continue to operate as investors and business angels in the region, contributing their expertise and funding.[44] Self-interest in startup culture is evident in two primary aspects: extreme dedication to work, with entrepreneurs often boasting about their tireless efforts,[45] and a Darwinian approach where the unyielding competition ensures that only the strongest succeed.[46]

The stigma of failure is tightly linked to entrepreneurial activities.[47] Central to startup culture is the acceptance of failure and the celebration of risk-taking.[48] Failure in business is seen as distinct from personal failure, with bankruptcy not considered a disgrace. This perspective is shaped by the continuous competition in startups and the uncertainty inherent in entrepreneurial endeavors.[49] The likelihood of achieving real success is quite low.

The typical objective of startups is to bring innovations or products to nascent markets, which comes with considerable risks and uncertain conditions.[50] The culture in Silicon Valley interprets failure as a shared learning opportunity.[51] Key elements of the globally popularized startup culture are its emphasis on innovation, disruptive market strategies, visionary leadership and a profound commitment to work.[52]

Cultivating a startup culture requires major changes in business practices and mindset. To successfully embed innovation, organizations should adopt startup methods in consumer engagement, culture and organizational structure, while maintaining their strengths in operations and financing to achieve robust and sustainable growth.[53]

2.4.2 Coworking Spaces

New York City-based The Farm Coworking defines a coworking space as "a community of like-minded individuals who work together in the same space to collaborate and grow". A coworking space gives an entrepreneur or a professional *a desk to work* or a dedicated office. It can be rented as and when the entrepreneur needs. A coworking space provides individuals with numerous opportunities to collaborate and interact. Some coworking spaces also offer services, events and networking sessions to startups.[54] For instance, China's UrWork, which had 100 locations in 30 cities worldwide in 2017, also provides opportunities to meet investors, and classes on a number of topics ranging from business strategy to augmented reality.[55]

Coworking spaces are mushrooming worldwide. One estimate suggested that 14,000 coworking spaces were operating worldwide in 2017,[56] which increased to over 30,000 as of 2022.[57]

In 2017, there were over 250 coworking spaces in Africa.[58] As of early 2018, about 200 companies were reported to be offering shared office spaces in India. Most of them were targeted at startups.[59] Some organizations operate in coworking spaces in many different locations. As of 2017, U.S.-based WeWork had coworking spaces in 203 locations in 50 cities and London-listed IWG had about 3,000 locations in 1,000 cities.[60]

An estimated 1.6 million people worldwide used coworking spaces in 2017, which is expected to reach about 3.8 million by 2020.[61] In 2017, the average per month cost for coworking spaces ranged from US$45 to over US$1,000. The average cost in the United States was about US$350 per month.[62]

A number of benefits have been linked to coworking spaces. In a study, 82% of the users of coworking spaces reported that coworking expanded their professional networks, 80% received help or guidance from coworking members and 64% reported that coworking networking was a key source of work and business referrals.[63]

Coworking spaces come in all shapes and sizes. India has many women-friendly or women-only coworking spaces. For instance, Wsquare is a women-only coworking space in Chennai, India. In the last eight months of 2017, more than 150 women used the facility. About 80% of the users were entrepreneurs. Others were students, researchers, freelance professionals or remote employees working for big companies.[64]

Some are targeting narrower niche audiences. Nigeria's 360 Creative Hub provides coworking space for fashion entrepreneurs, who can work on designs and find specific machines needed for production.[65]

2.4.3 Incubators

Incubators help startups with various aspects of entrepreneurial process. These include developing a business and marketing plan, providing

mentoring and training typically by proven entrepreneurial investors and connecting startups with funding sources, industry experts, relevant authorities and educational institutions. Incubators also help new ventures develop objectives and strategic positioning, and conduct feasibility studies and market research.[66]

Some incubators also provide low-cost locations, where startups gather and work on their ideas. Facilities provided include conference rooms and research labs.[67] A startup can stay in the space as long as it needs to or until the business grows to a scale that requires relocating to its own space.[68]

Some well-regarded incubators only accept members that are in the earliest stages of startup. The startup may be required to submit its business plan to apply and also for the interview process.[69]

Some incubators provide their services to startups operating in specific sectors. The Bank of England FinTech Accelerator offers blockchain startups an accelerator/incubator environment if the startups focus on incorporating blockchain technology into the existing technology used by the organization.[70] As another example, Huobi Labs is a blockchain incubator started by the Chinese cryptocurrency exchange Huobi. It offers startups advisory services and funding. As of early 2018, the Huobi Labs incubator had contributed to a number of blockchain platforms such as IOStoken. It does not connect startups with venture capital (V.C.). It offers startup capital itself.[71]

2.4.4 Scale-Up Hubs and Accelerators

Scale-up hubs and accelerators provide expert guidance, education and mentorship to entrepreneurial firms in order to help them reach the next stage of growth.[72] They usually do so in a cohort-based setting for a fixed period (three to six months).[73] They help startups develop strong institutional strength, vision and strategy; develop initial products; identify appropriate customer segments; develop connections; and secure resources such as capital and employees.[74] They may also support early-stage companies through seed money.[75] Scale-up hubs and accelerators perform these functions often in exchange for equity. In this way, they help startups prepare to enter into adulthood.[76]

The founders of a small firm often have specific and limited expertise. Growth, however, requires diverse skill sets and knowledge bases. They include those related to commercial (e.g., marketing new products), human resources (e.g., recruiting and training employees), project management (e.g., logistics and organizations of various events), financial (e.g., capital management) and strategic thinking skills (e.g., developing leadership and taking actions to fulfill new missions and strategies).[77] Small firms often face challenges in developing these skills in-house. These are the gaps that scale-up hubs and accelerators fill through training and support.

The accelerator model was invented in the United States. As of July 2021, Y Combinator, a leading seed money startup accelerator based in California, was the most active in the United States. It had supported 3,777 investments by mid-2021.[78]

Europe is, however, rapidly catching up to U.S. levels. As of July 2021, Startupbootcamp, based in London, was Europe's most active startup accelerator with 537 investments. Nine of the most active accelerators in Europe were located in the United Kingdom.[79]

Research has suggested that accelerators have a positive impact on entrepreneurial ecosystems, especially the financing environment.[80] Accelerators often make relatively small investments in early-stage companies. However, companies receiving such investments are able to raise substantial amounts of capital from other sources from seed and early-stage V.C. deals.[81]

Scale-up hubs and accelerators operate in diverse settings. In the United States, accelerators are often run by private companies. They don't have much affiliation with the government agencies. In Europe, many startup accelerators receive funding from the E.U. in addition to funds from private and institutional investors.[82] For instance, a substantial portion of the European Commission's annual spending of US$900 million for startups is reported to go to accelerators.[83]

In the Middle East, proportionately higher numbers of accelerators operate as nonprofit organizations. Whereas 25%–35% of accelerators are nonprofits in other regions, about 50% of all accelerators in the Middle East are nonprofit. Nonprofit accelerators do not require equity stakes from startups. They tend to focus on industries with specific public benefit such as health tech and edtech. Nonprofit accelerators also focus on providing opportunities for minority groups.[84]

Some accelerator programs involve narrow economic sectors. For instance, Romania's Techcelerator targets startups in the technology sectors such as software, cybersecurity, A.I., I.T. solutions for health, AgTech and FinTech. In early 2018, it announced that it would provide €25,000 (about US$30,000) funding for 15–20 startups that have a prototype or are at the minimum viable product stage. The startups with a high probability of success would have the opportunity to receive a second investment round, which could be up to €75,000 (about US$91,000). The ten-week program was reported to have 60 local and foreign mentors.[85]

2.5 The Roles of Policy and Regulation in Enhancing the Quality and Productivity of an Entrepreneurial Ecosystem

The government is considered to be the most powerful institutional actor and thus can become an important force in shaping an entrepreneurial ecosystem. Regulative frameworks not only exert direct influence on

entrepreneurial activities, but also affect other determinants of entrepreneurship such as market conditions, infrastructures, human capital and access to finance.

Iceland's data center industry is expanding due to its favorable conditions, including a cold climate that minimizes cooling costs, a secure environment that lowers security expenses and abundant renewable energy. The country has prioritized data centers as a key economic sector. For additional details, visit relevant resources online.[86] It has regulations and policy in place to provide strong data security and privacy protections.

In 2024, Iceland's statutory corporate tax rate (S.T.R.) remained at 21%, which was lower than the Organisation for Economic Co-operation and Development average of 23.85%.[87] S.T.R.s reflect the standard tax rate imposed on corporate income, serving as a key metric for comparing tax burdens across countries and tracking changes over time.

In general, the E.U. has no restriction on its member countries to move their data to Iceland.[88] This can be contrasted with some economies such as India, which are not considered data secure by the E.U. The fact that India has not achieved the status of a data secure country prevents the flow of sensitive data, such as patient information, to India.

The governments can also play a key role in the development of a better corporate governance system, which is one of the most important mechanisms contributing to entrepreneurial success of an economy. Note that corporate governance entails the systems, principles, rules, laws and processes by which businesses are operated, regulated and controlled. The idea here is that good corporate governance plays a key role in the integrity of corporations, financial institutions and markets. Key elements of good corporate governance practices include high level of transparency, respect for minority shareholders and strong and independent boards of directors. For instance, in some economies, controlling shareholders engage in siphoning off company funds through various means.[89] In countries characterized by poor corporate governance, underdeveloped financial and legal systems and higher corruption, the growth rate of the smallest firms is most adversely affected, and fewer new firms, particularly small firms, are created.[90]

Poor enforcement – rather than absence – of existing regulatory safeguards is one of the main constraints to the development of an effective corporate governance mechanism in India. For instance, following the 1991 Indian liberalization and reform of capital markets, a new regulatory body, Securities Exchange Board of India (S.E.B.I.) was established in 1992 in order to protect the interests of investors and promote the development of the securities market. However, the S.E.B.I. has been accused of not punishing the guilty.[91]

It should be noted that various determinants of entrepreneurship discussed above, however favorable they may be to entrepreneurship in themselves, may be counteracted in practice by flawed policies and corrupt

institutions. In some emerging economies ambiguous wording and frequent changes in tax laws allow tax inspectors to engage in corrupt behavior and increase uncertainty for businesses. Moreover, the processes involved with determining whether an entrepreneur had violated the tax law such as the tax inspector's examination of the tax payments and submission of a report to the authorities for verification lack transparency. There is little, if any, supervision of tax inspectors. The upshot of these tendencies is tax inspectors' lack of accountability and substantial discretionary power to determine whether an entrepreneur violated the tax law. In these economies, there is thus a firmly held belief among entrepreneurs that paying bribes demanded by a tax inspector is the only way to avoid more serious troubles.[92]

Politicians' and bureaucrats' engagement in corrupt behavior has been a major concern in many economies. Corruption is the abuse of public authority for private gain. It is a transaction that takes place usually between government officials or representatives and profit-oriented organizations. Corruption may take various forms. Analysts argue that Russia is trapped in a predatory and corrupt system, which has slowed the growth of an entrepreneurial class.[93] Likewise, a private coal miner in China's Shanxi Province told a journalist that corruption accounted for 20% of his operating costs. The proportion is expected to be higher in illegal mines.[94]

2.6 A Systems Approach to Understanding the Entrepreneurial Ecosystem: Moving from Parts to the Whole

To take an "ecosystem approach" means that it is important to pay attention to the whole system at work rather than individual elements. That is, instead of analyzing individual components or aspects of the entrepreneurial processes, such as government policy or R&D, we holistically examine all the components and the interactions among them, all as part of one system.

Nongovernment actors are sometimes more effective than the government in bringing favorable changes in the entrepreneurial ecosystem. For instance, entrepreneurial success is not socially admired in Scandinavia (see Jante's Law, Chapter 4). In Sweden, the think tank Timbro is working to bring a long-term shift in the "public opinion in favor of free markets, entrepreneurship, private property, and an open society".[95] The institute is funded mostly by large Swedish corporations. Likewise, the nongovernmental organization Injaz al-Arab (www.injazalarab.org/), which was formed in 2004 and operated in 13 countries in the Middle East and North Africa in 2010, sends volunteers to teach work readiness, financial literacy and entrepreneurship in schools. As of mid-2010, Injaz al-Arab programs engaged 10,000 private-sector volunteers and reached over 500,000 students.[96]

There are also instances of news media and popular press devoting substantial space in promoting entrepreneurship. In an attempt to support and

encourage local entrepreneurship, Puerto Rico's largest daily newspaper, *El Nuevo Día*, devoted a weekly page to startup success stories. The stories promoted new forms of social dialogue and created awareness about the ingredients and effects of entrepreneurship.[97]

Corporate governance mechanisms differ across contexts due to differences in culture and history in addition to local power relations, policies and regulations as discussed earlier. While the U.S. and Western European economies have well-developed corporate governance systems, cross-cultural differences in their corporate governance mechanisms are observed, especially in family business. For instance, U.S. businesses are less likely to give senior positions to nonfamily members than their European counterparts. This difference can be attributed to the fact that U.S. family businesses can grow by just focusing on the large U.S. market, while European companies are forced to internationalize their business at a much earlier stage due to their small national markets.[98]

While all the above factors are important in the role they play in an entrepreneurial ecosystem, different factors may dominate the system under different conditions that shape incentives and challenges in establishing certain types of firms. Consider, for instance, ForShe, which is an all-women-driven taxi service in Mumbai, India. The company was founded in 2007 with nine vehicles. The company's target customers are women, who travel alone and prefer such services. Businesses, hotels and call centers showed interest in these taxis for their women employees. However, taxi driver is a very rare occupation for women in India and other Asian countries. ForShe founder noted that a major challenge for her is to find female drivers that are well versed with the Mumbai city.[99]

2.7 Concluding Comments

A favorable entrepreneurial ecosystem is characterized by factors such as entrepreneurship-friendly formal institutions, supportive informal institutions, a strong orientation toward innovation and state-of-the-art technologies, a good geographic location and high-quality infrastructures. These conditions are associated with a high rate of firm creation and help existing entrepreneurial firms to survive, thrive and grow. These factors also help attract foreign firms, which can stimulate the entrepreneurial ecosystem by contributing considerably to the quality, diversity and competition.

To take an "ecosystem approach" means that various actors interested in entrepreneurship developments shift their focus from parts to wholes. While the roles of factors such as geography and policy in shaping an entrepreneurial ecosystem are discussed in detail above, these factors' synergistic interaction with other elements is what makes the entrepreneurial ecosystem more or less productive. The sustainability, health and productivity of

the entrepreneurial ecosystem and firms can be enhanced by the implementation of a more holistic strategy for assessing, monitoring and managing the entrepreneurial ecosystems. The above discussion indicates that the government has the most important role to play in this process.

2.8 Discussion Questions

1. Among the key elements of entrepreneurial ecosystems discussed earlier, which one do you think is the most important in driving entrepreneurial activities?
2. Can the state or nonstate actors change an entrepreneurial ecosystem? If so, how?
3. Why are policy-related factors important for a good-quality entrepreneurial ecosystem?
4. How does corruption influence entrepreneurship?
5. What types of skills are needed to promote entrepreneurship?
6. Select a developing country and critically examine how key elements of entrepreneurial ecosystems discussed in this chapter have influenced entrepreneurship in the country.
7. Are factors related to the access to markets, finance, R&D and technology more important than policy and culture in promoting entrepreneurship? Why or why not?
8. What are the roles of entrepreneurship support programs such as coworking spaces, incubators, accelerators and scale-up hubs in enriching an entrepreneurial ecosystem?

2.9 End of the Chapter Case: Entrepreneurship at the Heart of Taiwan's Semiconductor Dominance: The Role of T.S.M.C. in Shaping the Global Market

Taiwan holds a unique and influential position in the global semiconductor industry, largely due to its exceptional entrepreneurial ecosystem. Taiwan's success in this industry can be largely attributed to a single company**,** Taiwan Semiconductor Manufacturing Corporation (T.S.M.C.). Founded by Morris Chang, a mainland China-born engineer with a distinguished career at Texas Instruments, in 1987 T.S.M.C. became the first "pure-play" foundry, specializing exclusively in manufacturing chips for other companies. Semiconductor foundries, or "fabs", produce most of the world's chips for "fabless" firms like Qualcomm, NVIDIA and Apple, which design but do not manufacture their own chips. Occasionally, integrated device manufacturers with surplus production capacity may also act as foundries.[100]

2.9.1 T.S.M.C.: Dominating the Global Semiconductor Market with Cutting-Edge Technology and Market Share Leadership

T.S.M.C. is the largest global chip producer. In Q1 2024, T.S.M.C. held a commanding 61.7% share of the global semiconductor foundry market, far surpassing Samsung, which ranked second with 11%. Revenue-wise, T.S.M.C. significantly outpaced its competitors.[101] Taiwan's market share is much greater in more advanced chips (that is, smaller nanometer sizes). Smaller nanometer sizes in chipsets refer to the size of individual silicon transistors, which are key components in chips. These tiny transistors allow for more of them to be packed into a chip, enhancing performance. The term "nanometer" often refers to the "process node" or "technology node" in the semiconductor industry (1 nm = 0.000000001 m or 10^{-9} m). A smaller nanometer size generally leads to better efficiency, power consumption and processing capabilities.[102] As of mid-2024, Taiwan produced around 90% of the world's most advanced semiconductors, primarily through T.S.M.C., the largest global producer and a key supplier to companies like Apple and Nvidia.[103]

As of September 2024, T.S.M.C.'s 3 nm process has maintained full capacity utilization, reflecting high demand for its advanced semiconductor technology.[104] In April 2024, T.S.M.C. announced its most advanced 1.6 nm semiconductor process, the A16, which promises to deliver higher transistor density than the current 3 nm design (N3E), pushing the boundaries of chip performance.[105]

2.9.2 Challenges in Replicating T.S.M.C.'s Semiconductor Manufacturing Model: Expertise, Investment and Efficiency

Building a chip factory is much more complex than simply setting up a smartphone assembly plant in another country, where workers can be easily hired and trained. Chip manufacturing plants require highly skilled workers, often with master's or doctoral degrees in science and engineering. Additionally, the construction of a chip fabrication plant demands specialized expertise.[106] Each new semiconductor plant costs nearly $30 billion to build, requiring continuous operation 24/7 to justify the investment. T.S.M.C. founder Morris Chang has noted that if a machine breaks down at 1 a.m. in the United States, it will be repaired the next morning, whereas in Taiwan, repairs are made at 2 a.m. Replicating this work culture outside of Taiwan may prove challenging.[107] Due to these factors, T.S.M.C.'s business models are difficult to copy by competitors, which shields the company from competition.

Manufacturers like T.S.M.C. have excelled by prioritizing R&D and achieving exceptional efficiency, enabling them to produce chips with

increasingly smaller and more advanced transistors. Semiconductor jobs in Taiwan are prestigious and well-compensated compared to the national average, despite the country's relatively weak labor protection laws. These roles are highly demanding, and the industry benefits from a skilled workforce, with multiple shifts of advanced degree holders operating fabrication plants and a robust ecosystem of secondary industries supporting chip production.[108]

2.9.3 *Taiwan's Strategic Support for T.S.M.C.: Government Involvement in Semiconductor Innovation and Global Expansion*

In the 1980s, the Taiwanese government actively engaged with its diaspora in the West, particularly executives of Taiwanese descent in the United States.[109] Through consultations and formal forums, it gathered their insights, which were instrumental in shaping and implementing several programs.[110]

The Taiwanese government played a key role in T.S.M.C.'s founding, fostering a mutual dependency over time. Despite some concerns over T.S.M.C.'s outbound investments, the government supports them, recognizing their alignment in strengthening T.S.M.C.'s global presence and shared reliance on the United States. K.T. Li, the "father of Taiwan's economic miracle", convinced Morris Chang, a mainland China-born engineer with a distinguished career at Texas Instruments, to return to Taiwan and establish T.S.M.C. in 1987 with $100 million in government seed funding. The Executive Yuan, Taiwan's executive branch, claimed 49% ownership and secured additional investments from Philips and wealthy Taiwanese families. This support was vital for T.S.M.C.'s survival, given the capital-intensive nature of semiconductor manufacturing.[111] T.S.M.C. benefits from Taiwan's supportive industrial policies, including subsidized utilities, tax breaks for R&D and advanced equipment and government-developed infrastructure like industrial parks and research centers. Additionally, the government invests in talent cultivation, providing T.S.M.C. access to top-tier local talent at no cost.[112]

Taiwanese law limits domestic chipmakers, like T.S.M.C., to producing chips abroad that are one generation behind their domestic technology. T.S.M.C. plans to begin mass production of its next-gen A-16 chip in mid-2026, following 2 nm chip production in 2025. By 2028, its second Arizona fab will produce chips using 3 nm and 2 nm technologies.[113]

Conclusion

In conclusion, Taiwan's dominance in the global semiconductor market, largely driven by T.S.M.C., is the result of a unique combination of government support, an exceptional entrepreneurial ecosystem and cutting-edge

technological innovation. T.S.M.C.'s ability to maintain a commanding market share and push the boundaries of semiconductor technology reflects the company's ongoing commitment to R&D, a highly skilled workforce and strategic industry policies. As T.S.M.C. continues to advance into next-gen chip production, Taiwan's pivotal role in the global semiconductor supply chain remains secure, setting a challenging precedent for competitors.

Notes

1 Campbell, N. A., Reece, J. B., Taylor, M. R., Simon, J. E., & Dickey, J. L. (2009). *Biology concepts & connections* (6th ed.). Cummings Benjamin, p. 2, 3.
2 Helms, D. R., Helms, C. W., & Kosinski, R. J. (1997). *Biology in the laboratory*. Macmillan.
3 Hui, C. (2006). Carrying capacity, population equilibrium, and environment's maximal load. *Ecological Modeling*, *192*, 317–320.
4 Aridi, A., Querejazu, D., Dang, V. Q., & Piatkowski, M. (2024, April 16). Why Viet Nam needs more innovative entrepreneurs. *World Bank Blogs*. https://blogs.worldbank.org/en/eastasiapacific/why-viet-nam-needs-more-innovative-entrepreneurs
5 Helms, D. R., Helms, C. W., & Kosinski, R. J. (1997). *Biology in the laboratory*. Macmillan.
6 Chapin III, S. F., Walker, B. H., Hobbs, R. J., Hooper, D. U., Lawton, J. H., Sala, O. E., & Tilman, D. (1997). Biotic control over the functioning of ecosystems. *Science*, *277*(5325), 500–504.
7 Kang, Y. (2024, October 9). *S. Korea's top 4 conglomerates take up 40 pct of GDP in 2023*. Yonhap News Agency. https://en.yna.co.kr/view/AEN20241009001400320
8 Kang, Y. (2024, October 9). *S. Korea's top 4 conglomerates take up 40 pct of GDP in 2023*. Yonhap News Agency. https://en.yna.co.kr/view/AEN20241009001400320
9 *Korea Times*. (2010). Korea times: Korea has competitive support system for small firms. June 4.
10 *Economist*. (2011). What do you do when you reach the top?. 12 November, 400(8759), 79–81.
11 Dan Richards' interview with Josh Lerner, "Why public funding of venture capital has failed. February 1, 2011, http://advisorperspectives.com/newsletters11/pdfs/Why_Public_Funding_of_Venture_Capital_Has_Failed.pdf
12 "Fish out of water: Policymakers are turning their minds to the tricky subject of promoting entrepreneurship. 29 October 2009, www.economist.com/node/14743944
13 thestar.com. (2014). Malaysia's biotech landscape finally starting to emerge, 13 November. www.thestar.com.my/lifestyle/features/2014/11/13/malaysias-biotech-landscape-finally-starting-to-emerge/
14 "Prospects bright for UK's 'Silicon Roundabout. 16 December 2010, http://blogs.reuters.com/great-debate-uk/2010/12/16/prospects-bright-for-uks-silicon-roundabout/
15 Kaplan, R. D. (1996). War after peace. *New Republic*, *214*(18), 22–23.
16 Isenberg, D. J. (2010). Entrepreneurship in Haiti. www.huffingtonpost.com/daniel-isenberg/entrepreneurship-in-haiti_b_650519.html

17 Singleton, A. (2008). The stigma of failure is bad for Britain. 15 January, http://blogs.telegraph.co.uk/alex_singleton/blog/2008/01/15/the_stigma_of_failure_is_bad_for_britain
18 Sitte, A., & Rheault, M. (2009). Arab youth express strong entrepreneurial spirit. *Gallup Poll Briefing*, 9 June, p. 3.
19 Theil, S. (2007). Teaching entrepreneurship in the Arab world. *Newsweek International*, 14 August, German Marshall Fund of the United States, www.gmfus.org/publications/article.cfm?id=332
20 Choudhury, S. R. (2018). Japan is changing its views on entrepreneurship, and that could be good for start-ups. www.cnbc.com/2018/03/18/working-in-japan-views-on-entrepreneurship-and-start-ups-are-changing.html
21 Choudhury, S. R. (2018). Japan is changing its views on entrepreneurship, and that could be good for start-ups. www.cnbc.com/2018/03/18/working-in-japan-views-on-entrepreneurship-and-start-ups-are-changing.html.
22 Choudhury, S. R. (2018). Japan is changing its views on entrepreneurship, and that could be good for start-ups. www.cnbc.com/2018/03/18/working-in-japan-views-on-entrepreneurship-and-start-ups-are-changing.html.
23 Ho, Y. P., & Wong, P. K. (2007). Financing, regulatory costs and entrepreneurial propensity. *Small Business Economics*, *28*, 187–204.
24 Gross, D. (2008, September 20). Poverty: Cheap loans at insanely high rates? Give us more. *Newsweek*. www.newsweek.com/id/160074
25 *Economist*. (2008). Computers without border, 25 October.
26 Gudjonsson, H. (2018). The Arctic, where cold storage comes cheap for the digital age, 22 March. www.ft.com/content/779c1102-2d2b-11e8-97ec-4bd3494d5f14
27 Icenews. (2008). Iceland green data centre dream still alive. November 13, 2008. www.icenews.is/2008/11/13/iceland-green-data-centre-dream-still-alive/
28 Browning, J., & Valdimarsson, O. R. (2012). Iceland, data-center hub?" March 29, 2012. www.businessweek.com/articles/2012-03-28/iceland-data-center-hub
29 Gudjonsson. March 22, 2018.
30 Indriðason, H. (2024, August 26). Iceland ditches crypto mining for AI: "A great opportunity for Nordic data centres." *Nordic Labour Journal*. http://www.nordiclabourjournal.org/i-fokus/in-focus-2024/theme-ai/article.2024-08-20.3526275119
31 Moss, S. (2024, March 26). Iceland's AI moment: It's cold, it's renewable, and it's cheap. But is it ready? *Data Center Dynamics*. https://www.datacenterdynamics.com/en/analysis/icelands-ai-moment/
32 Moss, S. (2018, April 19). *Iceland's Bitcoin heist suspect flees on a plane: Part of a gang thought to be behind four server thefts at Icelandic data centers*. DataCenterDynamics. https://www.datacenterdynamics.com/en/news/icelands-bitcoin-heist-suspect-flees-on-a-plane/
33 February 28, 2018. Reykjavík to open its first large-scale Data Center next year. http://icelandmag.is/article/reykjavik-open-its-first-large-scale-data-center-next-year
34 Maria Gallucci. (2015). Iceland lures data center companies with cheap, renewable energy. www.ibtimes.com/iceland-lures-data-center-companies-cheap-renewable-energy-2081695
35 Moss, S. (2024, March 26). Iceland's AI moment: It's cold, it's renewable, and it's cheap. But is it ready? *Data Center Dynamics*. https://www.datacenterdynamics.com/en/analysis/icelands-ai-moment/

36 Moss, S. (2024, March 26). Iceland's AI moment: It's cold, it's renewable, and it's cheap. But is it ready? *Data Center Dynamics*. https://www.datacenterdynamics.com/en/analysis/icelands-ai-moment/
37 Indriðason, H. (2024, August 26). Iceland ditches crypto mining for AI: "A great opportunity for Nordic data centres." *Nordic Labour Journal*. http://www.nordiclabourjournal.org/i-fokus/in-focus-2024/theme-ai/article.2024-08-20.3526275119
38 Blank, S. (2006). *The four steps to the Epiphany. Successful Strategies for products that Win*. K&S Ranch.
39 Procopio, J. (2024, April 4). *When should you stop calling your company a startup? At what point does the label stop helping your prospects and start hurting them?* Built In. https://builtin.com/articles/what-is-a-startup
40 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
41 Maas, A., & Ester, P. (2016). *Silicon Valley, Planet startup. disruptive innovation, passionate entrepreneurship and hightech startups*. Amsterdam University Press.
42 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
43 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
44 Saxenian, A. (2006). *The new Argonauts. Regional advantage in a global economy*. Harvard University Press.
45 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
46 Maas, A., & Ester, P. (2016). *Silicon Valley, Planet startup. Disruptive innovation, passionate entrepreneurship and hightech startups*. Amsterdam University Press.
47 Landier, A., 2005. Entrepreneurship and the stigma of failure, Stern School of Business. In *NY University Working Paper* (pp. 1–37). http://papers.ssrn.com/sol3/papers.cfm?abstract_id=850446
48 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
49 Maas, A., & Ester, P. (2016). *Silicon Valley, Planet startup. Disruptive innovation, passionate entrepreneurship and hightech startups*. Amsterdam University Press.
50 Ries, E. (2011). *The lean startup*. Crown.
51 Saxenian, A. (2006). *The new Argonauts. Regional advantage in a global economy*. Harvard University Press.
52 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
53 Ernst & Young. (2020). *Incumbents to disruptors: Adopting the start-up culture for innovation*. https://www.ey.com/en_gl/growth/incumbents-to-disruptors https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/consumer-products-retail/incumbents-to-disruptors/incumbents-to-disruptors-adopting-the-start-up-culture-for-innovation.pdf?download
54 Church, G. (2017). Coworking vs accelerators vs incubators: The ultimate guide for startups. https://allwork.space/2017/08/coworking-vs-accelerators-vs-incubators-the-ultimate-guide-for-startups/

55 Yang, Y. (2017). Meet Mao Daqing—China's king of co-working. www.ft.com/content/4ce139f8-a4fd-11e7-b797-b61809486fe2
56 Foertsch, C. (2017). More than one million people will work in coworking spaces in 2017. www.deskmag.com/en/the-complete-2017-coworking-forecast-more-than-one-million-people-work-from-14000-coworking-spaces-s
57 Gitnux. (2024, June 27). *Insights into coworking statistics: Growth, trends, and member benefits*. Gitnux. https://gitnux.org/coworking-statistics/
58 Aransiola, D. (2017). The rise of coworking spaces in Africa. www.deskmag.com/en/the-rise-of-coworking-spaces-in-africa-958
59 Khan, T. (2018). Why the co-working industry is gravitating towards large companies and SMEs. https://economictimes.indiatimes.com/small-biz/sme-sector/why-the-co-working-industry-gravitating-towards-large-companies-and-smes/articleshow/63038041.cms
60 Evans, J. (2017). Shared offices gain popularity as companies value the flexibility. www.ft.com/content/84a8f010-7eb0-11e7-ab01-a13271d1ee9c
61 King, S. (2017). Coworking is not about workspace—It's about feeling less lonely. https://hbr.org/2017/12/coworking-is-not-about-workspace-its-about-feeling-less-lonely
62 King, S. (2017). Coworking is not about workspace—It's about feeling less lonely. https://hbr.org/2017/12/coworking-is-not-about-workspace-its-about-feeling-less-lonely
63 King, S. (2017). Coworking is not about workspace—It's about feeling less lonely. https://hbr.org/2017/12/coworking-is-not-about-workspace-its-about-feeling-less-lonely
64 Sushma, U.N. (2017). A coworking space by women, of women, for only women. https://qz.com/1138489/indias-first-women-only-co-working-office-is-the-perfect-place-to-find-work-life-balance/
65 Aransiola, D. (2017). The rise of coworking spaces in Africa. www.deskmag.com/en/the-rise-of-coworking-spaces-in-africa-958
66 Ballout, L. (2017). The importance of incubators and accelerators. http://news.arabnet.me/the-importance-of-incubators-and-accelerators/
67 The Chambers. (2018). Incubators & co-working spaces. www.raleighchamber.org/incubators-and-co-working-space.html
68 Deeb, G. (2014). Is a startup incubator or accelerator right for you?" www.forbes.com/sites/georgedeeb/2014/08/28/is-a-startup-incubator-or-accelerator-right-for-you/#6441d5123d7a
69 Harris, A. (2017). Coworking space vs. startup incubator vs. accelerator: Which is best? www.rocketspace.com/tech-startups/coworking-space-vs.-startup-incubator-vs.-accelerator-which-is-best
70 Town, S. (2018). The VC juggernaut awakens: Institutional capital, blockchain startups, and you. http:////cryptoslate.com/crypto-venture-capital/
71 Town, S. (2018). The VC juggernaut awakens: Institutional capital, blockchain startups, and you. http:////cryptoslate.com/crypto-venture-capital/
72 Webonboarding and webexpenses bring you the Scale-up Hub. 6 July 2017. www.webonboarding.com/2017/webonboarding-and-webexpenses-bring-you-the-scale-up-hub
73 Hathaway, I. (2016). Accelerating growth: Startup accelerator programs in the United States. www.brookings.edu/research/accelerating-growth-startup-accelerator-programs-in-the-united-states/
74 Cohen, Susan L. (2013). What do accelerators do? Insights from incubators and angels. *Innovations: Technology, Governance, Globalization*, *8*(3–4), 19–25.

75 Bates, S. (2017). What is the difference between accelerators, incubators and co-working spaces?www.seedrs.com/learn/blog/accelerators-incubators-co-working-spaces
76 Pernell. (2012). Accelerators vs incubators: What's the difference? www.businessinsider.com/accelerators-vs-incubators-whats-the-difference-2012-12.
77 OECD. (2018). Enabling SMEs to scale up. Plenary session 1, *The 2018 OECD Ministerial Conference*, 22–23 February 2018, Mexico City.
78 Statista Research Department. (2023, June 2). *Leading U.S. startup accelerators by investments as of July 2021*. https://www.statista.com/statistics/1249900/leading-startup-accelerators-investments-usa/
79 Statista Research Department. (2023, June 2). *Leading European startup accelerators by investments as of July 2021*. Statista. https://www.statista.com/statistics/1249902/leading-startup-accelerators-investments-europe/
80 Fehder, D. C., & Yael, V. (2014). Accelerators and the regional supply of venture capital investment. working paper. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2518668
81 Lustig, N. (2017). A new era for startup investing in Latin America. https://techcrunch.com/2017/05/19/a-new-era-for-startup-investing-in-latin-america/
82 Dam, C. (2017). The different types of startup accelerators in Europe and USA. https://medium.com/@cindydam/the-different-types-of-startup-accelerators-in-europe-and-usa-1217f045e20a
83 O'Brien, C. (2016). Europe has gone crazy for startup accelerators, with 26 opening in 2015. https://venturebeat.com/2016/06/14/europe-has-gone-crazy-for-startup-accelerators-with-26-opening-in-2015/
84 Forbes. (2016). The state of the startup accelerator industry. www.forbes.com/sites/groupthink/2016/06/29/the-state-of-the-startup-accelerator-industry/#5bfd81de7b44
85 Ro Insider. (2018). New accelerator in Romania finances tech start-ups. www.romania-insider.com/techcelerator-romania-launch/
86 The International Trade Administration, U.S. Department of Commerce. (2024, March 15). Iceland - Country Commercial Guide. *U.S. International Trade Administration*. https://www.trade.gov/country-commercial-guides/iceland-data-centers#:~:text=Iceland%20is%20a%20favorable%20location,one%20if%20its%20key%20sectors
87 Enache, C. (2024, December 17). Corporate tax rates around the world, 2024. *Tax Foundation*. https://taxfoundation.org/data/all/global/corporate-tax-rates-by-country-2024/
88 Hamilton, D. (2010). Q&A: Verne Global's Lisa Rhodes on Iceland data centers. September 2, 2010. www.thewhir.com/web-hosting-news/qa-verne-globals-lisa-rhodes-on-iceland-data-centers
89 Bertrand, M., Mehta, P., & Mullainathan, S. (2002). Ferreting out tunneling: An application to Indian business groups. *Quarterly Journal of Economics*, *117*(1), 121–148.
90 Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2002). Financial and legal constraints to firm growth: Does size matter?" World Bank Working Paper 2784. Washington, DC.
91 Ashima goyal regulation and De-regulation of the stock market in India. September 8, 2005. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=609322
92 International Consortium for Law and Development, Knowledge in the Service of Democratic Social Change. The Kyrgyz Workshop on Drafting

Anti-Corruption Legislation, 22–26 November 2004 www.iclad-law.org/Country%20Projects/KyrgyzAlt.html
93 Fish, S. (2005). *Democracy derailed in Russia: The failure of open politics*. Cambridge University Press.
94 Epstein, G. (2009). The price of corruption. 30 October. www.forbes.com/2009/10/30/china-coal-corruption-communist-party-beijing-dispatch.html
95 Lehrer, E., & Hildreth, J. (2002). Scandinavia's surprising turn from Socialism. *The American Enterprise*, *13*(8), 42–44.
96 ameinfo.com. (2010). Injaz Al-Arab Board convenes in Qatar. June 2, 2010. www.ameinfo.com/234264.html
97 Isenberg, D. J. (2010). How to start an entrepreneurial revolution. https://doi.org/10.1002/9781907312755.ch1
98 Cambieri, G. (2011). Family business challenges differ between the US and Europe. 28 September. www.campdenfb.com/article/family-business-challenges-differ-between-us-and-europe
99 Chadha, M. (2007, May 8). Mumbai's women-only taxi service. *BBC News*. http://news.bbc.co.uk/2/hi/south_asia/6623211.stm
100 PCMag. (n.d.). *Foundry*. Retrieved November 20, 2024, from https://www.pcmag.com/encyclopedia/term/foundry
101 Alsop, T. (2024, July 2). Semiconductor foundries revenue share worldwide 2019–2024, by quarter. *Statista*. https://www.statista.com/statistics/867223/worldwide-semiconductor-foundries-by-market-share/
102 Bhatia, S. (2022, April 18). *Chip Nanometer Technology explained, and why the smaller the better*. Pocketnow. https://pocketnow.com/chip-nanometer-technology-explained/
103 Davidson, H., & Lin, C.-H. (2024, July 19). How Taiwan secured semiconductor supremacy – and why it won't give it up. *The Guardian*. https://www.theguardian.com/world/article/2024/jul/19/taiwan-semiconductor-industry-booming
104 Chen, M., & Hsiao, J. (2024, September 4). TSMC's 3nm process at full capacity, led by Intel's Lunar Lake and Apple's iPhone 16 launch. *DIGITIMES Asia*. https://www.digitimes.com/news/a20240904PD213/3nm-tsmc-intel-apple-launch.html
105 Shivam, H. (2024, April 26). *Apple's go-to chipmaker TSMC unveils 1.6nm process for 2026 chips: Details*. Business Standard. https://www.business-standard.com/technology/tech-news/apple-s-go-to-chipmaker-tsmc-unveils-1-6nm-process-for-2026-chips-details-124042600400_1.html
106 Yoon, J. (2024, August 12). Chipmakers face a labour crisis: A human worker shortage may turn out to be the biggest obstacle to the AI industry. *Financial Times*. https://www.ft.com/content/e4dc9ec2-1fcf-48cb-b774-8b112bd48398
107 Yoon, J. (2024, August 12). Chipmakers face a labour crisis: A human worker shortage may turn out to be the biggest obstacle to the AI industry. *Financial Times*. https://www.ft.com/content/e4dc9ec2-1fcf-48cb-b774-8b112bd48398
108 Davidson, H., & Lin, C.-h. (2024, July 19). How Taiwan secured semiconductor supremacy – and why it won't give it up. *The Guardian*. https://www.theguardian.com/world/article/2024/jul/19/taiwan-semiconductor-industry-booming
109 Kshetri, N., Rojas-Torres, D., & Acevedo, M. C. (2015). Diaspora networks, non-economic remittances and entrepreneurship development: Evidence from

some economies in Latin America. *Journal of Developmental Entrepreneurship, 20*(1). https://doi.org/10.1142/s1084946715500053
110 Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, *6*(88), 40–50.
111 Robertson, S. (2024, August 26). *TSMC and Taiwan's government: Two boats on the same tide*. Domino Theory. https://dominotheory.com/tsmc-and-taiwans-government-two-boats-on-the-same-tide/
112 Robertson, S. (2024, August 26). *TSMC and Taiwan's government: Two boats on the same tide*. Domino Theory. https://dominotheory.com/tsmc-and-taiwans-government-two-boats-on-the-same-tide/
113 Wang, L. (2024, November 8). TSMC cannot make 2nm chips abroad now: MOEA. *Taipei Times*, p. 12. https://www.taipeitimes.com/News/biz/archives/2024/11/08/2003826545

Chapter 3

Sources of Entrepreneurial Finances and Their Variation across the World

This chapter's objectives are:

1. To demonstrate an understanding of various types of entrepreneurial financing.
2. To analyze international variations and their sources in the availability of funds as well as types of funds to meet financial needs of potential and existing entrepreneurial ventures.
3. To evaluate the impacts of disruptive economic events such as the 2008 global financial crisis and I.T. bubble burst on the availability of various types of entrepreneurial finances.
4. To assess the effects of microfinance on the entrepreneurial activities of the poorest people in developing economies.
5. To demonstrate an understanding of motivations of investors associated with various forms of entrepreneurial financing.
6. To assess the appropriateness of various sources of financing for entrepreneurs with different levels of needs and different phases of business operations.
7. To demonstrate an understanding of some of the recent innovations in entrepreneurial financing such as crowdfunding.

3.1 Introduction

Not everyone who wants to start a business venture is able to do so. A lack of access to capital is often the biggest roadblock for latent entrepreneurs to materialize the goal of starting their own business. This is true even in advanced economies such as the United States. A 2017 survey found that 90% of small business owners in the United States agreed that credit availability for small businesses is a problem. Over 60% thought that it was harder to get a loan in 2017 than it was in 2008 (Arensmeyer, 2017).[1]

Economies worldwide vary widely in terms of the availability of funds to meet financial needs of entrepreneurial ventures, types of available funds and the relative availability of such funds across various phases of ventures. A

DOI: 10.4324/9781003565154-3

country's entrepreneurial finance environment is shaped by diverse motivations of various players such as investors, entrepreneurs, regulatory agencies and nongovernmental organizations.

For most potential entrepreneurs, business financing is not a problem in most industrialized countries. In these countries, policies, structures and strategies are in place in banks to reduce the risk of lending to small and medium-sized enterprises (S.M.E.s). For instance, S.M.E.s in Organisation for Economic Co-operation and Development (O.E.C.D.) countries benefit from the fact that financial markets in these countries are highly competitive. Market-based banking in these economies forces banks to achieve high returns. For many banks, financing S.M.E.s is becoming attractive. They are also developing effective techniques which distinguish high- and low-risk S.M.E. borrowers, and identify those likely to expand and survive. Banks in industrialized countries have also come up with new business models and products, which derive an increasing proportion of revenue from fees for services rather than interest on loans. Such models favor lending to S.M.E.s. There are also well-established systems for raising money through capital markets.[2]

S.M.E.s in developing countries are more likely to be impeded by the lack of financing than those in developed countries. For many commercial banks in these countries, revenues from fees for services are insignificant. Due primarily to the lack of competition, banks in many emerging markets have been laggards in implementing models that provide incentives to lend to S.M.E.s. This shortage of financing has special implications on the size distribution of firms. Compared with developed countries, firms in emerging markets tend to be heavily concentrated at the top and the bottom. In many cases, big firms are powerful oligarchs, as discussed in Chapter 1, or state-owned enterprises, which have access to bank loans. For instance, some Russian oligarchs received huge loans from state banks and invested in big state companies. Many Western banks have also provided loans to Russia's oligarchs. Likewise, in China, a large proportion of loans from large commercial banks that are state-owned go to state-owned enterprises mainly to finance public infrastructure projects.[3]

The characteristics of the banking system in these markets work against S.M.E.s. Many banks are state-owned and their credit may be allocated on the basis of government guarantees or in line with government targeting to develop specific sectors. Often banks are subject to ceilings on the interest rates they can charge, which would make it difficult to price credit in a way that reflects the risk of lending to S.M.E.s. Lending to S.M.E.s would involve special risks for financial institutions. This means that if banks are earning acceptable returns on other lending, there is no incentive to develop necessary skills to serve S.M.E.s.

For many potential entrepreneurs, the only way to finance their ventures would be to rely on informal sources. As explained in Chapter 1,

microenterprises that are funded through informal sources of capital lack growth opportunities. The shortage of S.M.E.s, also known as the "missing middle", is arguably related to the low rate of economic growth.[4] The availability and composition of formal and informal finances explain the phenomenon of the missing middle.

Despite the ease with which S.M.E.s receive bank loans in O.E.C.D. economies, innovative S.M.E.s, which create value through the development of technology and innovation, face problems to access finance in these economies. Such S.M.E.s are perceived as more risky than traditional S.M.E.s or large firms. They often do not meet the criteria for traditional bank loans. Moreover, banks have exhibited higher perceptions of risks with regard to financing innovative S.M.E.s following the so-called dot.com bubble which mainly hit the I.T. and closely related industries between the late 1990s and early 2000s.[5]

It is also important to note the gender dimension in access to entrepreneurial financing. In the developing world, 70% of women-owned formal S.M.E.s lack access to the capital they need.[6] Women in developing economies were 9 percentage points less likely to have a bank account than men.[7]

3.2 Availability and Costs of Bank Financing

Many entrepreneurs prefer bank loans over other forms of financing as such loans allow them to have full control of the firms and thus have more incentives to exert higher levels of effort. Traditional bank financing is more important to S.M.E.s due to the fact that they have fewer alternative options available compared to large enterprises. For instance, large South Korean firms are increasing using the capital market for financing and have thus dramatically reduced their dependence on bank credit.

As noted earlier, economies worldwide differ widely in terms of the availability and costs of bank loan financing. First, there are significant differences worldwide in the cost of lending (Figure 3.1). A comparison of annual lending rates (A.L.R.s) for short- and medium-term financing needs of businesses across countries would help us understand the variability of the costs of entrepreneurial finance. A.L.R.s would serve as an indicator to assess how easy or difficult it is to access the financial resources or capital for starting and/or continuing a business.

The high A.L.R.s in some of the economies (Figure 3.1) are a response to the legacies of their hyperinflationary pasts. For instance, during 1980–94 Brazil went through a hyperinflation with three-to-four-digit annual inflation rates that went until the successful implementation of the Plano Real in July 1994, which stabilized the economy.

The real issue for most potential entrepreneurs, however, concerns availability rather than the costs of capital. In this regard, many O.E.C.D.

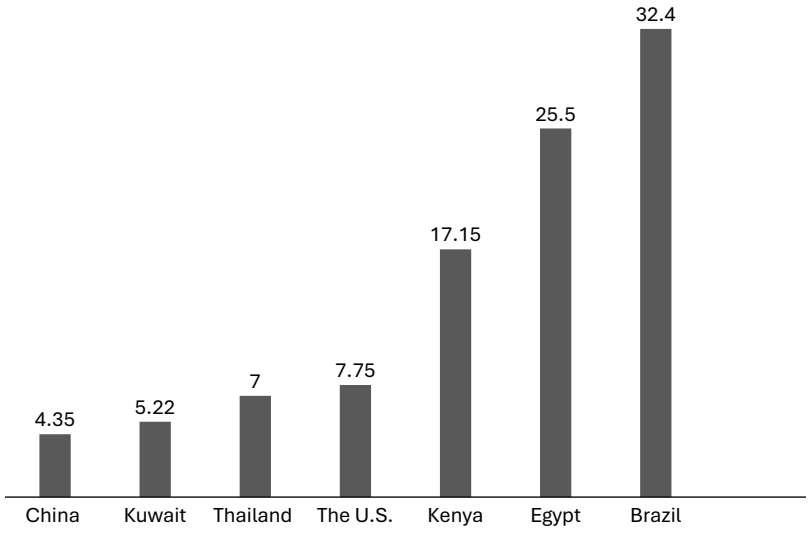

Figure 3.1 A.L.R.s in Selected Economies (2024)

countries have realized that focused government intervention is necessary to improve S.M.E.s' access to finance. They have launched a number of programs to use public funds to facilitate S.M.E. lending. One example is the European Commission's S.M.E. guarantee facility (S.M.E.G.) (http://ec.europa.eu/enterprise/policies/finance/cip-financial-instruments/index_en.htm), which encourages banks to make more debt finance available to S.M.E.s such as microcredit and mezzanine finance (which is typically a debt capital that is used to finance existing S.M.E.s' expansion, and the lender has the rights to convert to an ownership or equity if the loan is not paid back in time and in full). The S.M.E.G. program reduces the banks' risk exposure by providing co-guarantees, counter-guarantees or direct guarantees. Consequently, large proportions of S.M.E.s have access to bank financing. For instance, in the European Union economies, commercial banks are the main source of finance for 79% of S.M.E.s.[8]

Unavailability of financing is a more critical barrier faced by most entrepreneurs in developing countries. For instance, despite high interest rates, demand for credit exists in most developing economies. According to the World Bank's Global Findex Database 2021, 1.4 billion adults worldwide remained unbanked, that is, they did not have an account at a financial institution or through a mobile money provider.[9] This figure has decreased from 2.5 billion unbanked adults in 2011 to 1.7 billion in 2017.[10] According to the 2021 Global Findex Database, 54% of the unbanked – around 740

million people – live in just seven countries: Nigeria, Indonesia, India, Egypt, China, Pakistan and Bangladesh. This highlights the concentration of the unbanked population in these economies. The unbanked adults often lack accounts due to insufficient funds, long distances to financial institutions and inadequate documentation requirements. These barriers consistently hinder financial inclusion efforts worldwide.[11]

A high percentage of unbanked adults cite the cost of financial services as a barrier. Globally, 36% of unbanked adults believe these services are too expensive, a share that rises to 60% in Latin America and the Caribbean. In countries like Brazil, Colombia, Honduras, Nicaragua, Panama, Paraguay and Peru, over 60% of unbanked individuals identify cost as a major obstacle. This underscores the significant financial accessibility challenges in the region.[12]

Globally, distrust in the financial system prevents 23% of unbanked adults from having accounts. This concern is more pronounced in Europe, Central Asia and Latin America and the Caribbean, where roughly a third of unbanked adults share this sentiment. In Ukraine, distrust was a reason for 54% of unbanked adults. Similarly, more than one-third of unbanked individuals in countries such as Argentina, Bolivia, Bulgaria, Colombia, Jamaica and Russia also cited distrust in financial institutions as a key barrier.[13]

As of 2021, 76% of adults globally owned an account at a bank or regulated institution. This marks a 50% increase in account ownership over the past decade. In developing economies, account ownership rose to 71%, driven by an 8-percentage-point increase from 2017 to 2021. In Sub-Saharan Africa, mobile money adoption played a significant role in this expansion.[14]

A study of 16 Sub-Saharan African economies explores the impact of mobile money adoption on investment by women-owned businesses. It finds a positive correlation between mobile money usage and increased investments by these firms, particularly S.M.E.s, while the effect is statistically insignificant for male-owned firms. Women-led businesses using mobile money for supplier transactions and customer credit provision show higher investment levels. The findings suggest digital technologies can play a pivotal role in addressing gender disparities in business investments across the region.[15]

S.M.E.s in Sub-Saharan Africa, totaling around 44 million, account for nearly 95% of registered businesses and contribute approximately 50% to the region's gross domestic product (G.D.P.). However, 40% of S.M.E.s report limited access to finance as a major growth constraint. The funding gap for these businesses is estimated to exceed $140 billion.[16]

Part of the problem also lies in the fact that many developing economies are characterized by the lack, or poor performance, of credit rating agencies to provide information about the creditworthiness of S.M.E.s. A national credit bureau would collect and distribute reliable credit information and hence

increase transparency and minimize the banks' lending risks. Many emerging economies lack such an agency and some have a poorly functioning one. This situation puts S.M.E.s in a disadvantaged position in the credit market. This is because S.M.E.s tend to be more informationally opaque than large corporations because the former often lack certified audited financial statements and thus it is difficult for banks to assess or monitor the financial conditions.

Due to the rapidly increasing internationalization of banking, many foreign banks are active in emerging markets. There is, however, a common accusation that foreign banks "cherry pick" the best borrowers and lend more to large transparent firms at the expense of S.M.E.s.[17]

Many developing countries also have government-supported programs to help S.M.E.s finance their businesses. For instance, due to the history of high interest rates, Brazil's development bank, the Banco Nacional de Desenvolvimento Econômico e Social (B.N.D.E.S.) dominates long-term debt business. The B.N.D.E.S. provides low-interest loans for longer periods compared to banks or institutional investors. However, many bureaucratic and red-tape processes, such as the need for notarized signatures for several declarations and certificates, lead to significant costs, and the process often takes more than six months.[18]

3.3 The Capital Market

Entrepreneurial firms can also raise money thorough capital markets by issuing debt or equity securities. An initial public offering (I.P.O.), which occurs when a company first sells common shares to the public, is often a major goal for many S.M.E.s. In addition to raising capital to finance growth, a publicly traded company is more likely to gain the trust of their customers, as it is more closely monitored than private corporations.

I.P.O.s are categorized into two primary types: traditional I.P.O.s and reverse I.P.O.s. Traditional I.P.O.s involve a private company going public for the first time by issuing new shares to raise funds, often used for business expansion. Conversely, reverse I.P.O.s are less common and entail a public company transitioning back to private ownership. This typically involves the company buying back its shares and delisting from stock exchanges.[19]

Some indicators of capital market development include market capitalization (which is the share price times the number of outstanding shares) of listed companies, number of listed firms and size of I.P.O. offerings. Economies across the world vary widely in the development of the capital market. For instance, according to the World Bank (https://data.worldbank.org/indicator/CM.MKT.LCAP.GD.ZS?most_recent_value_desc=false), based on the latest data available as of December 2024, market capitalization as a proportion of G.D.P. varied from 0.2% in Algeria to 1273.2% in Hong Kong. The worldwide average was 106.2%.

Many developing economies lack appropriate legal and regulatory framework required for the development and functioning of the capital market.

These include the lack of effective supervisory and monitoring systems, bankruptcy regulations and procedures that are hostile to entrepreneurs, the lack of transparent accounting and disclosure standards and a poor protection of minority shareholders' rights.[20] Moreover, some emerging markets have unfavorable regulations for foreign investors. For instance, in China foreign investors require a license under the qualified foreign institutional investor program to access the financial markets.

In some developing economies, raising money through the capital market represents an undesirable option because of socioeconomic, cultural and other structural features. For instance, the largest firms in Colombia and some other Latin American countries have shown reluctance and resistance to list on the stock market. Being mostly family-owned, they are characterized by a conservative mindset and thus tend to avoid volatility in equity markets.[21] At the same time, there is also a low degree of willingness of people to invest in the capital market. In Mexico and Colombia, for instance, the middle classes are much more inclined toward real estate investments than putting their money in the stock market.[22] Stock exchanges in Latin America face challenges such as economic instability, financial crises, high-income inequality and limited access to financial services. These factors hinder the full realization of their potential and slow the region's financial development.[23]

Global I.P.O. proceeds dropped by 30% to US$120.05 billion in 2023, while the number of I.P.O.s decreased by 16% to 1,344, largely due to inflation and interest rate hikes in major markets, which negatively impacted offering activity.[24] As presented in Figure 3.2, China led the world in traditional I.P.O.s in 2023, hosting 302 offerings. India ranked second with

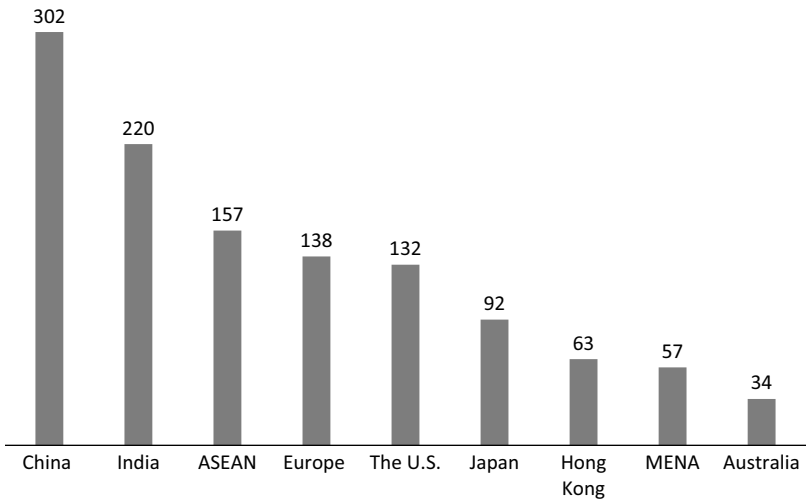

Figure 3.2 Number of Traditional I.P.O.s in Selected Economies (2023)

220 I.P.O.s, while the Association of Southeast Asian Nations (A.S.E.A.N.) countries combined for 157, securing third place globally.

In 2023, India raised US$7.89 billion through I.P.O.s, almost identical to the US$7.99 billion raised in 2022. This reflects a steady performance in the country's I.P.O. market.[25]

3.4 Venture Capital

Venture capital (V.C. or Venture) is a form of private equity capital, which is normally provided to immature capital-intensive companies that have high-growth potential. The investor may be a person or an investment firm. The investor hopes to generate a return through events such as an I.P.O. or trade sale of the company. In a V.C.-financed company, the entrepreneur is thus likely to benefit from the V.C. investor's entrepreneurial experience and managerial input. However, the entrepreneur is required to surrender partial ownership of the venture. In a V.C.-financed project, there are problems related to adverse selection and two-sided moral hazard. Note that adverse selection (anti-selection, or negative selection) arises from information asymmetry between the investor and the entrepreneur. In such a case, one party is unable to determine if the other party is lying. Moral hazard is the problem of not being able to determine if the other party (the entrepreneur or the V.C. investor in this case) is cheating or acting dishonestly. They cannot verify each other's efforts.

V.C. is especially attractive for new and innovative companies, which have limited history of operation. They tend to be small to raise capital in the public markets and as noted above face difficulty in securing a bank loan. V.C. funds are important not because a large proportion of entrepreneurs receive them but because they are important funding sources for high-growth firms or S.M.E.s with innovative ideas, products, services or new technologies (innovative S.M.E.s). Indeed, according to Fundera, only about 5 out of every 10,000 startup businesses, or less than 0.05%, receive venture funding.[26] This highlights the highly competitive nature of securing V.C. It also makes the V.C. availability irrelevant for most entrepreneurs. In the United States, for instance, most businesses are created as sole proprietorships and service companies. These businesses tend to be less capital-intensive and thus do not seek or obtain V.C. funding.

Reported anecdotes suggest that approximately 1 in 350 ventures reviewed by venture capitalists receive funding. Of those funded, only about 10% become highly successful, either through a significant exit or an I.P.O. This results in an estimated 1 in 3,500 chance of success for ventures seeking V.C.[27]

In 2023, global startup investment reached $285 billion, a 38% decline compared to the $462 billion invested in 2022. This marks the lowest funding level since 2018, reflecting broader trends in V.C. investment.[28] The

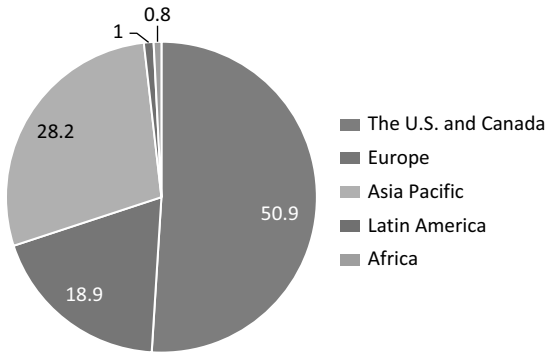

Figure 3.3 Regional Share of Total V.C. Deal Value, 2023

United States and Canada represent more than half of global V.C. funding, a significant proportion of the worldwide total (Figure 3.3).

3.4.1 Business Angels

Business angels or angel investors, who are individuals that provide financial backing through seed money for small startups usually founded by their family members or friends, are becoming increasingly important investors in many countries. Especially, the United States has dense networks in which successful entrepreneurs mentor startups and play the roles as "business angels", or general partners of V.C. firms.

One thing that should be noted is that available data and statistics on the V.C. industry mainly cover formal private equity investments in the industry, that is, funds raised and investments that circulate through "intermediary" V.C. companies. While there is the lack or limited availability of hard and reliable data on direct investments made by business angels, such investments are believed to be several times higher than formal V.C. investment in early stages. According to Konstantin Fokin, President of the National Business Angels Association of Russia, business angels invest about US$100 billion annually worldwide in young businesses, which is 90% of all the investment in early stage businesses.[29]

3.4.2 The V.C. Industry in Developing Countries

V.C. and angel investments are a relatively new phenomenon in the developing world. In most of the economies of the Middle East and North Africa, there is the lack of institutional investors that are capable of investing in the V.C. industry. Likewise, the banks are not interested in being players in the

V.C. industry.[30] Global venture firms, on the other hand, are reluctant to invest in emerging markets due to various challenges such as unfamiliar local laws and accounting standards, stock exchanges that have little experience in technology listings and different negotiating styles. Some developing economies are, however, becoming increasingly attractive destinations for V.C.

3.5 Accelerators as a Source of Entrepreneurial Financing

Accelerators are emerging as a key source of entrepreneurial financing. The United States and Canada account for most of such financing. Other geographic regions – Latin America, Asia and Oceania and the Middle East – are following close behind. The top five categories invested in by accelerators include the Internet of Things (74% of accelerators interested), followed by big data analytics (65%), Software as a Service (65%), fintec (64%) and mobile apps (63%) (Forbes, 2016).[31]

In 2015, the U.S.-based 500 Startups invested more than US$18 million and became the biggest accelerator program in the world in terms of investment. Another U.S. accelerator, Techstars, invested US$17 million in U.S. startups. Other top seed accelerators were Start-Up Chile (US$7 million), Latin America's NXTP Labs (US$6 million), Europe's Accelerace (US$4 million) and Canada's Alacrity Foundation (US$3 million).[32]

Startup exits through mergers, acquisitions and I.P.O.s are considered to be a success indicator of accelerator investment programs. In this regard, again, accelerators in the United States and Canada reported the greatest number of startup exits in 2015 (Figure 3.3).[33]

The emergence of accelerator/investment program*s* has resulted in reduced importance of other sources of entrepreneurial financing such as V.C. For instance, V.C. funding is reported to be declining in Europe. According to Pitchbook analysts, the decline can be attributed to European incubators and accelerators, which may delay the need for V.C. financing.[34]

3.6 Microfinance

Microfinance was started in the 1970s to provide small working capital loans to poor people in the developing world to start a business. A microfinance institution (M.F.I.) typically borrows funds at a low cost and tries to keep loan defaults and overhead expenses very low. Loans are typically made to entrepreneurs without physical collateral.

The global microfinance market was valued at approximately US$102 billion in 2015[35] and US$215.68 billion in 2023, which is projected to reach US$590.74 billion by 2033.[36] This growth is driven by increasing financial inclusion efforts and rising demand for microloans in developing regions.[37]

In 2016, M.F.I.s had 123 million customers,[38] which increased to about 200 million in the early 2020s.[39] Countries with high numbers of borrowers include India, Vietnam, Bangladesh, Peru and Mexico.

The latitude in terms of products offered by microfinance companies has also expanded. Nowadays, microfinance provides low-income people with diverse financial services such as various types of loans (student loans, home loans), savings, money transfer and insurance. Microfinance is described as one of the highest-profile and most effective examples of an anti-poverty program.[40]

Most microfinance activities are concentrated in the Asia Pacific region. India and Bangladesh together account for more than half of all borrowers in the world.

Large multinational banks have also been attracted to the microfinance industry. For instance, Citigroup, Deutsche Bank and HSBC have separate microfinance divisions. As of 2009, Citibank worked with 85 M.F.I.s in 35 countries.[41] Microfinance has a clear double bottom line for multinational banks—both social and financial—as it enables them to demonstrate corporate social responsibility while achieving attractive returns on investment. [42]

Some countries have relaxed regulations to allow commercial banks to enter into this business. In the Philippines, in 2010, the central bank introduced a policy that allows all banks to lend directly to farmers. Before that, only rural banks that were part of the Micro Enterprises' Access to Banking Services program could provide direct loans to farmers.[43]

Interest rates charged by M.F.I.s vary widely and there is no agreement as to what a reasonable rate would be. From 2003 to 2015, Sub-Saharan Africa faced the highest global average microcredit interest rates at 34%, compared to 30% in Latin America, 28% in the Middle East and North Africa and 22% in Asia. Some countries, like Cameroon and Zambia, had rates exceeding 100% until regulatory interest-rate caps were introduced in 2013.[44] For most poor people who lack access to credit, however, microlenders are argued to be a better option than the village loan sharks.

M.F.I.s have demonstrated questionable effectiveness in fighting poverty. Microfinance, once lauded for empowering the poor, has faced criticism for exacerbating hardship. In Jordan, laws permitting imprisonment for debt have led to over 23,000 women being sought by police for small debts as of 2019. Sri Lanka has also witnessed severe consequences, with approximately 200 suicides linked to microfinance-related debts during 2019–21. These instances highlight ongoing social and ethical challenges in the sector, raising concerns about exploitation despite its promise of financial inclusion.[45]

Due partly to poor staff management in M.F.I.s, informal intermediaries such as loan sharks still function as a key source of loans for many poor families. Studies have suggested that loan officers at M.F.I.s have an incentive to focus more on the number of loans provided and payback rates. There is

little incentive to fund the poorest borrowers. Many loan officers at M.F.I.s know that some borrowers use their loans to lend to poor families. They still provide loans to the informal intermediaries because of potentially higher payback rates.[46] This reinforces the existing socioeconomic hierarchies in developing countries.

There is also evidence that microfinance customers borrow money from traditional moneylenders to pay off the debts with an M.F.I. Proof of that claim is evident in the growth of both microfinance and traditional money lending in India. Data from a government survey indicated that, in the 1990s, traditional moneylenders' share in the rural Indian household debt increased from 18% to 30%.[47] It is speculated that one reason behind the growth of traditional money lending could be the practice of some microfinance borrowers to borrow money from moneylenders in order to pay their microfinance debt. There is a peer pressure within microfinance groups to pay back loans. A field observation in Andhra Pradesh state of India indicated that women who borrowed from M.F.I.s needed to rotate loans from other sources including local moneylenders to pay to the M.F.I.s.[48]

3.7 Crowdfunding

Crowdfunding (C.F.), which involves raising small amounts of capital from a large number of individuals, is considered to be a major disruption in entrepreneurial financing. Key elements of C.F. include an online platform, an individual or an entity that needs funding and a community willing to contribute to the funds. Polaris Market Research & Consulting LLP projects substantial growth in the global C.F. market, which was valued at US$19.86 billion in 2023. The market is anticipated to reach US$72.88 billion by 2032, driven by the increasing popularity of digital fundraising platforms and rising Internet accessibility.[49]

Equity-based crowdfunding (E.C.F.) is emerging as an increasingly important source of entrepreneurial financing. For instance, the "business and entrepreneurship" category accounted for 27.4% of total C.F. volume in 2012, which increased to 41.3% in 2014.[50] One estimate suggested that the Internet-based E.C.F. market was US$400 million worldwide in 2013, which increased to US$1.1 billion in 2014.[51] In 2014, E.C.F. accounted for 30% of all seed capital in the United Kingdom.[52]

Nonetheless, economies worldwide vary greatly in entrepreneurs' efforts to raise and investors' propensity to invest in E.C.F. For instance, per capita E.C.F. in 2015 was estimated at US$0.003 in the Latin America and the Caribbean (L.A.C.) region, US$0.23 in Asia Pacific and US$8.32 in the United States.

In the context of E.C.F., the first observation is that most economies have not yet enacted E.C.F. legislation. This means that E.C.F.-related formal institutions are not well developed in most countries. For instance,

according to a 2015 report of the International Organization of Securities Commissions (I.O.S.C.O.),[53] which was based on a survey in which 23 member countries participated, only 8 – Canada, France, Germany, Italy, Japan, Spain, the United Kingdom and the United States – had "bespoke" E.C.F. regulations. Four – Brazil, South Korea, India and Mexico – were planning to introduce them. The remaining economies relied on general securities and financial services laws to govern E.C.F.[54] The countries participating in the I.O.S.C.O. survey are big and/or rich. Indeed most small and/or developing nations lack E.C.F. laws. For instance, as of 2015, Malaysia was the only Southeast Asian country to have E.C.F. legislation.

Entrepreneurs are raising E.C.F. even in countries without E.C.F. regulations. For instance, as of September 2016, India lacked E.C.F. laws[55] but had over half-a-dozen equity C.F. platforms (E.C.F.P.s). During the 18 months leading up to September 2016, Indian E.C.F.P.s raised US$52–67 million for about 200 companies.[56] Likewise, as of early 2016, China lacked formal E.C.F. legislation. Nonetheless E.C.F. is a dominant segment in the Chinese C.F. landscape.[57] Barriers related to informal institutions are even more pronounced than formal institutions to raise E.C.F. Whereas the United States has an investment culture that can easily be adapted to E.C.F., China lacks such a culture. For instance, until the early 2000s, bank lending accounted for 90% of corporate financing in China, which reduced to 55% in 2012.[58] Due to the relative newness of individual investments, new channels such as E.C.F. are viewed as high risk investments.[59]

3.8 Blockchain-Based Tokenization: A New Alternative Funding Model

Blockchain-based tokenization is revolutionizing entrepreneurial financing by offering a novel way for startups to raise capital. By converting assets into digital tokens on the blockchain, it enables fractional ownership, increased liquidity and wider access to investors, making it a compelling alternative funding model for emerging businesses.

3.8.1 Initial Coin Offering

An initial coin offering (I.C.O.) is a fundraising tool that allows a startup to trade future cryptocoins in exchange for cryptocurrencies of immediate and liquid value such as bitcoin and Ethereum (Wilhelm, 2017).[60] A startup raising money through an I.C.O. can create its own cryptocurrency utilizing blockchain protocols such as Ethereum, Counterparty, or Openledger. Roadmap goals and strategies are outlined in a whitepaper. I.C.O. values are set up based on the amount of money a project requires to achieve the stated objectives. Unlike I.P.O.s, token holders do not have ownership

rights or asset claims at the company launching the project. Instead, the tokens may act as "bearer instruments" and the users have rights related to a specific project (Are ICOs the new future of start-ups, 2017).[61]

In a study conducted in 2020, analyzing over 5,036 I.C.O.s from 2016 to 2019, it was found that I.C.O.s globally raised more than US$13 billion. Statista's report for the same period placed this figure slightly higher, at over US$14.8 billion. By mid-2023, initial coin offerings (I.C.O.s) had collectively raised over US$50 billion since their inception, showcasing their enduring significance in blockchain-based fundraising.[62]

Venture capitalists often tend to avoid blockchain companies that have only proof-of-concept or solely white-paper-based pre-I.C.O. concepts. They are generally interested only in blockchain projects that have demonstrated significant promise for success.[63] I.C.O.s thus fill an important funding gap for early stage blockchain companies that have not yet developed marketable products.

Token offerings need to be registered in a real-world jurisdiction, which regulates I.C.O. activities. One of the most fascinating aspects of I.C.O.s is a surprisingly high degree of inter-jurisdictional variation in regulations and policies governing this form of fund raising. For instance, Switzerland is touted as a "cryptocurrency haven" (Lopez, 2017).[64] Cryptoventures in other major economies, on the other hand, have encountered diverse legislative and regulatory obstacles.

3.8.2 Decentralized Finance

Decentralized finance (DeFi) (In Focus 3.1) leverages blockchain technology to create financial products through trustless and transparent protocols, operating without intermediaries (https://defiprime.com/). In June 2019, the total value locked in the DeFi ecosystem was US$400 million, a figure that surged to US$90 billion by June 2024 (Figure 3.4). The majority of DeFi protocols are built on the Ethereum blockchain. The goal of DeFi is to replace traditional financial systems with smart contracts, eliminating the need for trusted third parties.

IN FOCUS 3.1 LEVERAGING DEFI FOR ENTREPRENEURIAL GROWTH: OPPORTUNITIES, RISKS AND BEST PRACTICES

Through blockchain and smart contracts, DeFi facilitates peer-to-peer lending and borrowing, giving entrepreneurs a decentralized alternative to traditional banks. This system enhances transparency, flexibility and efficiency in capital acquisition.[65]

DeFi has disrupted traditional banking by enabling S.M.E.s to access financial services without intermediaries, offering faster transactions, better security and improved financial inclusion. Unlike traditional systems, which often restrict cross-border transactions, DeFi provides global access through the Internet. For small businesses, it has simplified operations by eliminating paperwork, bank fees and delays, thus facilitating growth and efficiency.[66]

Opportunities

This decentralized approach is particularly beneficial for businesses in regions with limited access to traditional banking systems.[67] Entrepreneurs can leverage DeFi to bypass conventional financial systems, gaining access to capital via blockchain-powered smart contracts. This decentralized model promotes transparency, improves operational efficiency and opens doors to creative solutions like instant flash loans, enhancing financial inclusion. Lowering transaction fees also benefits businesses from emerging economies such as Africa by reducing cross-border payment costs, enhancing profitability and improving sustainability for companies operating on tight margins.[68]

Traditional banking and DeFi can collaborate by combining the trust and regulatory compliance of banks with the innovation and accessibility of decentralized finance, benefiting stakeholders through enhanced services like lower-cost cross-border payments and financial inclusion. Traditional banks can use DeFi's decentralized infrastructure to reach and provide services to unbanked populations. Banks could attract new customers, especially younger ones, by offering DeFi services, as a report from Antier Solution shows 41% of individuals aged 18–34 already use DeFi platforms.[69]

Risks

While DeFi presents exciting opportunities, it also comes with risks across financial, procedural, legal and technical dimensions. Investors face market volatility and liquidity issues, underscoring the need for sound risk management strategies. Procedural threats like phishing and social engineering demand heightened user vigilance. Legal challenges arise due to DeFi's regulatory gray areas, as highlighted by cryptoexchange collapses. On the technical front, the reliance on smart contracts and blockchain technology exposes platforms to hacking, distributed denial-of-service attacks and infrastructure vulnerabilities, requiring robust security protocols and responsible platform governance.[70]

Best Practices for Entrepreneurs to Ensure Safe and Compliant Integration

Addressing security and compliance in DeFi is crucial, requiring secure coding, robust encryption, multifactor authentication and regulatory adherence to mitigate risks.[71] Entrepreneurs venturing into DeFi should prioritize education and security by adopting noncustodial wallets like MetaMask, which provide control over funds and robust protection through multifactor authentication and encryption. Starting small with investments allows for gradual learning, while selecting reputable, mobile-compatible, open-source platforms ensures transparency and flexibility. Engaging with the DeFi community and leveraging expert insights can further enhance their approach, as a growing number of small business owners globally – 15%–20% – are already integrating DeFi into their operations.[72]

Conclusion

In conclusion, DeFi presents significant opportunities for entrepreneurs, particularly in regions with limited access to traditional banking systems, by enhancing financial inclusion and offering more efficient capital acquisition methods. However, it also carries inherent risks, such as market volatility, security concerns and regulatory challenges, which require entrepreneurs to adopt strong risk management strategies and prioritize education and compliance. By engaging with the DeFi community and following best practices, small business owners can safely integrate DeFi into their operations and unlock its full potential.

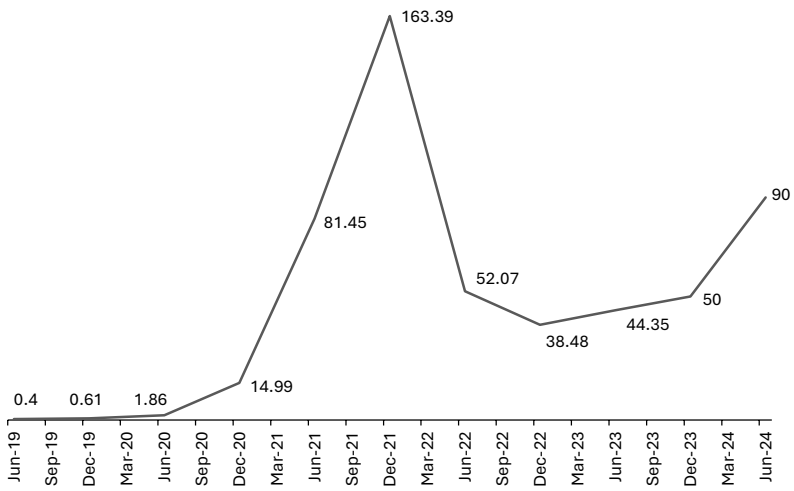

Figure 3.4 DeFi Total Value Locked (US$, Billion)

3.9 International Remittances as a Source of Entrepreneurial Financing

According to the World Bank, international remittances amounted to US$429 billion in 2016 (http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-and-remittances-publications). Global remittance flows further increased to US$843 billion in 2022 and $857 billion in 2023.[73]

International remittances are an important source of financing in many developing countries. For instance, a survey of microenterprises in Mexico found that about one-third of the capital invested was associated with migration to the United States (Woodruff and Zenteno 2007). It is argued that economic remittances from diaspora networks play the role of financial intermediaries in the sense that such remittances enable households and microentrepreneurs to overcome credit constraints and imperfections they face in the financial markets in developing countries. Households and microenterprises receiving economic remittances are able to invest in human and physical capital, which is likely to stimulate entrepreneurial activities and contribute to long-run economic growth of a country.[74] Perhaps even more impressive is that the population at the middle-to-bottom end of the wealth distribution is more likely to benefit from economic remittances.[75,76,77] Note that poor households often face a high degree of credit constraint and thus have low degrees of access to self-employment and entrepreneurship.[78] This issue is rather important because of the fact that poverty reduction has been identified as a key entrepreneurial impact.[79]

While some studies have shown that remittances are mainly used for consumption instead of investment activities, research has also indicated that households receiving international remittances tend to invest more in entrepreneurial activities than those not receiving remittances.[80] Remittances contribute to entrepreneurship by increasing savings and promoting credit mobilization and other forms of investment. Remittance-receiving families often receive funds that are much larger than required for immediate expenditure. They thus deposit the excess funds in the formal banking system, which enhance the banking system liquidity.

3.10 Other Sources of Entrepreneurial Financing

Many other important sources of entrepreneurial financing exist. We discuss some of them in this section.

3.10.1 Supply Chain Financing

In supply chain financing, companies collaborate with financial institutions to provide financing and other related services such as technical assistance,

management, corporate governance and legal compliance to small firms in the company's supply chain. For instance, the Brazilian company VCP has collaborated with the bank ABN AMRO Real in its Poupança Florestal (Forest Savings Account) program, which provides farmers with financial resources. VCP also provides seedlings and technical assistance to plant eucalyptus and has committed to buying the timber at a fair price after seven years. The Forest Savings Account program is supported by local partnerships with governmental agencies and universities.[81]

3.10.2 *Informal Financing Sources*

The importance of informal sources is readily understood within the context of the lack of access to formal financing. Informal financing often involves small, short-term loans to borrowers in rural areas. Informal financial institutions often serve the lower end of the market and are complementary to the formal financial system. Two important questions arise: The first question is how informal sources of finance can exist where the formal sources cannot. The second question concerns the financing gap that exists. The answer to the first question involves considering informal investors' superior information about the entrepreneur or enforcement possibilities which reduce problems such as adverse selection and moral hazard. Informal financial institutions rely on relationships and thus have advantages that enable them to lend, efficiently monitor and enforce repayment to the entrepreneurs that formal investors such as commercial banks may not trust. The answer to the second question lies in the lack of availability of sufficient funds and relatively high cost of capital. The limited and costly funds constrain growth.[82] Moreover, monitoring and enforcement mechanisms of informal financial institutions are ill equipped and ineffective, which makes them unprepared to scale up investments or to move to the formal sector.[83]

3.11 Concluding Comments

A variety of sources exist to meet financial needs of existing and potential entrepreneurs. Financing from accelerators and I.C.O.s are some of the newest sources of entrepreneurial financing.

Availability and affordability of a given source vary across countries, types of ventures and phases of a business. While there has been a dramatic increase in the availability of different sources of finance for potential entrepreneurs in emerging economies in recent years, the supplies are insufficient to meet financing needs of potential entrepreneurs. Financing S.M.E.s is a risky proposition for many banks in emerging markets. While the largest firms use formal sources of finance (e.g., bank loans in China mostly go to state-owned enterprises), the smallest tend to rely more on informal finance.

Microfinance deserves special attention in the context of emerging economies. In many cases, what seems to be happening, however, is that M.F.I.s are focusing more on increasing repayment rates rather than encouraging productive utilization of microcredits. Despite the growth of M.F.I.s, predatory lenders are still thriving. When M.F.I.s are poorly managed, they provide entrepreneurial opportunities for "middle men" who take M.F.I. loans and lend to poorer borrowers. As a result the poorest of the poor microentrepreneurs benefit less. In this regard, one way to increase the success rate of microfinance program is to manage M.F.I.s in a better way. M.F.I.s should also provide trainings that can address the lack of business and entrepreneurial skills of borrowers.

Given the important roles of microcredits and microfinances among the poorest of the poor, such schemes play an important role in developing countries and efforts should be made to boost their effectiveness and diffusion. Many potential entrepreneurs are also unaware of diverse financing options that they may access. In this regard, improving awareness about the various financing options among potential entrepreneurs is also important.

3.12 Discussion Questions

1. What are some of the potential barriers that M.F.I.s are likely to face in industrialized countries?
2. What are some of the barriers for the development of the V.C. industry in the developing world?
3. What are some of the key factors that have led to the phenomenon of the "missing middle" in developing economies?
4. Do you think that there should be an appropriate interest rate that M.F.I.s can justify charging to potential borrowers? What factors would determine such rates?
5. Do you agree with the following statement: "Microfinance has done more to bolster the status of women and to protect them from abuse than any laws could accomplish"? Why?

3.13 End of the Chapter Case: Crowdfunding in Latin America

Crowdfunding in Latin America has been growing steadily since its inception in 2009, with platforms emerging to cater to various needs and audiences across the region. Brazil's Vakinha pioneered the concept, offering a simple way to fundraise for any cause, while Catarse focused on supporting creative and artistic projects through a reward-based model. Kickante, Brazil's leading C.F.P., has raised over BRL 100 million (US$16.2 million), offering campaigns for diverse causes and an online marketplace. Argentina's Idea.Me supports artistic and nonprofit initiatives across Latin America,

emphasizing access to capital for innovative ideas. In Mexico, Snowball combines C.F. with investment opportunities, allowing users to buy shares in startups and S.M.E.s after a voting phase, creating a unique model that blends fundraising and profit-sharing. These platforms highlight the region's creativity and resourcefulness in leveraging collective financing for social and entrepreneurial goals.[84]

Just like in Australia and New Zealand, the most successful C.F. campaigns in Latin America have been those related to music, dance, theater and other creative projects (launcht.com, 2013).[85] The region's C.F. market, however, is less developed compared to most other regions. This is especially the case for E.C.F.

3.13.1 Regulatory Uncertainty

Regulatory uncertainty has had a negative effect in the E.C.F. market. Regulators have special concerns regarding E.C.F. for which regulatory frameworks are not well developed in most economies in the region. In such conditions, it is reasonable to assume that laws and regulations that were laid down for a broader scope of activities and purpose (e.g., entrepreneurial activities such as raising finances and investments) may be applied to equity-based C.F.

Countries vary widely in the degree of friendliness of the regulatory framework for entrepreneurship. In economies where entrepreneurs face constraints and distortions such as red tape and high tax burdens, they may be discouraged from raising E.C.F. On the other hand, in a country where promoting productive entrepreneurship is a national priority, the legislature and the government may put their support behind E.C.F. even without clear legal rules.

Let us compare Brazil and the United Kingdom for this purpose. In the United Kingdom, generous tax breaks for investing in seed stage firms favor equity C.F. (MacLellan, 2013).[86] On the other hand, in Brazil, the undeveloped regulatory framework has led to a problematic interpretation of C.F. The state bank Caixa Econômica Federal, which is the government department responsible for regulating lotteries and other contests, wanted to classify C.F. as a contest with prizes. Such interpretation may limit the growth of the C.F. due to extremely high taxes on payouts (flaviogut.com, 2012).[87]

3.13.2 Low Thin Trust

Online E.C.F. involves fundraising efforts often initiated by a stranger. What is important here is thin trust between strangers rather than thick trust between people that know each other. In Latin America trust mainly resides within the "jus sanguinis" ("the right of blood"). Latin Americans thus lack trust in unknown people.[88]

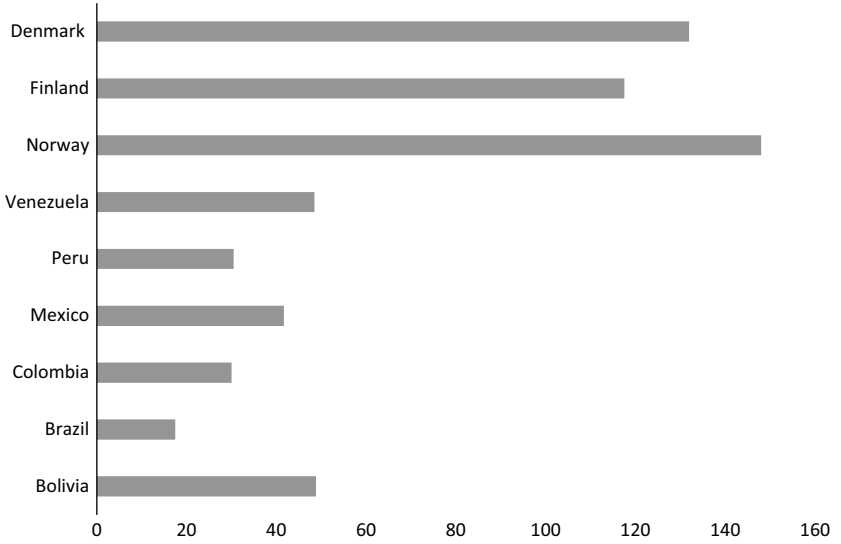

Figure 3.5 A Comparison of Trust Indices of Selected Economies in Latin America with Nordic Countries

One key observation regarding the slow takeoff of E.C.F. in L.A.C. is that the liberalization of markets and economic modernization led to the disbandment of social networks. Whereas these disappearing networks have been replaced by new forms of support systems (e.g., voluntary associations in the United States) such systems have not yet emerged in Latin America. Latin American economies thus consist of "lonely populations" who lack social support and links.[89] The trust index of Brazil was 17.5 compared to Norway's 148[90] (Figure 3.5).

As noted earlier, whereas many C.F. projects promoted by U.S.-based C.F.P.s are product-based and people fund them expecting to receive a product in return, Brazilians tend to be more interested in the project's social benefits. It is also rare in Brazil for a project to be funded at a level higher than asked for by the project creator.[91]

3.13.13 Underdeveloped Payment Mechanisms

Some C.F.P.s in the region have recognized the importance of becoming a global player. Perhaps the greatest barrier for a regional player centers on the variation in payment systems across economies in the region. This has been a challenge faced by Ideame. A key aspect of Idea.Me's localization involved the use of various payment options acceptable in the L.A.C.

region including cash and other methods to account for the region's risk aversion. Crowdfunders can pay with almost all regional currencies such as Argentine and Mexican Pesos, Brazilian Real and US Dollar. It became the region's first C.F.P. to support Bitcoins, Paypal, MercadoPago (a popular mode of payment for local consumers and businesses in Argentina, Colombia and Mexico), DineroMail (a mode for local payments in Chile) and Moip (which is used for local payments in Brazil).[92] Idea.Me's websites are in Spanish, Portuguese and English.

3.13.4 Summary

E.C.F. per capita in the L.A.C. is among the lowest in the world. A critical and urgent step for regulators in the region is to enact E.C.F. laws. The case of Idea.Me makes it clear that when entrepreneurs or investors cross borders, they should be aware of local differences in C.F.-related institutions and do what they can to compensate for these differences. Given the global nature of C.F., its growth hinges critically upon the compatibility of the payment mechanisms across countries. International cooperation to harmonize payment systems can stimulate the growth of this industry.

Notes

1 Arensmeyer, J. (2017). Capital continues to elude small businesses: What can be done? https://www.business.com/articles/small-businesses-unable-to-get-bank-loans/
2 OECD. (2006). Financing SMEs and entrepreneurs. *Policy Brief*. http://www.oecd.org/cfe/37704120.pdf
3 Yan, L. (2012). Development finance. *Chinese Economy*, *45*(1), 8–27.
4 Lee, S., & Persson, P. (2012). Financing from family and friends. *NYU Stern Working Paper FIN-12-007*. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2086625
5 OECD. (2006). Financing SMEs and entrepreneurs. *Policy Brief*. http://www.oecd.org/cfe/37704120.pdf
6 The World Bank. (2018). Women entrepreneurs finance initiative. http://www.worldbank.org/en/programs/women-entrepreneurs
7 Demirgüç-Kunt, A., Klapper, L., Singer, D., & Hess, S. A. J. (2018). *The global findex database 2017, measuring financial inclusion and the fintech revolution*. International Bank for Reconstruction and Development/The World Bank.
8 OECD. (2006). Financing SMEs and entrepreneurs. *Policy Brief*. http://www.oecd.org/cfe/37704120.pdf
9 World Bank. (2021). *The Global Findex Database 2021*. https://www.worldbank.org/en/publication/globalfindex/Report
10 Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank. https://www.worldbank.org/en/publication/globalfindex 2018
11 World Bank. (2021). *The Global Findex Database 2021*. https://www.worldbank.org/en/publication/globalfindex/Report

12 World Bank. (2021). *The Global Findex Database 2021*. https://www.worldbank.org/en/publication/globalfindex/Report
13 World Bank. (2021). *The Global Findex Database 2021*. https://www.worldbank.org/en/publication/globalfindex/Report
14 World Bank. (2021). *The Global Findex Database 2021*. https://www.worldbank.org/en/publication/globalfindex/Report
15 Islam, A. M., & Muzi, S. (2022). Does mobile money enable women-owned businesses to invest? Firm-level evidence from Sub-Saharan Africa. *Small Business Economics*, *59*(3), 1245–1271. https://doi.org/10.1007/s11187-021-00571-7
16 Ivory, R., & Pullella, E. (2024, July 31). *How can blended finance help improve African SMEs' access to finance?* Convergence. https://www.convergence.finance/news/3zA5WAvKR7tdfexCAKj02R/view
17 Degryse, H., Havrylchyk, O., Jurzyk, E., & Kozak, S. (2009). *Foreign bank entry and credit allocation in emerging markets*. International Monetary Fund, WP/09/270. http://www.imf.org/external/pubs/ft/wp/2009/wp09270.pdf
18 7 Challenges SMES face in Brazil, 13 December 2011. http://thebrazilbusiness.com/article/7-challenges-smes-face-in-brazil
19 FasterCapital. (2024, June 23). *The main types of IPOs and what they entail*. https://fastercapital.com/content/The-main-types-of-IPOs-and-what-they-entail.html
20 de la Torre, A., Gozzi, J., & Schmukler, S. (2007). *Capital market development: Whither Latin America?* Policy Research Working Paper No. 4156, World Bank.
21 Rathbone, J. P. (2010). Capital markets: Investors require patience more than nimble financial footwork. http://www.ft.com/intl/cms/s/0/53e3395e-4042-11df-8d23-00144feabdc0.html#axzz1VLe1OWo0
22 Portes, A., & Smith, L. (2008). Institutions and development in Latin America: A comparative analysis. *Studies in Comparative International Development*, *43*(2), 101–128.
23 Statista Research Department. (2024, September 23). *Stock exchanges in Latin America - statistics & facts*. Statista. Retrieved December 9, 2024, from https://www.statista.com/topics/11251/stock-exchanges-in-latin-america/#topicOverview
24 White & Case LLP. (2024, April 18). *Market overview: The global IPO landscape*. JD Supra. https://www.jdsupra.com/legalnews/market-overview-the-global-ipo-landscape-9670826/
25 Guptan, R. (2024, April 11). *Coming of age: A strong year for India's capital markets*. White & Case. https://www.whitecase.com/insight-our-thinking/global-ipos-2024-india-capital-markets
26 Wood, M. (2020, February 3). *Raising capital for startups: 8 statistics that will surprise you*. Fundera. https://www.fundera.com/resources/startup-funding-statistics
27 Bhatia, M. (n.d.). *For every success story in Silicon Valley, how many are there that fail?* Startups.com. Retrieved July 24, 2024, from https://www.startups.com/community/questions/396/for-every-success-story-in-silicon-valley-how-many-are-there-that-fail
28 Teare, G. (2024, January 4). Global startup funding in 2023 clocks in at lowest level in 5 years. *Crunchbase News*. https://news.crunchbase.com/venture/global-funding-data-analysis-ai-eoy-2023/
29 National Business-Angels Association. (2012). European Business Angel Network Congress. http://www.ebancongress2012.org/58.html

30 OECD. (2006). MENA Investment Policy Brief, Issue 1. http://www.oecd.org/mena/investment/37256468.pdf
31 Forbes. (2016). The state of the Startup Accelerator Industry. https://www.forbes.com/sites/groupthink/2016/06/29/the-state-of-the-startup-accelerator-industry/#5bfd81de7b44
32 Forbes. (2016). The state of the Startup Accelerator Industry. https://www.forbes.com/sites/groupthink/2016/06/29/the-state-of-the-startup-accelerator-industry/#5bfd81de7b44
33 Gust. (2015). Global Accelerator report 2015. http://gust.com/global-accelerator-report-2015/
34 Henry, Z. (2017). Why Investment in EU Startups Continues to Decline (Hint, It's Not the Reason You Think). https://www.inc.com/zoe-henry/eu-startup-funding-2017-brexit.html
35 Convergences. (2017). Is microfinance still working? Microfinance Barometer.
36 Spherical Insights & Consulting. (2024, July 8). *Global microfinance market size to worth USD 590.74 billion by 2033, CAGR of 10.60%.* GlobeNewswire. https://www.globenewswire.com/news-release/2024/07/08/2909745/0/en/Global-Microfinance-Market-Size-To-Worth-USD-590-74-Billion-By-2033-CAGR-of-10-60.html
37 Spherical Insights & Consulting. (2024, July 8). *Global microfinance market size to worth USD 590.74 billion by 2033, CAGR of 10.60%.* GlobeNewswire. https://www.globenewswire.com/news-release/2024/07/08/2909745/0/en/Global-Microfinance-Market-Size-To-Worth-USD-590-74-Billion-By-2033-CAGR-of-10-60.html
38 Convergences. (2017). Is microfinance still working? Microfinance Barometer
39 Hernandez, E., & Faz, X. (2022, October 12). *Friend or Foe to the World's Poor? Settling the Microfinance Debate.* CGAP Leadership Essay Series. https://www.cgap.org/blog/friend-or-foe-worlds-poor-settling-microfinance-debate
40 Hubbard, G., & Duggan, W. (2009). *The Aid Trap Columbia.* University Press.
41 Engen, J. (2009). *Is microfinance ready for its next big leap?*
42 Hermes, N., Lensink, R., & Meesters, A. (2011). *Outreach and efficiency of microfinance institutions.* World Development.
43 Remo, M. (2010). Big banks can now lend directly to farmers. *Philippine Daily Inquirer.* http://business.inquirer.net/money/topstories/view/20100124-249251/Big-banks-can-now-lend-directly-to-farmers
44 Whitehouse, D. (2024, January 3). *Microfinance suicides show Africans must beware of excessive debt.* The Africa Report. https://www.theafricareport.com/329702/microfinance-suicides-show-africans-must-beware-of-excessive-debt/
45 Finch, G., & Kocieniewski, D. (2022, May 3). *Big money backs tiny loans that lead to debt, despair and even suicide.* Bloomberg. Data analysis and graphics by S. Rangarajan & C. Cannon. Videographers: S. Rathnayaka & Y. Azcona. https://www.bloomberg.com/graphics/2022-microfinance-banks-profit-off-developing-world/
46 Arp, F. (2018). The 34 billion dollar question: Is microfinance the answer to poverty? https://www.weforum.org/agenda/2018/01/the-34-billion-dollar-question-is-microfinance-the-answer-to-poverty
47 Gokhale, K. (2009). As Microfinance Grows in India, So Do Its Rivals. *Wall Street Journal - Eastern Edition*, 15 December, pA. 17–18.
48 Young, S. (2010). The "Moral Hazards" of Microfinance: Restructuring Rural Credit in India. *Antipode*, *42*(1), 201–223.
49 Polaris Market Research & Consulting LLP. (2024, August 12). *Crowdfunding market size to grow USD 72.88 billion by 2032, at a CAGR of 16.1% from 2024*

to 2032 [Press release]. https://www.globenewswire.com/news-release/2024/08/12/2928427/0/en/Crowdfunding-Market-size-to-grow-USD-72-88-Billion-by-2032-at-a-CAGR-of-16-1-from-2024-to-2032-Polaris-Market-Research.html
50 Reuters.com. (2015). Crowdfunding Market Grows 167% in 2014: Crowdfunding Platforms Raise $16.2 Billion, Finds Research Firm Massolution. http://www.marketwired.com/press-release/crowdfunding-market-grows-167-2014-crowdfunding-platforms-raise-162-billion-finds-research-2005299.htm
51 Feit, R. (2015). Equity crowdfunding by the numbers. http://www.inc.com/ryan-feit/equity-crowdfunding-by-the-numbers.html
52 Exporter Magazine. (2015). In with the crowd. http://exportermagazine.co.nz/article/crowd
53 The IOSCO sets standards for the securities sector. Its members are the world's securities regulators.
54 Torris, T. (2016). Global crowdfunding & local regulation: From light touch to prescriptive bespoke rules. http://www.crowdfundinsider.com/2016/05/85762-global-crowdfunding-local-regulation-from-light-touch-to-prescriptive-bespoke-rules/
55 Crowdfinders. (2016). *International Crowdfunding index 2015*. London.
56 Menon, S. (2016, September 9). Crowd control: Sebi warning turns off crowdfunding tap for startups. *The Economic Times*. http://economictimes.indiatimes.com/small-biz/money/crowd-control-sebi-warning-turns-off-crowdfunding-tap-for-startups/articleshow/54202702.cms
57 Zhang, M. (2016). The legislative trends in equity crowdfunding in China. http://minnjil.org/the-legislative-trends-in-equity-crowdfunding-in-china/
58 Walter, C. E., Fraser J., & Howie, T. (2003). Of China's Financial Bondage: Beijing discovers another way to repress savings and hide bad debt. http://www.wsj.com/articles/SB10001424127887323468604578247293207694134
59 Liang, Z. (2015). Crowdfunding in China: Potentials, challenges, risks and solutions. http://www.crowdfundinsider.com/2015/10/75384-crowdfunding-in-china-potentials-challenges-risks-and-solutions/
60 Wilhelm, A. (2017). WTF is an ICO? Retrieved September 7, from https://techcrunch.com/2017/05/23/wtf-is-an-ico/
61 Are ICOs the new future of start-ups? (2017). Retrieved September 7, from https://www.mazars.com/Home/News/Latest-News3/Are-ICOs-the-new-future-of-start-ups
62 Dean, E. (2023, August 25). *70+ ICO statistics you need to know in 2023*. ICO Bench. https://icobench.com/stats/ico-statistics/#:~:text=According%20to%20Crypto%20Vantage%2C%20ICOs,billion%20for%20the%20same%20period
63 Lyons, C. (2024, August 10). VC firms are slowing down crypto investments for a 'nuanced reason' — Venture capitalist. *Cointelegraph*. https://cointelegraph.com/news/venture-capital-crypto-firms-slowing-down-bitcoin-ethereum-returns 2018.
64 Lopez. (2017). An international regulatory shift could tame cryptocurrency market. Retrieved September 7, from http://www.corpcounsel.com/id=1202796983089/An-International-Regulatory-Shift-Could-Tame-Cryptocurrency-Market?mcode=1202617073467&curindex=1&slreturn=20170802171341
65 Stevens, G. (2024, May 7). *DeFi: A double-edged sword for entrepreneurs*. Namecheap. https://www.namecheap.com/blog/defi-a-double-edged-sword

-for-entrepreneurs/#:~=DeFi%20uses%20blockchain%20technology%20to%20give%20businesses
66 Agrawal, V. (2023, August 16). *Demystifying DeFi: A guide for small business owners and entrepreneurs*. Forbes. https://www.forbes.com/councils/theyec/2023/08/16/demystifying-defi-a-guide-for-small-business-owners-and-entrepreneurs/
67 Africa.com. (2024, August 15). *Challenges to business lending in Africa and how DeFi can help*. https://www.africa.com/challenges-to-business-lending-in-africa-and-how-defi-can-help/
68 Africa.com. (2024, August 15). *Challenges to business lending in Africa and how DeFi can help*. https://www.africa.com/challenges-to-business-lending-in-africa-and-how-defi-can-help/
69 Richardson, K. (2023, July 19). *How DeFi and traditional banking can collaborate for mutual benefit*. YEC Council Post. https://www.forbes.com/sites/theyec/2023/07/19/how-defi-and-traditional-banking-can-collaborate-for-mutual-benefit/
70 Stevens, G. (2024, May 7). *DeFi: A double-edged sword for entrepreneurs*. Namecheap. https://www.namecheap.com/blog/defi-a-double-edged-sword-for-entrepreneurs/#:~=DeFi%20uses%20blockchain%20technology%20to%20give%20businesses
71 Richardson, K. (2023, July 19). *How DeFi and traditional banking can collaborate for mutual benefit*. YEC Council Post. https://www.forbes.com/sites/theyec/2023/07/19/how-defi-and-traditional-banking-can-collaborate-for-mutual-benefit/
72 Agrawal, V. (2023, August 16). *Demystifying DeFi: A guide for small business owners and entrepreneurs*. Forbes. https://www.forbes.com/councils/theyec/2023/08/16/demystifying-defi-a-guide-for-small-business-owners-and-entrepreneurs/
73 Migration Data Portal. (2024, June 27). *Remittances*. https://www.migrationdataportal.org/themes/remittances
74 Mundaca, B., & Gabriela, R. (2009). Financial market development, and economic growth: The case of Latin America and the Caribbean. *Review of Development Economics*, *13*(2), 288–303.
75 Lucas, R. E. B. (1987). Emigration to South Africa's mines. *American Economic Review*, 77, 313–330.
76 Rozelle, S., Taylor, J. E., & deBrauw, A. (1999). Migration, remittances and agriculture productivity in China. *American Economic Review*, *89*, 287–291.
77 Woodruff, C., & Zenteno, R., (2007). Migration networks and microenterprises in Mexico. *Journal of Development Economics*, *82*, 509–528.
78 Mundaca, B., & Gabriela, R. 2009. Financial market development, and economic growth: The case of Latin America and the Caribbean. *Review of Development Economics*, *13*(2), 288–303.
79 Ahmad, N., & Hoffmann, A. N. (2008). A Framework for Addressing and Measuring Entrepreneurship. OECD Statistics Working Paper.
80 Adams, R. H. Jr. (2006). International remittances and the household: Analysis and review of global evidence. *Journal of African Economies*, *15*(Supplement 2), 396–425.
81 Boechat, C. Roberta Mokrejs Paro Votorantim Celulose e Papel (VCP) in Brazil: Planting eucalyptus in partnership with the rural poor. http://growinginclusivemarkets.org/media/cases/Brazil_VCP_2008.pdf

82 Lee, S., & Persson, P. (2012). Financing from family and friends. *NYU Stern Working Paper FIN-12-007*. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2086625
83 Ayyagari, M., Asli, D., & Maksimovic, V. (2010). Formal versus informal finance: Evidence from China. *Review of Financial Studies*, *23*(8), 3048–3097.
84 Oliver, B. (2023, January 16). Crowdfunding in Latin America: A look at the key players. *FinTech LATAM*. https://emergingmarkets.today/crowdfunding-in-latin-america-key-players-2023/
85 Launcht.com. (2013). State of international crowdfunding. http://www.launcht.com/blog/2013/02/06/state-of-international-crowdfunding/
86 MacLellan, K. (2013). *Global crowdfunding volumes rise 81 percent in 2012*. Reuters. http://news.yahoo.com/global-crowdfunding-volumes-rise-81-125829169.html
87 flaviogut.com. (2012). Lack of regulation presents challenges to crowdsourcing in Brazil. http://flaviogut.com/post/20133232952/lack-of-regulation-presents-challenges-to-crowdsourcing
88 Lagos, M. (2001). How people view democracy: Between stability and crisis in Latin America. *Journal of Democracy*, *12*(1), 137–145.
89 Lagos, M. (2001). How people view democracy: Between stability and crisis in Latin America. *Journal of Democracy*, *12*(1), 137–145.
90 Medrano, J. D. (2016). Interpersonal trust. http://www.jdsurvey.net/jds/jdsurveyMaps.jsp?Idioma=%20I&SeccionTexto=0404&NOID=104
91 MCS. (2013). A chat with the Cara from Catarse, my crowdfunding study. http://www.mycrowdfundingstudy.com/2012/01/31/a-chat-with-one-of-the-caras-of-catarse/
92 Sreeharsha, V. (2012). Crowdfunding merger points to ambitions in Latin America. https://dealbook.nytimes.com/2012/08/24/crowd-funding-merger-points-to-ambitions-in-latin-america/

Chapter 4

Entrepreneurship in Organisation for Economic Co-operation and Development Economies

This chapter's objectives are:

1. To demonstrate an understanding of determinants, performance indicators and impacts of entrepreneurship in O.E.C.D. economies.
2. To analyze the variation in the patterns of entrepreneurship across O.E.C.D. economies.
3. To demonstrate an understanding of various forms of entrepreneurial financing in O.E.C.D. economies.
4. To understand the causes, contexts, mechanisms and processes associated with economic and political reform activities undertaken by the newly joined O.E.C.D. members.

4.1 The O.E.C.D. in Relation to Entrepreneurship

The reasons and motivations underlying the formation of the Organisation for Economic Co-operation and Development (O.E.C.D.) (www.oecd.org/) relate to the development of entrepreneurship and improvement in the entrepreneurial climate in its member as well as nonmember countries that are committed to democracy and the market economy. The organization's missions encompasses promoting sustainable economic growth, enhancing living standards, increasing employment opportunities, ensuring financial stability, supporting economic development in nonmember countries, and fostering global trade expansion.[1] As of 2025, the O.E.C.D. had 38 member countries (Table 4.1). The O.E.C.D. is also strengthening partnership with key nonmember economies such as Brazil, China, India, Indonesia, Russia and South Africa.

O.E.C.D. membership is considered to be more symbolic in nature. However, in order to become an O.E.C.D. member, an economy needs to improve in a number of areas such as democratic freedoms, tax and environment laws and accounting and statistics rules.[2]

DOI: 10.4324/9781003565154-4

Table 4.1 O.E.C.D. Member Countries

Australia	*Finland*	*Korea*	*Slovak Republic*
Austria	France	Latvia	Slovenia
Belgium	Germany	Lithuania	Spain
Canada	Greece	Luxembourg	Sweden
Chile	Hungary	Mexico	Switzerland
Colombia	Iceland	Netherlands	United Kingdom
Costa Rica	Ireland	New Zealand	United States
Czechia	Israel	Norway	
Denmark	Italy	Poland	
Estonia	Japan	Portugal	

4.2 Variation in Entrepreneurial Performance

O.E.C.D. member countries show a variation in entrepreneurial performance. For instance, rapid expansion of successful young firms seems to be more of a feature of the United States than of other O.E.C.D. economies.[3] For instance, only 3% of startups in the United Kingdom become midsized, compared with 6% in the United States.[4]

There is also substantial heterogeneity across European members of O.E.C.D. countries in terms of the growth of young firms. In some countries such as Belgium and Sweden, startups continue to grow relatively fast even after five and seven years following entry. In other countries such as Italy and Denmark, flatter growth rates can be seen after the third year.

There are a large number of incubators that cater to companies that have just started. As noted in Chapter 2, Europe has a higher number of accelerators than North America. However, they should operate more as "scale-up hubs" in a more effective way. Put differently, the quality rather than the number of accelerators is likely to have the most pronounced effect on firm growth. That is, what Europe needs is more sophisticated "scale-up hubs" that cater to 100+ employee companies. Such hubs need to provide more advanced mentoring and selective support in order to spread experience and know-how to aspiring CEOs. These hubs would cater to smaller numbers of CEOs (a few dozen instead of a few hundred). A key goal is to fill the experience and mentoring gaps and reduce scale-up and financing risks.[5]

4.3 Newly Accessed and Candidate Countries

A review of some of the newly accessed and candidate countries would help illustrate the importance of economic and political climate reforms in order to qualify for O.E.C.D. membership. Accession talks to join the O.E.C.D. began with Estonia, Israel and Slovenia along with Chile and Russia in

May 2007. Their readiness to join the O.E.C.D. was assessed by the progress made by these economies in political and economic reform activities, especially in areas such as combating corruption, ensuring high standards of corporate governance and protecting intellectual property rights (I.P.R.s).[6] As explained in Chapters 1 and 2, these factors are critical foundations for entrepreneurial development.

In the discussion below, we look at the key indicators in these areas for the new members and candidate countries. The Economic Freedom Index covers ten components: Business Freedom, Trade Freedom, Fiscal Freedom, Government Spending, Monetary Freedom, Investment Freedom, Financial Freedom, Property Rights, Freedom from Corruption and Labor Freedom. I.P.R. protection is a component of the Economic Freedom Index. The Corruption Perceptions Index measures the perceived levels of public sector corruption. The Regulatory Quality Index measures the "perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development".[7] This index can be used to evaluate overall economic and political reforms including the regulatory environment related to corporate governance.

4.3.1 Newly Accessed Countries

Chile, Slovenia, Israel and Estonia joined the O.E.C.D. in 2010. Latvia became an O.E.C.D. member in 2016. Lithuania's and Colombia's memberships were approved in May 2018. Below we discuss the economic and political reforms undertaken by newly joined members in a number of areas such as combating corruption, enhancement of corporate governance and I.P.R. protection.

4.3.1.1 Colombia

As of early 2018, only 20 of the 23 O.E.C.D. Committees had approved Colombia's O.E.C.D. accession.[8] The lack of progress in some key areas was a concern. In particular the O.E.C.D.'s Trade Union Advisory Committee (T.U.A.C.) argued that the Colombian government failed to protect trade unionists or take action against perpetrators of violence. According to human rights groups, there were at least 143 murders of trade union activists during 2012–17.[9] At a February 2018 T.U.A.C. meeting, Colombian trade unionists complained about the lack of progress in a number of areas including tackling informality and improper use of subcontracting and urged the O.E.C.D. member governments to pressure Colombia to make progress before inviting it to join the O.E.C.D.[10]

Another concern is Colombia's illicit mining industry. According to the O.E.C.D., illegal armed groups and criminal organizations are playing a key role in gold production in the country. The country's illegal gold mining

industry was estimated to generate about $2.5 billion per year.[11] This was three times more than the country's cocaine industry.[12] The O.E.C.D. also warned that illegal mining in Colombia is associated with serious human rights abuses such as child labor, forced labor and sex trafficking. There is also significant environmental damage.[13]

Colombia also allegedly failed to control manufacturing and distribution of counterfeit and substandard pharmaceuticals.[14] It was reported that fake pharmaceutical products were imported to Colombia from West African countries. Secret facilities that manufacture counterfeit drugs were also reported to exist in the country.[15]

The issues were finally resolved and in May 2018, the O.E.C.D. approved Colombia's membership in the organization. For the membership to be effective, Colombia needed to take the required steps at the national level in order to accede to the O.E.C.D. Convention.

4.3.1.2 Lithuania

The O.E.C.D. invited Lithuania to open accession talks in 2015. Lithuania's progress during the accession process was reviewed by 21 O.E.C.D. Committees. The Committees looked at implementation of substantive O.E.C.D. legal instruments in Lithuania and the country's policies in relation to O.E.C.D. best practices. Lithuania introduced a number of reforms and initiatives in key areas such as corporate governance in state-owned enterprises and listed companies, the fight against corruption and investment.[16]

On the corporate governance front, Lithuania took initiatives to increase efficiency and transparency of public enterprises. For instance, significant reforms were undertaken in forestry and road maintenance enterprises. It also started depoliticizing state-owned enterprises (S.O.E.s). Likewise, during the accession period, Lithuania amended the Penal Code to increase fines for corruption-related crimes by tenfold.[17] In May 2018, Lithuania was formally invited to become the 36th O.E.C.D. member.

4.3.1.3 Latvia

In May 2013, the O.E.C.D. Council had launched accession discussions with Latvia. Latvia worked closely with 21 O.E.C.D. Committees that covered diverse issues impacting entrepreneurial performance ranging from investment and corporate governance to trade and export credits. The Committees, which were composed of experts from O.E.C.D. member countries, evaluated Latvia's compliance with O.E.C.D. standards and best practices.[18] Latvia received positive opinions from each of the 21 Committees (www.mfa.gov.lv/en/policy/economic-affairs/oecd/latvia-s-road-to-the-oecd-chronology-of-events). For instance, in the area of

corporate governance, Latvia's framework for listed companies was found to be consistent with the O.E.C.D. principles. For S.O.E.s, Latvia undertook significant reforms during the O.E.C.D. accession review process. For instance, it started the process of re-establishing boards of directors, which was abolished in 2009.[19] In the educational sector, it was asked to evaluate and improve the development of skills based on the demands in the labor market and follow best practices of other O.E.C.D. members.[20]

Latvia hopes that O.E.C.D. membership will lead to significant improvement in the country's entrepreneurial climate. For instance, it expected improvement in international credit rating which would reduce interest rates related to entrepreneurial financing. Compliance with O.E.C.D. standards in business operations such as better investment environment and higher degree of investment protection would contribute to higher investor confidence and hence an increase in foreign direct investment.

A further benefit is that Latvia will be included in various policy papers and studies published by the O.E.C.D. as well as relevant statistics and various databases. A key point here is that surveys and studies conducted by the O.E.C.D. are viewed by investors and international financial institutions as more credible. An improved legal framework to fight against corruption and stronger enforcement of anticorruption would further improve the entrepreneurial environment.

The country will also gain from deeper economic contacts and increased business and trade cooperation with other O.E.C.D. members. The O.E.C.D. membership also provides new opportunities to learn from exemplar O.E.C.D. countries.[21]

4.3.1.4 Chile

Following the accession talks, an Accession Roadmap was adopted in November 2007, which set out the terms, conditions and process for Chile's accession to the O.E.C.D. In the Roadmap, the O.E.C.D. Council requested a number of O.E.C.D. Committees to provide it with a formal opinion. In light of the formal opinions received from O.E.C.D. Committees and other relevant information, the O.E.C.D. Council decided to invite Chile to become an O.E.C.D. member in December 2009. After completion of its internal procedures, Chile became an O.E.C.D. member in May 2010.

While Chileans have shown concerns about massive and endemic corruption in government and state institutions, Chile has seen rapid and phenomenal progress in anticorruption efforts following the end of Augusto Pinochet's dictatorship in 1990.[22] Despite some instances of corruption and criminal activities, the levels are low by the regional standards. A number of high-profile corruption scandals served as a big jolt in bringing into effect the anticorruption efforts. For instance, the Chilean economic development agency (C.O.R.F.O.), the Ministry of Public Works (M.O.P.), the

Central Bank, the Sports and Recreation Department (ChileDeportes) and a number of other S.O.E.s were embroiled in huge corruption scandals. ChileDeportes' use of state funds for political campaigns in 2006 is the most notable scandal that prompted the Chilean government to introduce a number of regulatory reforms.

Key elements of the new regulatory frameworks include clarification and modernization in the way public employees are paid, new campaign finance legislation, the establishment of a budget commission for monitoring and overseeing government spending and the establishment of ethical guidelines for public employees. There have also been reforms in the way the M.O.P. awards government contracts. These measures have produced the anticipated effects. In Transparency International's 2023 Corruption Perceptions Index, Chile ranked 29th out of 180 economies (https://www.transparency.org/en/cpi/2023).

A concentrated ownership structure with conglomerates and business groups controlling most firms and the capital market's limited liquidity were major challenges facing Chile's corporate governance landscape. Minority shareholders are often vulnerable in such settings due to the controlling shareholders' tendency to engage in irregular practices to extract private benefits. In this regard, Chile has made considerable progress on the corporate governance front, mainly through laws adopted in 2000 on Public Tender Offers and on Corporate Governance, and a Corporate Governance law approved by Congress in 2009.[23] Adequate safeguards are put in place through the new laws to protect minority shareholders which include enhanced transparency standards and restrictive rules regarding the use of privileged information, related party transactions and conflicts of interest. Major changes have been made to the definition of independent directors as well as their role in reviewing sensitive issues. The 2009 law has also strengthened the governance of Chile's largest S.O.E., the copper mining company Codelco. The O.E.C.D. has noted that this is a significant step, which is likely to result in momentum to further reform in the country's other S.O.E.s.

Commercial operations are aided by efficient regulations that support open-market policies.[24] Chile's economic freedom score of 75.2 in 2018 (www.heritage.org/index/ranking) made it the 20th freest economy in the world and the score was the highest in the South and Central America and Caribbean region. Especially impressive is the country's progress in its fiscal health component, in which Chile scored 91.7. Private property is well protected and contracts are secure. Except for some areas such as coastal trade, air transport and the mass media, there is no restriction of private ownership.[25] The laws provide for compensation in the case of property expropriation. Foreign investors can own up to 100% of a Chilean-based company.

The key to Chile's success on this front is also highly transparent and efficient court administration. For instance, as of 2004, 99% of the courts proceedings were open to the public and out of every 100 crimes reported to law enforcement agencies, 89 cases were closed. In 2004, the average time to process a case varied from 11 to 307 days, which was much quicker compared to the old system.[26]

4.3.1.5 Israel

The adoption and implementation of the 2000 Companies law and its subsequent upgrades have strengthened Israel's corporate governance. Corporate transactions that are viewed potentially abusive are required to go through stringent approval at the board level and in shareholder meetings. The Israeli authorities are considering to further tighten the rule.[27] Virtually all large companies except for those in public utilities and the military have been privatized and measures to promote a level playing field between public and private enterprises have been introduced.

The Review of Corporate Governance in Israel conducted by the O.E.C.D. in 2011 made some recommendations for policy changes to further improve the corporate governance quality. A main recommendation was to enhance the autonomy of the Israeli securities regulator, including giving the right to issue secondary regulations and levy fines. The O.E.C.D. viewed that these measures would provide a better protection to investors than the current system's reliance on legislation and legal enforcement. Other recommendations were to monitor the quality of the auditing of listed companies and to establish specialized courts for hearing commercial cases. The O.E.C.D. report, however, noted that the country had made progress in several of these areas.

The Israeli court system is independent and bribery as well as other forms of corruption are illegal. In 2008, the offense of bribery to a foreign public official was introduced to the Israeli Penal Law, which prohibits offering or paying a bribe to a foreign public official for the purpose of obtaining business or other advantages.[28] Israel has also launched a campaign to increase awareness of the O.E.C.D. Convention on Combating Bribery of Foreign Public Officials and the foreign bribery offense. The Inter-Ministerial team on Combating Bribery has coordinated this effort and the Ministry of Justice (M.O.J.) has intended to work with the State Comptroller's Office. The M.O.J. has also established a website, which is dedicated to fighting corruption and international bribery.[29]

Protections for property rights and contracts are enforced effectively. Israel's broader efforts specifically aimed at increasing its ability to benefit from an enhanced I.P.R. regime deserve mention. The country has increased the resources of the patent office, upgraded enforcement activities as well as implementing programs to bring ideas funded by government

research to the market.[30] In March 2008, the M.O.J. submitted a statement on I.P.R. in Israel to the Office of the U.S. Trade Representative (U.S.T.R.) as part of U.S.T.R.'s annual "Special 301" review process. Note that the Special 301 reports identify trade barriers to U.S. companies and products due to the lack of "adequate and effective" I.P.R. protection in other countries. Israel defended its I.P.R. regime as adequate, effective and in conformance with all relevant international obligations, and requested removal of Israel from the "watch list".[31] A 2011 O.E.C.D. report suggested the importance of improvement in a number of areas including enhancing protection in specific areas of copyright and patent protection and improving administrative efficiency.[32]

4.3.1.6 Estonia

According to the annual surveys of Transparency International, Estonia has been the least corrupt country in Eastern Europe. In Transparency International's 2023 Corruption Perceptions Index, Estonia ranked 12th (https://www.transparency.org/en/cpi/2023). Indeed, Estonia is cleaner than some of the Western European countries, which can be attributed to the proactive measures taken by the country to fight corruption. The Estonian Ministry of Justice invited Transparency International to take a lead role in the drafting of the country's new anticorruption strategy.[33]

The principles of "Honest State" program started in 2004 have been an integral part of the government of Estonia's best practices to fight corruption. The program has a number of components to reduce corruption in the government including auditing local governments, which have been viewed as the greatest source of corruption. The program also requires public servants to file electronic declarations of economic interests. Additional components of the program include the establishment of the National Ethics Council, an increase in the number of specialized investigators and prosecutors who focus on corruption and an anonymous hotline to report corruption cases.[34] Estonia is a signatory to the O.E.C.D. Convention on Combating Bribery of Foreign Public Officials in International Business Transactions since 2005. As a signatory of the Convention, Estonia is obligated to criminalize bribery of foreign public officials in conducting international business.

Estonia has committed to the development of a superior corporate governance practice. It revised legal frameworks several times based on European Union (E.U.) directives. Issues identified earlier such as audit requirements and standards and the lack of institutional arrangements for S.O.E. oversight and monitoring have been addressed. There are voluntary guidelines in issues such as the role of independent directors. These are important because the small size of the market for listed companies and low liquidity mean that market mechanisms are less likely to provide incentives

for good corporate governance. Observers have noted that Estonian companies closely follow legal corporate governance requirements.[35]

Estonia's economic freedom score was 78.8 in 2018, which was seventh highest in the world and ahead of many O.E.C.D. members. Especially impressive is the country's progress in its fiscal health component, in which it scored 99.8. Likewise, its investment freedom score was 90.

Only a small number of the country's enterprises in strategic sectors such as the main port, the power plants, the postal system, railway, airports and the national lottery are state owned. S.O.E.s operate on the same legal bases as private enterprises. Foreign and local investors are treated equally in Estonia. The regulatory frameworks in Estonia have been well developed to adequately protect property rights, including intellectual property such as copyrights, patents, trademarks, industrial design and trade secrets.

4.3.1.7 Slovenia

Not long ago Slovenia was plagued with a number of corruption scandals. Some argue that effectiveness of anticorruption institutions is hampered by factors such as the country's small size, a history of close interaction between the public and private sectors and an important role of personal contacts in business relations. Contrary to these observations, Slovenia has made significant progress on the anticorruption front, as reflected in its position as the least corrupt state in central and southeastern Europe.

As is the case of other transition countries in the region, Slovenia was constantly monitored as part of the process of attaining full membership of international organizations such as the E.U., North Atlantic Treaty Organization and O.E.C.D. In response to the Council of Europe's critical report, Slovenia initiated various efforts including the establishment of a coordinating anticorruption commission in 2001. Slovenia has also established specialized law enforcement units to combat serious economic crimes.

A major feature of the Slovenian economy concerns the prevalence of S.O.E.s, both in the listed and in the unlisted sectors. It is thus of paramount important to ensure that there are consistent and transparent ownership policies. Moreover, it is important for the state to act as an informed and responsible shareholder, and make sure that S.O.E. board members possess skills and authority to exercise their functions.[36] In this regard, the accession process led to the country's adoption of key legislation to improve corporate governance framework for S.O.E.s, minority shareholder protection and securities regulation. In April 2010, the Slovenian parliament adopted legislation that established a central ownership agency to manage all of the State's direct interests in S.O.E.s. In addition, the country is also preparing legislation to define the relationship between the new central ownership agency and two key state institutions overseeing the pension fund (KAD) and restitution fund (SOD).[37]

In Slovenia's Index of Economic Freedom, the property rights component is stronger than many other O.E.C.D. members. The country made significant amendments and modifications, particularly during the process of accession to the E.U.[38] More specifically, the I.P.R.-related regulatory framework underwent several changes between its declaration of independence in 1991 and E.U. accession in 2004, like most other aspects of regulations. As an E.U. member, legal standards related to Slovenia's I.P.R. regime are similar to most O.E.C.D. countries. The country grants protection to copyrights and related rights, trademarks, geographical indications, patents, industrial designs, topographies of integrated circuits and undisclosed business secrets.[39]

4.3.1.8 Costa Rica

In April 2015, the O.E.C.D. invited Costa Rica to open formal O.E.C.D. accession talks.[40] In May 2020, O.E.C.D. member countries extended a formal invitation to Costa Rica to join the organization. The process involved in-depth reviews by 22 O.E.C.D. Committees and extensive reforms to meet O.E.C.D. criteria. These included revamping competition policy, overhauling the national statistics system, introducing criminal liability for foreign bribery and establishing a shareholder registry to enhance tax transparency.[41] In 2021, Costa Rica completed its accession process and became the first Central American country to join the O.E.C.D., expanding the organization's membership to 38 countries.[42]

4.3.2 Russia's Attempt to Join the O.E.C.D.

In order to provide further insights into the requirements necessary for becoming an O.E.C.D. member, we describe situations facing some candidate countries. Russia made an official request for O.E.C.D. membership in 1996.

While Russia is reported to have made some progress, the overall progress has been lower than required to become an O.E.C.D. member. Russia lags behind the newly accessed O.E.C.D. members in Corruption Perceptions Index, Economic Freedom Index and Regulatory Quality Index. For instance, in Transparency International's 2017 Corruption Perceptions Index, Russia ranked 135th.[43] The rank further worsened, dropping to 141st in 2023 (https://www.transparency.org/en/cpi/2023).

Russia is plagued by bribery and other forms of corruption (watch the video, "Russia corrupt from top to bottom": www.youtube.com/watch?v=BLTY-dzjlfA). Russian Prime Minister Dmitry Medvedev claimed that Russia suffers from "legal nihilism" and investors in the country feel unsafe due to concerns regarding law enforcement agencies' ability and willingness to protect them and the legal system's inefficiency. Factors such as weak rule

of law, inefficient bureaucracy and public officials' corrupt practices pose a serious challenge to entrepreneurship in the country.

Russia also suffers from unsatisfactory corporate governance practices, which have created a further barrier to full O.E.C.D. membership. Investors have complained about instances in which insiders and major shareholders have engaged in frauds such as transfer pricing and asset stripping. They allegedly do so by selling the output, the assets or the additional securities to another firm they own at below market prices.[44] Russia also adopted a corporate governance code in April 2002. However, the Business and Industry Advisory Committee (B.I.A.C.) to the O.E.C.D., which consists of the industrial and employers' organizations in the O.E.C.D. member countries, are concerned about the lack of respect for and compliance with the code.[45]

In reports submitted to the O.E.C.D. in 2008 and 2009, B.I.A.C. expressed concerns about the lack of strong I.P.R. protection and inadequate enforcement of I.P.R. in Russia. For 15 consecutive years (1998–2012), Russia has been on the United States Priority Watch List of countries with serious deficiencies in I.P.R. protection. A B.I.A.C. report accused Russia's Internet infrastructure of primarily serving as a channel for illegitimate e-commerce involving the distribution of pirated content and software. The report noted that a number of illegal peer-to-peer services and pay-per-download websites hinder the development of the legitimate online market.[46] The B.I.A.C. also expressed concerns regarding the law's inadequacy for addressing Internet piracy due to the lack of clear provisions on Internet service provider cooperation and third-party liability, thus failing to provide incentives for intermediaries to assist in curbing piracy.

Despite the above criticisms, Russia attempted to take some positive steps. In 2011, the Russian Parliament passed a law that prohibits Russian companies from bribing foreign officials. Following this, Russia was invited to join the antibribery convention in May 2011, which is a step toward an O.E.C.D. membership for Russia as acceptance into the convention is a requirement for the membership.

Russia also took measures to address significant losses by foreign companies due to I.P.R. infringement. It enacted a law to establish a special court for intellectual property disputes by February 2013. Russia also amended its criminal code to revise criminal thresholds for copyright piracy. The country's law enforcement authorities have taken criminal and civil actions against some serious copyright infringers.

In 2014, Russia expressed an intention to retaliate against Western sanctions. In response, the O.E.C.D. stopped talks aimed at allowing Russia to become an O.E.C.D. member.[47] In 2022, Russia was suspended from participation in all O.E.C.D. bodies due to its aggression against Ukraine. The O.E.C.D. had earlier terminated Russia's accession process, closed its Moscow office and stopped inviting its ministers to events. This decision marked a broader international response to Russia's actions.[48]

4.4 Determinants of Entrepreneurship across O.E.C.D. Economies: Variations in Regulation, Culture and Skills

While all the economies in Table 4.1 belong to the club of O.E.C.D., they differ widely in entrepreneurial performance. This section discusses the key determinants of entrepreneurship in these economies and illustrates key intra-O.E.C.D. differences in terms of some key factors.

4.4.1 Regulatory Framework

The O.E.C.D. economies differ on various components of regulatory framework. For instance, procedures for starting a business are far more difficult and time-consuming in Japan and Chile than in Canada and Australia. Too many rules and regulations, bureaucracy and red tape are the primary disadvantages of Chile and Japan. For instance, despite the progress noted above, inefficient and conservative government bureaucracy is widely recognized as a major problem facing Chile.[49] It was suggested that Japan had more than 11,000 rules to regulate businesses in the mid-1990s, which cost the Japanese economy US$75–110 billion a year.[50] Among the eight procedures involved in starting a business, the third step, registering at the Legal Affairs Bureau of the M.O.J., takes one to three weeks. The authorities can return the filed documents for revisions.

Compared to most other O.E.C.D. economies, Turkey's regulatory frameworks have been ineffective to drive entrepreneurial outcomes. It is among the O.E.C.D. countries with the lowest economic freedom. Despite the country's progress in areas such as trade freedom and fiscal freedom, its relatively inefficient judicial system has driven down the overall economic freedom. According to the U.S. State Department's 2010 Human Rights Report (www.state.gov/j/drl/rls/hrrpt/2010/eur/154455.htm), the close relationship between judges and prosecutors has been a hindrance to the right to a fair trial.

Another problem concerns long trials. There is also a high rate of infringement of I.P.R.s despite the improvement in the I.P.R. regime. In addition to an overburdened and slow court system, the lack of judges with proper training for commercial cases makes enforcement of property rights difficult. Inflexible labor regulations have also hindered Turkey's entrepreneurial development. The Turkish labor market is characterized by a high nonsalary cost of employing and difficulty in firing an employee. Turkey also has lengthy and unnecessarily burdensome bankruptcy proceedings.[51] Especially, legal fees associated with bankruptcy proceedings are notoriously high.[52]

In light of the above discussion about Turkey, available data and statistics show that poor regulatory quality, weak rule of law and corruption are even

bigger problems in Mexico. For instance, in Transparency International's 2017 Corruption Perceptions Index, Mexico ranked 135th (tied with Russia).[53] One observation is that excessive regulation in Mexico has been a means of punishing private sector firms. For instance, the local governments are found to use the regulations as a tool to extort and blackmail the private sector firms. One example to illustrate this point would be regulations in the transport industry prior to 1990, known as *regreso vacio* or empty return cargo, which prohibited two-way merchandise transportations. That is, private firms in the transport industry could transport from the origin to the destination, but not from the destination to the origin. If a firm did not want to make a return trip with an empty truck, it needed to bribe state and federal officials.[54]

Congestion in the law enforcement system caused by drug trafficking and related violence has also led to a decline in the respect for the rule of law in Mexico. For most types of crimes, the rates of arrest and successful prosecution are low. In a few cases, suspects are detained, but they are put to lengthy criminal proceedings and the court is often unable or unwilling to adhere to due process standards, which hampers their trials.[55]

4.4.1.1 Tax Policy and Entrepreneurship

As of 2023, Estonia continues to lead the International Tax Competitiveness Index for the tenth consecutive year, thanks to its highly favorable tax policies. The country's corporate income tax rate of 20% is applied only to distributed profits, making it an attractive destination for businesses. Additionally, Estonia imposes a flat 20% individual income tax that excludes personal dividend income, which further encourages investment. The property tax system is streamlined, taxing only land value rather than real property or capital. Furthermore, Estonia's territorial tax system exempts 100% of foreign profits earned by domestic corporations, contributing to its highly competitive tax environment for international business.[56]

Latvia, adopting the Estonian corporate tax system, has an efficient labor income tax system. New Zealand features a flat, low individual income tax with a top rate of 39%, largely exempts capital gains and imposes no taxes on inheritance or financial transactions. Switzerland offers a low corporate tax rate (19.7%), a broad consumption tax and partially exempts capital gains. Luxembourg boasts a competitive international tax system with a broad-based consumption tax.[57]

In addition to its modest corporate tax rates, many firms from the United States and other regions establish their European or regional headquarters in Switzerland due to the country's productive, multilingual workforce and well-developed infrastructure and transportation networks. Switzerland also serves as a strategic gateway for U.S. companies to access markets in Eastern Europe, the Middle East and beyond. Moreover, U.S. companies

are attracted to Switzerland for its favorable and less restrictive labor laws compared to other European locations, as well as the availability of a highly skilled workforce.[58] According to McKinsey & Co., during 1998–2008, Switzerland attracted regional headquarters of over 180 large foreign companies. Companies such as Kraft Foods, Yahoo and Google have established European headquarters in Switzerland.

As of 2010, over 150 U.S. companies had a presence in Switzerland. Note too that Switzerland's cantons have more autonomy than states in the United States. The cantons enjoy autonomy on important issues such as social security contributions, business and residency permits and construction codes. The Canton of Zug has been the most attractive location in terms of taxation, which attracted 1,600 new businesses in 2007 alone. Other Cantons are competing with Zug.

Colombia, with the least competitive tax system in the O.E.C.D., has a 35% corporate income tax, a net wealth tax, a financial transaction tax and a value-added tax covering less than 40% of final consumption, highlighting policy and enforcement issues.[59]

4.4.1.2 Corporate Bankruptcy Laws

It is an overriding reality that most new firms fail during their first five years. For instance, according to the O.E.C.D., 62.3% of new firms in the Netherlands and 53.1% of new firms in Hungary that were started in 2007 died within three years. Due to the high potential failure rate of start-ups, policies that penalize failed entrepreneurs keep most people away from entrepreneurship. On the other hand, a country with regulations that are friendly to failed entrepreneurs and a high tendency to forgive entrepreneurial failure is likely to attract more people in entrepreneurship.

The United States has been a global role model for its favorable and lenient corporate bankruptcy law. If an entrepreneurial firm is troubled but potentially viable, Chapter 11 bankruptcy allows entrepreneurs and managers to retain control of the firm, obtain protection from creditors and develop a reorganization plan. The situation is different in Japan, where secured creditors, who, as lenders, hold legally enforceable claim on the company's assets, are given the control rights.[60] The Japanese system is thus more likely to lead to premature liquidation of the firm than the U.S. system. Companies that are "terminally ill", on the other hand, can file for "Chapter 7", which involves liquidation and distribution of available assets among creditors. Debtors filing Chapter 7 bankruptcy can retain certain exempt assets such as household and personal goods, automobiles and homesteads.

Another important difference is whether or not there is an automatic stay on assets. Among O.E.C.D. economies, Canada and the United States have a provision of an automatic stay on assets, which means that creditors cannot

seize the company's assets used as collateral for loans after the bankruptcy proceedings have commenced. In South Korea, on the other hand, regulations do not provide such provisions.

4.4.2 Values, Culture and Skills

4.4.2.1 Values and Culture

While O.E.C.D. economies exhibit a high degree of homogeneity in political institutions, they are culturally heterogeneous. O.E.C.D. economies differ significantly in entrepreneurs' own view of themselves and preference for entrepreneurship as a career and societal attitudes toward entrepreneurs. According to a survey released by the European Commission, 45% of Europeans would prefer to start their own business instead of working as employees, which compared with 55% in the United States. In the United States, 73% view businessmen favorably compared to 49% in Europe. The research also indicated that entrepreneurs in Europe are viewed as exploiters of workers, whereas they are considered as job creators in the United States.

The lack of respect for entrepreneurs as well as the lack of social appreciation of their work is of especial concern in O.E.C.D. countries with a socialist past. For instance, according to the Global Entrepreneurship Week Policy Survey conducted in 2012, only 28% of entrepreneurs in Hungary thought that people who successfully start new firms have at least the same level of status and respect compared to a manager of a medium-sized company. Hungary ranked 34th out of 34 countries surveyed.[61]

Entrepreneurs are regarded as "déclassé" in some O.E.C.D. countries and are not socially admired in others. Jante's Law, which comes from the novel by Norwegian/Danish author Aksel Sandemose, would help explain the lack of social admiration of entrepreneurial success in the Scandinavian communities. This law is an unspoken code of ethics and explains the pattern of group behaviors observed in these communities. This law is centered around making people act less arrogant and more modest and humble. Jante's Law teaches people that flaunting their wealth or achievements is unworthy and inappropriate. Commenting on the Danish culture, a report observed that, due to the prevalence of Jante's Law, "which condemned the attempt of an individual to do better than others", entrepreneurial success is not socially admired in the country.[62]

That said, in some O.E.C.D. economies, there has been a drastic change in entrepreneurship-related cultural values. Ireland and Chile are probably two of the most spectacular examples that have demonstrated how entrepreneurship-related social norms can emerge in a short period. Until the 1980s, Irish youths were attracted to jobs in government and financial services. Defaulting on loans was judged as an immoral practice for businesses. The social norms also stigmatized bankruptcy.[63] The Irish economy produced a

number of multimillionaire businessmen in the 1980s. As of 2008, Ireland had over 30,000 euro millionaires and most of them were self-made.[64]

As discussed in Chapter 1, in startup culture, accepting failure and valuing risk-taking are fundamental principles. Business failures are perceived as separate from personal shortcomings, and bankruptcy is not considered dishonorable.[65] In this regard, Irish entrepreneurs gradually started treating entrepreneurial failure as a learning opportunity, not as a personal failure or stigma.

Similarly, entrepreneurs in the past had a negative social image as "greedy exploiters" in Chile, which has changed. Until the 1980s, the well-educated middle class in the country avoided opportunity-driven entrepreneurship.[66] According to the Chile 2008 G.E.M. Report, 80% of the country's economically active population considered entrepreneurship as a desirable career option. It was estimated that 12.9% of the adult population in Chile consisted of early-stage entrepreneurs and 68% of entrepreneurs were opportunity-based (seeking real opportunities for business and not driven by necessity).[67]

4.4.2.2 Skills

In terms of education, even in the worst-performing O.E.C.D. countries, the proportions of tertiary education age cohort enrolled in tertiary institutions are higher than the global average of 26% and Sub-Saharan African economies' 6%.[68] However, the real issue is whether students develop entrepreneurship skills in universities. An even more relevant indicator concerns successful entrepreneurs' views regarding the development of entrepreneurial skills and capabilities in colleges and universities. In this regard, entrepreneurs in O.E.C.D. economies have generally expressed dissatisfaction and frustration with the lack of entrepreneurship-related skills of university graduates. For instance, according to the E.U. Entrepreneurship Survey, entrepreneurial skills were among the most important barriers to entrepreneurship in Denmark; 28% of respondents indicated supply of skills and entrepreneurial capabilities as the main obstacle to entrepreneurship, which was the highest proportion in the E.U.[69]

In terms of college and tertiary education entry rates, for example, Australia and Poland perform better than most other O.E.C.D. economies. In international comparison, however, university education systems in these two economies do not have a good standing regarding the development of entrepreneurial skills and capabilities. For instance, according to the Global Entrepreneurship Week Policy Survey conducted in 2012, only 6% of Australian high-impact entrepreneurs and 8% of Polish high-impact entrepreneurs thought that university-level educational systems in their countries do a good job in teaching entrepreneurial skills.[70] These two countries ranked, respectively, 31st and 29th out of the 34 countries surveyed.

4.4.2.3 Openness to Immigration and Availability of Entrepreneurial Skills

A country's openness to immigration is tightly linked to entrepreneurial performance, innovation and economic growth.[71] The United States is an obvious example of an economy that has benefited greatly from immigrants' entrepreneurial activities. According to the Kauffman Foundation's annual Index of Startup Activity (www.kauffman.org/kauffman-index), in 2016, immigrants in the United States were about twice as likely as the native-born population to start a new business. About 30% of all new U.S. entrepreneurs were immigrants.[72] Likewise, a report of New American Economy found that 40.2% of Fortune 500 firms in 2016 had "at least one founder who either immigrated to the United States or was the child of immigrants".[73]

4.5 Access to Finance, Markets, Research and Development, and Technology

4.5.1 Market Access

While most O.E.C.D. members have well-developed institutions to facilitate market access, some show many clear instances of barriers to market access related to antitrust and unfair competition laws and enforcement. In Chapter 1, we discussed the anticompetitive consequences of barriers to new firms in Mexico. As a further example, there have been many instances of bid-rigging, in which competitors collude so that a competing business can secure a government contract at a predetermined price, which is increased artificially. Most businesses and consumers suffer the consequences of these anticompetitive and illegal practices.

Mexico's Social Security Department spends about $2.5 billion each year on pharmaceutical products and other goods and services. In order to fight against these anticompetitive acts by improving rules and procedures, and training procurement officers, the Mexican Competition Authority and the Mexican Social Security Institute (I.M.M.S.) signed a cooperation agreement with the O.E.C.D. in 2011 to implement the O.E.C.D. guidelines. Since then, the O.E.C.D. and the Mexican Competition Authority have been working with the I.M.M.S. to address these issues.[74]

In the O.E.C.D.'s product market regulation index, Japan performed poorly in the "barriers to competition" subcategory, which included areas such as entry barriers and antitrust issues.[75] The real issue is related to the lack of effective enforcement rather than the existence of law. Critics and skeptics have argued that the Japan Fair Trade Commission (J.F.T.C.) has not been effective in enforcing the Antimonopoly Act. The J.F.T.C. is often viewed as "a watch dog that does not bite".[76] Likewise, notwithstanding the progress France has made on this front, regulatory barriers to entry exist in retail trade, professional services and other sectors.[77] While some

regulations are necessary to protect the consumer, barriers to entry in the country are arguably higher than needed for such purpose in general professions such as accountants, architects and lawyers; regulated professions such as physiotherapists, veterinarians, pharmacists and hairdressers; and partially substitutable professions such as conventional physicians and practitioners of alternative medicine.[78]

4.5.2 Access to Finance

Compared to less developed economies, O.E.C.D. economies are characterized by a greater availability and easier access to financial resources for potential entrepreneur. That said, intra-O.E.C.D. differences can be observed in the availability and affordability of credits. Of the 35 O.E.C.D. members, 22 belong to the E.U. In this regard, thanks to focused government intervention such as European Commission's small and medium-sized enterprise (S.M.E.) guarantee facility, large proportions of S.M.E.s in the E.U. have access to bank financing. A 2014 study of the European Commission found that 62% of S.M.E.s choose bank loans over other forms of financing in order to expand their businesses.[79]

A U.S. Census study found that 70% of S.M.E.s in the country use bank financing to start or acquire a business.[80] In addition, many entrepreneurs such as the founders of Cisco Systems took second mortgages on their homes in order to finance their entrepreneurial venture.[81] Some entrepreneurs also use their credit cards for short-term operating funds.

According to the O.E.C.D., the average loan request rejection rate in 2015 was 11% in O.E.C.D. countries. The highest proportions were 57% for Slovakia and 40.9% South Korea. Finland had the lowest rejection rate of 3% (https://stats.oecd.org/Index.aspx?DataSetCode=SMES_SCOREBOARD).

Due to the substantial size of the informal economy in Mexico, potential entrepreneurs are less likely to borrow from formal financing sources. Most informal sector workers are unable to fulfill the requirements necessary to get loans from banks. A taco seller in Mexico City said that he is unable to get a loan from a bank: "The banks have a lot of requirements that I can't meet".[82] Moreover, Mexico's average annual lending rate is highest among the O.E.C.D. countries.

4.5.2.1 Venture Capital

Venture capital (V.C.) covers a vanishingly small share of total financing needs in most O.E.C.D. economies. In most of the O.E.C.D. countries, V.C. constitutes a very small percentage of gross domestic product (G.D.P.), which is often less than 0.05%. The two major exceptions are Israel and the United States where the V.C. industry is more mature, representing over

0.35% of G.D.P.[83] Other O.E.C.D. countries with more developed V.C. markets include Sweden, Switzerland and the United Kingdom.[84]

4.5.2.2 Microfinance

Compared to less developed economies, microfinance in the O.E.C.D. economies has low relative effectiveness vis-à-vis other well-established and well-known sources of financing discussed above. Nonetheless, microfinance obviously holds a tremendous potential in O.E.C.D. economies if we consider the fact that an estimated 60 million adults (8% of the adult population) do not use formal or semiformal financial services in these economies.[85] Among O.E.C.D. countries, microfinance institutions (M.F.I.s) especially have a notable presence in Mexico. As of 2016, M.F.I.s in Mexico had 7 million active borrowers with a gross loan portfolio of US$4.4 billion.[86] Mexico had the world's fifth highest number of borrowers from M.F.I.s.

In the United States, microcredit is becoming a growing source of credit for small businesses that are unbankable in the conventional credit market. Estimates suggest that the size of the unbanked population in the United States is 28 million and about 45 million people have only limited access to the services of financial institutions.[87]

4.5.2.3 Crowdfunding

As discussed in Chapter 3, crowdfunding is becoming increasingly popular in O.E.C.D. economies. What is more, equity-based crowdfunding (E.C.F.) is emerging as an increasingly important source of entrepreneurial financing in these economies. Especially the United States has the world's most developed E.C.F. market. Some compare crowdfunding investors with angel investors and suggest that crowdfunding would create 60 million new angel investors in the United States alone.[88]

4.5.3 Research and Development and Technology

In 2021, O.E.C.D. member countries' research and development (R&D) investment as a proportion of G.D.P. was 2.95%.[89] Since R&D is a key driver of a new and innovative product or service, the likelihood of launching a successful product by an entrepreneurial firm, while not guaranteed, is greatly enhanced by the firm's engagement in R&D. R&D activities in an industry would benefit other firms in the same industry as well as in related industry by intra- and interindustry and R&D spillovers, leading to an increase in total factor productivity.

O.E.C.D. economies differ in their emphasis on R&D. In a March 2018 report released on by KPMG, which was based on its tech innovation

survey, the United States ranked #1 as the most promising market for technological breakthroughs.[90]

Israel's civilian R&D per capita is the highest in the world. Israeli government has pursued an effective R&D policy. Attention has been focused on policy toward commercialization of new ideas and technologies. The Office of the Chief Scientist (www.matimop.org.il/ocs.html) in the Ministry of Industry, Trade and Labor is a unique government agency for promoting industrial R&D and innovation. It provides a wide range of supports to build and strengthen the innovation ecosystem's links from "idea" to "market". Successful entrepreneurs from the private sector are recruited to manage government programs that were launched to support innovation and entrepreneurship.[91]

R&D activities in Israel are also greatly facilitated by the fact that many foreign companies have located their R&D centers in the country. One estimate suggested that by 2010, multinationals such as Alcatel, Deutsche Telecom, Cisco, Google, HP, Merck, Microsoft and IBM had set up 220 R&D centers in the country.[92]

R&D expenditure as a proportion of G.D.P. is among the lowest in Chile, Colombia, Costa Rica and Mexico (Figure 4.1). Comparatively low R&D investments in these economies have led to low productivity per worker. For instance, according to the O.E.C.D. (http://stats.oecd.org/Index.aspx?Dat/asetCode=LEVEL), the amount of G.D.P. generated per worker in 2011 as a proportion of the United States was 29% in Mexico.

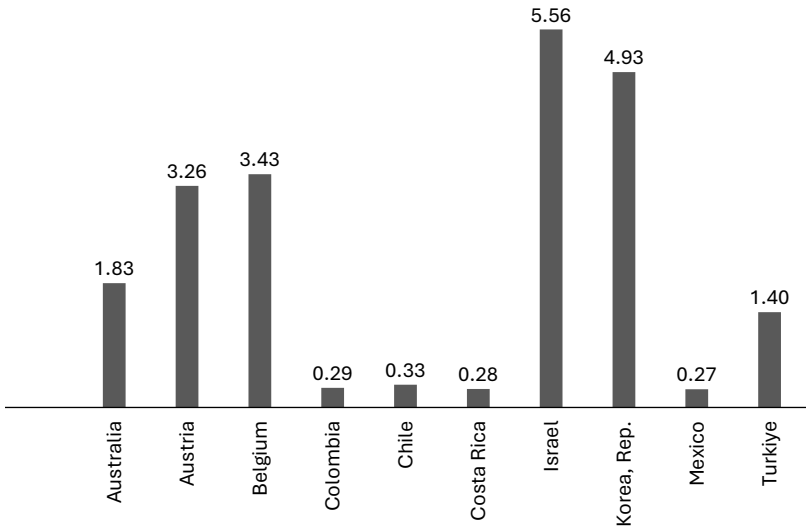

Figure 4.1 R&D Investment as a Proportion of G.D.P. in Selected O.E.C.D. Countries (2024, based on latest available data)

4.6 Concluding Comments

Entrepreneurial performance varies widely across the O.E.C.D. economies. The heterogeneity across the O.E.C.D. economies in performance and indicators of entrepreneurship indicates that the local social, cultural and political contexts constrain the roles that international organizations such as O.E.C.D. play in modern world affairs.

In response to the intra-O.E.C.D. regulatory differences, some entrepreneurial firms have engaged in arbitrage among national regulations by moving their activities in order to exploit such differences. For instance, it is reported that an increasing number of Czech companies have moved their headquarters to other O.E.C.D. and some non-O.E.C.D. economies with more favorable fiscal environments. By the end of 2009, 4,551 Czech-owned companies were headquartered in the Netherlands. Cyprus and Luxembourg were the other top two destinations for Czech companies to house their operations.[93]

In addition to the above differences, O.E.C.D. economies' entrepreneurial patterns exhibit differences in the relative emphasis on small and big businesses. Countries that are friendliest to small businesses include New Zealand, the United States, Canada and Australia.[94] On the other hand, Japan and the Nordic countries have exhibited a tendency to favor big businesses. Some of the world's leading brands such as Ericsson, Ikea, Lego and Nokia are from the Nordic countries. Likewise, big businesses have driven the Japanese economy.

The O.E.C.D. accession process has been a catalyst for bringing reforms in the four newly joined countries. Especially for small countries with limited natural resources such as Israel, economic and political reforms are of paramount significance and importance to drive entrepreneurial growth. For Estonia and Slovenia, the reforms required for E.U. accession also helped them prepare for O.E.C.D. accession. They had achieved substantial progress on many of the fronts mentioned earlier to join the E.U. Especially Chile has overcome significant cultural barriers. While the old system based on patronage, cronyism and regionalism has hindered the efforts to develop modern reform-oriented institutions in most Latin American economies such as Brazil and Mexico, Chile has been able to overcome such barriers.

A transparent and stable business climate with no barriers to free trade can create a dynamic environment for entrepreneurs. In this regard, the newly joined O.E.C.D. members have had more success than countries with longer membership durations in areas such as anticorruption and fight against poor corporate governance, which have encouraged the development of a climate that promotes entrepreneurship. In the Corruption Perceptions Index, for instance, the newly joined members outperform some countries which have been O.E.C.D. members for longer durations:

Hungary (4.6, rank = 54), Czech Republic (4.4, rank = 58), Turkey (4.2, rank = 61) and Mexico (3, rank = 100).

4.7 Discussion Questions

1. What are some of the reforms needed for Russia to become a full O.E.C.D. member?
2. Select an O.E.C.D. economy which has among the lowest per capita incomes and examine the entrepreneurial ecosystems in the economy you selected.
3. Which O.E.C.D. countries perform the best in terms of major entrepreneurial indicators? What are the main reasons behind their superior performance?
4. During the past three decades, which O.E.C.D. countries have made the fastest progress in enhancing their entrepreneurial ecosystems?
5. How do the new O.E.C.D. members differ from the old ones in terms of various determinants of entrepreneurship?

4.8 End of the Chapter Case: Naver's Entrepreneurial Drive in A.I. Innovation amid South Korea's Competitive Tech Landscape

Naver Corporation is a South Korean Internet company founded in 1999. It is headquartered in Seongnam, South Korea. It operates the country's leading search engine, Naver, and its top e-commerce platform.[95] Naver also runs global services like the LINE mobile messenger, Webtoon and Webnovel publishing, the SNOW video camera app and the ZEPETO metaverse platform.[96] Dubbed the "Google of South Korea" for its popular search engine,[97] Naver is making strides in advanced technologies, particularly in artificial intelligence and digital innovation. In 2023, Naver is South Korea's largest Internet company, serving over 700 million users worldwide.[98]

Through its global network of subsidiaries, the company extends its business reach across strategic locations such as Japan, the United States, France, Germany, South Korea, Hong Kong, Singapore, Indonesia, China, Vietnam, Taiwan and Thailand.[99]

4.8.1 Naver's R&D Investments and the Competitive A.I. Landscape in South Korea

The company allocates roughly 25% of its annual revenue toward research and development, focusing on advancing emerging technologies such as artificial intelligence, robotics and mobility.[100] Naver launched its Global

A.I. R&D Belt in 2019, establishing A.I. labs across South Korea, Japan, France and Southeast Asia, with a focus on Vietnam.[101] The initiative connects universities, startups and research labs to foster A.I. development through collaboration and knowledge exchange. In September 2021, Naver Corporation announced its plans to enhance its global A.I. R&D efforts by recruiting experts in search quality evaluation and natural language processing. This expansion aims to foster stronger collaboration within its A.I. community, accelerating technological advancements.[102]

South Korea leads globally in research ratios, with 16 full time-equivalent researchers per 1,000 economically active individuals and 8.6 per 1,000 people as of 2022. However, the absolute number of researchers remains smaller than those in China and the United States, which experts argue is crucial for fostering technological innovation. Despite high ratios, the overall researcher count is a limiting factor in innovation potential.[103]

In the 2021 Global Talent Competitiveness Index, South Korea ranked 24th among O.E.C.D. countries. It placed 25th in terms of growth potential, including areas like vocational education and skill development. However, the country's performance faltered in government spending per higher education recipient, ranking 31st with only US$5,773, significantly lower than Luxembourg (US$45,567) and Switzerland (US$25,713).[104]

Naver is thus in intense competition with other top South Korean tech firms, such as SK Telecom and Kakao, all vying for the best talent, particularly in artificial intelligence and technology innovation. For instance, Naver and SK Telecom are in a dispute over the recruitment of A.I. professionals amid growing competition in A.I. development. Naver Cloud, Naver's subsidiary managing its A.I. operations, sent a legal notice to SK Telecom on June 15, 2023, accusing the company of systematically poaching its senior staff. This includes former Naver CLOVA CEO Chung Sukgeun, who joined SK Telecom Americas, and five other employees who resigned to join SK Telecom. Naver expressed concerns over this continuous hiring of key A.I. experts. The demand for A.I. experts will increase due to the growing competition to develop A.I. services. Despite the booming market for A.I., there is a significant shortage of skilled professionals to meet the demand.[105]

4.8.2 Debate on A.I. Regulations in South Korea: Balancing Innovation and Oversight

Korea is currently grappling with divergent perspectives on A.I. regulations, as policy makers and industry leaders weigh the trade-offs between fostering innovation and ensuring oversight. Ha Jung-woo, head of Naver Cloud A.I. Innovation Center, advocates for adopting the United States' approach, which prioritizes collaboration with Big Tech to enhance national A.I. competitiveness. He contrasted this with the E.U.'s stringent regulations,

arguing that such measures are a strategy to counter Silicon Valley's dominance rather than a model Korea should emulate. Despite these views, the Korean government is moving forward with regulations, including mandatory visible watermarks for A.I.-generated content, citing global concerns over distinguishing such outputs. However, critics like Rep. Yoon Young-chan question the urgency of these regulations, especially as Korea's hyperscale A.I. models are still in their nascent stages. The government has pledged to consider industry input carefully, aiming to balance regulation with innovation.[106] Naver's A.I. chief, Ha Jung-woo, urged South Korea to prioritize lower-level A.I. laws to boost the industry and user education, warning that limited investment risks falling behind countries like France, Germany, Japan and Canada, which offer billions in A.I. support.[107]

4.8.3 Conclusion

Naver Corporation's ongoing efforts to advance in artificial intelligence and emerging technologies highlight its commitment to research and development, with a substantial portion of its annual revenue allocated to these initiatives. Despite South Korea's strong R&D ratios, the country faces challenges related to the shortage of skilled A.I. professionals, a concern exacerbated by fierce competition among local tech giants. As South Korea moves forward with A.I. regulations, the debate between innovation and oversight remains a key issue, with industry leaders advocating for a balance that fosters growth while addressing global concerns.

Notes

1 oecd.org. (2010). OECD work on statistics. www.oecd.org/dataoecd/18/49/44652140.pdf
2 Dw.com. (2014). OECD suspends Russia accession talks while Moscow vows 'symmetrical' sanctions. www.dw.com/en/oecd-suspends-russia-accession-talks-while-moscow-vows-symmetrical-sanctions/a-17494773
3 Calvino, F., Criscuolo, C., & Menon, C. (2016). *No country for young firms? Start-up dynamics and national policies*. 29, OECD Science, Technology and Industry Policy Papers. OECD Publishing.
4 Andrew Bounds. (2016). SME lending grows for first time since financial crisis. www.ft.com/content/db2a1686-c8e4-11e5-be0b-b7ece4e953a0
5 Basta, V. (2017). Venture investing in the US and Europe are totally different industries. https://techcrunch.com/2017/06/07/venture-investing-in-the-us-and-europe-are-totally-different-industries/
6 OECD. (2010). Accession: Estonia, Israel and Slovenia invited to join OECD. www.oecd.org/document/57/0,3746,en_21571361_44315115_45159737_1_1_1_1,00.html
7 http://info.worldbank.org/governance/wgi/pdf/rq.pdf
8 United States Council for International Business. (2018). Hampl Urges High Standards in Colombia's OECD Accession. www.uscib.org/hampl-urges-high-standards-in-colombias-oecd-accession/

9 Bate, R. (2018). You down with OECD? thehill.com/opinion/international/379302-you-down-with-oecd
10 tuac.org. (2018). No progress on Trade Union Rights and Safety in Colombia? No OECD Accession. say Colombian Trade Unionists, 22 February. https://tuac.org/news/no-progress-trade-union-rights-safety-colombia-no-oecd-accession/
11 OECD. (2016). Due diligence in Colombia's gold supply chain overview.
12 Wyss, J., & Gurney, K. (2018). Dirty gold is the new cocaine in Colombia—and it's just as bloody. www.miamiherald.com/news/nation-world/world/americas/colombia/article194188034.html
13 Bate, R. (2018). You down with OECD? http://thehill.com/opinion/international/379302-you-down-with-oecd
14 Bate, R. (2011). A different kind of drug war with a chance for success. www.realclearmarkets.com/articles/2011/08/06/a_different_kind_of_drug_war_with_a_chance_for_success_99168.html
15 Moeller IP Advisors. (2017). Worldwide: How do fake drugs and Chinese counterfeit medicine impact Latin America & its pharmaceutical industry?. www.mondaq.com/Uruguay/x/560082/food+drugs+law/How+Do+Fake+Drugs+And+Chinese+Counterfeit+Medicine+Impact+Latin+America+Its+Pharmaceutical+Industry
16 OECD. (2018). OECD members agree to formally invite Lithuania as 36th member. www.oecd.org/newsroom/-members-agree-to-formally-invite-lithuania-as-36th-member.htm
17 lrp.lt. (2018). OECD membership finalizes Lithuania's establishment in global organizations. www.lrp.lt/en/press-centre/press-releases/oecd-membership-finalizes-lithuanias-establishment-in-global-organizations/30093
18 OECD. (2013). OECD sets out roadmap for Latvia's membership. www.oecd.org/newsroom/oecd-sets-out-roadmap-for-latvias-membership.htm
19 OECD. (2017). Corporate governance in Latvia. www.oecd.org/latvia/corporate-governance-in-latvia-9789264268180-en.htm
20 Ministry of Foreign Affairs. (2016). Latvia's accession to the organisation for economic cooperation and development. www.mfa.gov.lv/en/policy/economic-affairs/oecd/latvia-s-accession-to-the-oecd
21 Ministry of Foreign Affairs. (2016). Latvia's accession to the organisation for economic cooperation and development. www.mfa.gov.lv/en/policy/economic-affairs/oecd/latvia-s-accession-to-the-oecd
22 Chapter 4: Business Environment. *Chile Business Forecast Report*. 2011 2nd Quarter, 2, 23–30.
23 OECD. (2011). Corporate overnance in Chile. www.oecd.org/dataoecd/21/63/47073155.pdf
24 Chile. www.heritage.org/index/country/chile
25 Chapter 4: Business Environment. *Chile Business Forecast Report*. 2010 4th Quarter, 33–40.
26 chile-usa.org. (2005). Ministry of justice reforms underway. www.chile-usa.org/minjustice.htm
27 OECD. Corporate governance in Israel 2011. www.keepeek.com/Digital-Asset-Management/oecd/governance/corporate-governance-in-israel-2011_9789264097698-en
28 Israel strengthens the battle against bribery and corruption. www.justice.gov.il/MOJEng/Mankal/Corruption/

29 OECD. (2009). *Israel joins OECD Anti-Bribery Convention*. Retrieved from https://web-archive.oecd.org/2012-06-14/67121-israeljoinsoecdanti-briberyconvention.htm).
30 OECD. (2011). Enhancing market openness, intellectual property rights, and compliance through regulatory reform in Israel. www.oecd.org/israel/48262991.pdf
31 Israel's intellectual property law. 16 Mar 2008. www.mfa.gov.il/MFA/Government/Law/Legal+Issues+and+Rulings/Israel%20intellectual%20property%20law%2016-Mar-2008
32 OECD. (2011). Enhancing market openness, intellectual property rights, and compliance through regulatory reform in Israel. www.oecd.org/israel/48262991.pdf
33 2011 Investment Climate Statement: Estonia, Bureau of Economic. *Energy and Business Affairs*, March 2011. www.state.gov/e/eb/rls/othr/ics/2011/157274.htm
34 2011 Investment Climate Statement: Estonia, Bureau of Economic. *Energy and Business Affairs*, March 2011. www.state.gov/e/eb/rls/othr/ics/2011/157274.htm
35 OECD. (2011). Corporate governance in Estonia. www.oecd-ilibrary.org/governance/corporate-governance-in-estonia-2011_9789264119079-en
36 Corporate governance in Slovenia 2011. www.keepeek.com/Digital-Asset-Management/oecd/governance/corporate-governance-in-slovenia-2011_9789264097704-en
37 Background note: Slovenia's accession to the OECD. www.oecd.org/document/53/0,3746,en_21571361_44315115_45161781_1_1_1_1,00.html
38 OECD. (2011). Enhancing market openness, Intellectual property rights, and compliance through regulatory reform in Slovenia. www.oecd.org/slovenia/48263001.pdf
39 WIPO. (2008d). Country profile from WIPO guide to intellectual property worldwide. www.wipo.int/about-ip/en/ipworldwide/pdf/si.pdf
40 OECD. Members and partners. www.oecd.org/about/membersandpartners/
41 OECD. (2021, May 25). *OECD welcomes Costa Rica as its 38th member*. OECD. https://www.oecd.org/en/about/news/press-releases/2021/05/-welcomes-costa-rica-as-its-38th-member.html
42 Organisation for Economic Co-operation and Development (OECD). (n.d.). *Costa Rica*. Retrieved December 10, 2024, from https://www.oecd.org/en/countries/costa-rica.html
43 Transparency International. (2018, February 21). *Corruption Perceptions Index 2017*. Retrieved from https://www.transparency.org/news/feature/corruption_perceptions_index_2017.
44 OECD Observer. (1999). Corporate governance: Getting it right in Russia. www.oecdobserver.org/news/archivestory.php/aid/21/Corporate_governance:_getting_it_right_in_Russia.html
45 BIAC. (2012). Russia-OECD accession discussions: Improving the Russian business environment, BIAC Statement to the OECD. www.biac.org/statements/nme/12-06_FIN_BIAC_BIAC_RUSSIA_PAPER_2012.pdf
46 OECD-Russia Accession Discussions: Improving the Russian Business Environment: BIAC Statement to the OECD. www.biac.org/statements/nme/08%2003%202011%20FINAL%20BIAC%20DRAFT%20BIAC%20RUSSIA%20PAPER%202011.pdf

47 DW made for minds. (2014). OECD suspends Russia accession talks while Moscow vows 'symmetrical' sanctions. www.dw.com/en/oecd-suspends-russia-accession-talks-while-moscow-vows-symmetrical-sanctions/a-17494773
48 Horobin, W. (2022, March 8). OECD isolates Russia further by ejecting country from all bodies. *Bloomberg Tax*. https://news.bloombergtax.com/transfer-pricing/oecd-isolates-russia-further-by-ejecting-country-from-all-bodies?context=article-related
49 *Economist*. (2012). Entrepreneurs in Latin America: The lure of Chilecon Valley, as America shuts out immigrant entrepreneurs, Chile welcomes them. www.economist.com/node/21564589
50 *BusinessWeek*. (1995). Score one more for Japan's Bureaucrats (Int'l Edition). www.businessweek.com/stories/1995-04-02/score-one-more-for-japans-bureaucrats-intl-edition
51 *heritage.org*. (2010). Turkey. www.heritage.org/index/country/Turkey
52 *Economist*. (2010). Making a success of failure. p. 68.
53 transparency.org. (2018).
54 Gamboa-Cavazos, M., Garza-Cantu, V., & Salinas, E. (2007). The organization of corruption: Political horizons and special interests. sitios.itesm.mx/egap/que_es_egap/inv_pub/EGAP_AP_07_01.pdf
55 Shirk, D. A. (2011). Criminal justice reform in Mexico: An overview. *Mexican Law Review*. info8.juridicas.unam.mx/pdf/mlawrns/cont/6/arc/arc1.pdf
56 Mengden, A. (2023, October 18). *International Tax Competitiveness Index 2023*. Tax Foundation. https://taxfoundation.org/research/all/global/2023-international-tax-competitiveness-index/#:~:text=Switzerland%20has%20a%20relatively%20low,a%20competitive%20international%20tax%20system
57 Mengden, A. (2023, October 18). *International Tax Competitiveness Index 2023*. Tax Foundation. https://taxfoundation.org/research/all/global/2023-international-tax-competitiveness-index/#:~:text=Switzerland%20has%20a%20relatively%20low,a%20competitive%20international%20tax%20system
58 U.S. Department of State. (2024). *2024 investment climate statements: Switzerland*. Bureau of Economic and Business Affairs. https://www.state.gov/reports/2024-investment-climate-statements/switzerland/
59 Mengden, A. (2023, October 18). *International Tax Competitiveness Index 2023*. Tax Foundation. https://taxfoundation.org/research/all/global/2023-international-tax-competitiveness-index/#:~:text=Switzerland%20has%20a%20relatively%20low,a%20competitive%20international%20tax%20system
60 Franks, J., Nyborg, K., & Torous, W. (1996). A comparison of US, UK, and German insolvency codes. *Financial Management*, *25*, 86–101.
61 Global Entrepreneurship Week. (2012). Global entrepreneurship week policy survey turns up unexpected results. www.unleashingideas.org/policysurvey
62 OECD. (2008). OECD economic surveys: Poland, raising labor supply to sustain strong potential growth. 10, 19–45.
63 Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, *88*(6), 40–50.
64 Brown, J. M. (2008). Lucre of the Irish, prospect. www.prospectmagazine.co.uk/2008/01/lucreoftheirish/
65 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
66 Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, *88*(6), 40–50.

67 Chile. (2008). GEM Report, 2009. Chileans see entrepreneurship as desirable career option. www3.babson.edu/Newsroom/Releases/Chile-GEM-2009.cfm
68 UIS. (2010). Trends in tertiary education: Sub-Saharan Africa. *UIS Fact Sheet*. www.uis.unesco.org/FactSheets/Documents/fs10-2010-en.pdf
69 EC (European Commission). (2007). Entrepreneurship survey of the EU (25 Member States), United States, Iceland and Norway: Analytical Report. *Eurobarometer*.
70 Global Entrepreneurship Week. (2012). Global entrepreneurship week policy survey turns up unexpected results. www.unleashingideas.org/policysurvey
71 Zachary, G. P. (2000). *The global me: New cosmopolitans and the competitive edge: Picking Globalism's winners and losers*. Nicholas Brealey Pub.
72 Furnham. A. (2017). Why immigrants make great entrepreneurs. www.wsj.com/articles/why-immigrants-make-great-entrepreneurs-1511752261
73 New American Economy Reason for Reform: Entrepreneurship, October, 2016.
74 Fighting bid rigging in government contracts: Mexico-OECD partnership. www.oecd.org/competition/cartelsandanti-competitiveagreements/fightingbidriggingingovernmentcontractsmexico-oecdpartnership.htm
75 OECD Economic Surveys: Japan. (2008). Enhancing the productivity of the service sector in Japan. 125–170.
76 Shogo, I. (2001). Competition in Japan's telecommunications sector: Challenges for the Japan fair commission. www.jftc.go.jp/e-page/speech/011011speech.pdf
77 OECD Economic Surveys: France. (2009). Strengthening competition to boost efficiency and employment, 5, 101–130.
78 Economic Survey of France. (2009). Strengthening competition to boost efficiency and employment. www.oecd.org/eco/economicsurveyoffrance2009strengtheningcompetitiontoboostefficiencyandemployment.htm
79 WSBI. (2016). Not so different: SME financing patterns in Europe and United States. www.wsbi-esbg.org/press/latest-news/Pages/Not-so-different-SME-financing-patterns-in-Europe-and-United-States.aspx
80 WSBI. (2016). Not so different: SME financing patterns in Europe and United States. www.wsbi-esbg.org/press/latest-news/Pages/Not-so-different-SME-financing-patterns-in-Europe-and-United-States.aspx
81 Schramm, C. J. (2004). Building entrepreneurial economies. *Foreign Affairs*, *83*(4), 104–115.
82 Elinor, C. (2012). Small banks target lending at Mexico's informal sector. www.the-european.eu/story-335/small-banks-target-lending-at-mexicos-informal-sector.html
83 Entrepreneurship at a Glance 2017. (2017). Venture capital: Venture capital investments. www.oecd-ilibrary.org/employment/entrepreneurship-at-a-glance-2017/venture-capital-investments_entrepreneur_aag-2017-25-en
84 Ernst & Young. (2002). Globalizing venture capital: Global venture capital insights and trends report 2011, 2. www.ey.com/Publication/vwLUAssets/Globalizing_venture_capital_-_Global_venture_capital_insights_and_trends_report_2011/$FILE/Globalizing_venture_capital_Global_venture_capital_insights_and_trends_report_2011.pdf
85 Chaia, A., Goland, T., & Schiff, R. (2010). Counting the world's unbanked.
86 Convergences. (2017). Is microfinance still working? Microfinance Barometer.
87 Grameen America. (2008). Grameen America. www.grameenamerica.com/About-Us/Grameen-America.html

88 Kitchens, R., & Torrence, P. (2012). The jobs act – Crowdfunding and beyond. *Economic Development Journal*, Fall, *11*(4), 42–47.
89 World Bank. (n.d.). *World Development Indicators*. World Bank. Retrieved December 10, 2024, from https://databank.worldbank.org/source/world-development-indicators/Series/GB.XPD.RSDV.GD.ZS#
90 Mostowyk, L. (2018). US named top global tech innovation leader, China in second spot: KPMG report. https://home.kpmg.com/xx/en/home/media/press-releases/2018/03/us-named-top-global-tech-innovation-leader.html
91 Murat, S. (2012). Lessons from a start-up nation. http://blogs.worldbank.org/psd/lessons-from-a-start-up-nation
92 The Danish enterprise and construction authority profile of Israel: An entrepreneurial country. www.erhvervsstyrelsen.dk/publikationer/ivaerksaettere/Entrepreneurship%20Index%202010/kap05.htm
93 Heijmans, P. (2010, January 27). EU sets its sights on tax havens. *The Prague Post*.
94 Lewis, G. (2007). Who in the world is entrepreneurial? *FSB: Fortune Small Business*, *17*(5), 14.
95 NAVER Corporation. (2023, March 30). *NAVER joins hands with two Saudi Arabian ministries for digital transformation*. PR Newswire. https://www.prnewswire.com/news-releases/naver-joins-hands-with-two-saudi-arabian-ministries-for-digital-transformation-301780287.html
96 https://www.prnewswire.com/news-releases/naver-joins-hands-with-two-saudi-arabian-ministries-for-digital-transformation-301785788.html
97 Park, K. (2023, September 1). *Korean internet giant Naver explores robotics, AI, and autonomous driving*. TechCrunch. https://techcrunch.com/2023/09/01/korean-internet-giant-naver-explores-robotics-ai-and-autonomous-driving/
98 NAVER Corporation. (2023, March 30). *NAVER joins hands with two Saudi Arabian ministries for digital transformation*. PR Newswire. https://www.prnewswire.com/news-releases/naver-joins-hands-with-two-saudi-arabian-ministries-for-digital-transformation-301780287.html
99 GlobalData. (n.d.). *Naver Corp: Overview*. GlobalData. Retrieved December 3, 2024, from https://www.globaldata.com/company-profile/naver-corp/#:~:text=The%20company%20operates%20through%20a,%2C%20Vietnam%2C%20Taiwan%20and%20Thailand
100 NAVER Corporation. (2023, March 30). *NAVER joins hands with two Saudi Arabian ministries for digital transformation*. PR Newswire. https://www.prnewswire.com/news-releases/naver-joins-hands-with-two-saudi-arabian-ministries-for-digital-transformation-301780287.html
101 Project program. (2023, November 3). *Naver's Global AI R&D Belt with PTIT*. PTIT. https://english.ptit.edu.vn/navers-global-ai-rd-belt-with-ptit/
102 NAVER Corporation. (2021, September 16). NAVER bolsters AI R&D capability, appoints global leading AI professionals in search quality and natural language processing. PR Newswire. https://www.prnewswire.com/news-releases/naver-bolsters-ai-rd-capability-appoints-global-leading-ai-professionals-in-search-quality-and-natural-language-processing-301375129.html
103 Jung, S. (2022, June 15). South Korea's R&D personnel competitiveness still low. *Business Korea*. https://www.businesskorea.co.kr/news/articleView.html?idxno=94633
104 Jung, S. (2022, June 15). South Korea's R&D personnel competitiveness still low. *Business Korea*. https://www.businesskorea.co.kr/news/articleView.html?idxno=94633

105 Baek, B.-Y. (2023, June 21). Naver, SK Telecom clash over AI manpower. *The Korea Times*. https://koreatimes.co.kr/www/tech/2024/08/133_353414.html

106 Park, J. (2023, November 3). Korea at pivotal moment in redesigning AI strategies. *The Korea Times*. https://www.koreatimes.co.kr/www/tech/2024/10/129_362459.html

107 Yoo, C. (2024, August 20). *South Korea fears losing race for AI leadership, Naver's AI expert says*. https://mlex.shorthandstories.com/south-korea-fears-losing-race-for-ai-leadership-navers-ai-expert-says/index.html

Chapter 5

Entrepreneurship in Postsocialist Economies in Former Soviet Union and Central and Eastern Europe

This chapter's objectives are:

1. To demonstrate an understanding of the natures of entrepreneurial activities in F.S.U.&C.E.E. economies.
2. To analyze the drivers of entrepreneurship in F.S.U.&C.E.E. economies.
3. To evaluate some of the barriers to transition to market economies in F.S.U.&C.E.E. economies.
4. To assess the extent of productive, unproductive and destructive entrepreneurship in F.S.U.&C.E.E. economies.
5. To demonstrate an understanding of the sources of heterogeneity in entrepreneurial activities in F.S.U.&C.E.E. economies.

5.1 Introduction

In this chapter, we shift our attention to entrepreneurship in the formerly socialist countries of the Former Soviet Union and Central and Eastern Europe (F.S.U.&C.E.E.). Note that during the socialist economic systems in the past, all these countries were characterized by a pervasive hostility to entrepreneurship. Among the F.S.U.&C.E.E. economies, Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia are Organisation for Economic Co-operation and Development (O.E.C.D.) members. In Chapter 4, we discussed at length the importance of economic and political reforms in order to be qualified for O.E.C.D. membership. Some other F.S.U.&C.E.E. economies, while not yet O.E.C.D. members, have joined the North Atlantic Treaty Organization (N.A.T.O.) and the European Union (E.U.), and thus institutional reforms in these economies were constantly monitored as part of the process of attaining full membership of these international organizations.

Former Soviet Union and Central and Eastern Europe countries have shown varying degrees of political reform and success in entrepreneurship. Anders Åslund divides the countries of the former Soviet bloc into three

DOI: 10.4324/9781003565154-5

groups based on their political reforms and current status. Among the three groups, the nine Central and Eastern European (C.E.E.) countries in the E.U. – Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania and Slovakia – excel with their democratic governance and effective corruption control, though some like Hungary and Poland face democracy challenges. The seven bad-equilibrium countries – Azerbaijan, Belarus, Kazakhstan, Russia, Tajikistan, Turkmenistan and Uzbekistan – are former Soviet republics characterized by authoritarian rule and entrenched corruption.

Armenia, Georgia, Kyrgyzstan, Moldova and Ukraine, the intermediate group of former Soviet republics, exhibit varied corruption and political systems with no obvious pattern of convergence.[1] Among non-E.U. F.S.U. countries, Georgia is viewed as a success story. Georgia's favorable business climate consistently places it high in international rankings for transparency, competitiveness and economic freedom. The European Union granted Georgia candidate status in December 2023, specifying nine requirements for the country to meet, such as strengthening deoligarchization and anticorruption measures, to advance in its accession journey.[2] Although Georgia has shown stronger performance compared to other F.S.U. economies, essential aspects of entrepreneurship are still not well developed in the country. For example, while government grants in Georgia are essential for early-stage funding, growing startups require equity finance. Angel investors are beginning to make their presence known, but venture capital (V.C.) is still in its infancy.[3]

There is a considerable disparity in entrepreneurial outcomes among these countries, with some showcasing robust performance while others face substantial challenges. For instance, Russia is considered a prime example of oligarchic capitalism.[4] Although Putin has replaced the original oligarchs with his own since the 1990s, the power structure in Russia remains fundamentally unchanged.

> It's a symbiotic relationship in which the oligarchs' economic power buttresses the political power of the Russian president, and the president's power buttresses the economic power of the oligarchs – like a medieval king getting tribute from his aristocracy in exchange for his protection.[5]

Estonia's entrepreneurial success story stands out as a remarkable achievement among former Soviet Union countries. With a population of approximately 1.3 million, Estonia has risen to prominence in the European tech arena. The State of European Tech 2022 report by Atomico names Estonia as the top European country for tech startups. By December 2022, the Estonian Startup Database had recorded 1,452 startups, underscoring the country's dynamic tech environment. Estonia also excels in unicorn creation, boasting

ten billion-dollar companies and a leading rate of 7.7 unicorns per million inhabitants, surpassing larger competitors like Luxembourg, the United Kingdom and Germany.[6]

F.S.U.&C.E.E. countries also present appealing opportunities for foreign firms to base their entrepreneurial activities in the region. According to the United Nations Industrial Development Organisation, the four Visegrád countries (Czechia, Hungary, Poland, Slovakia) and Slovenia are among the top 30 most competitive manufacturing exporters globally. Additionally, the Observatory of Economic Complexity ranks Slovakia, Hungary, Slovenia and Czechia in the top 20 for the most knowledge-intensive product exporters worldwide.[7] Likewise, the I.T. workforce in Ukraine, Belarus and Russia surpassed 1 million professionals in 2022, according to Gartner, with 250,000 in consulting or outsourcing.[8]

In general, there is growing recognition among postsocialist (P.S.) economies in F.S.U.&C.E.E. that free-market entrepreneurship is essential for ultimately improving their economic future. Even countries that lack membership in any of the above international organizations have demonstrated their commitment and willingness to encourage and promote free-market entrepreneurship. For instance, the growth of Russia's economy is supported by its significant reliance on free market principles.[9]

However, high-impact entrepreneurship remains rare and limited in the region. For instance, although artificial intelligence (A.I.) startup activity in Central and Eastern Europe is on the rise, with 900 active A.I. product companies as of early 2024 raising US$4.2 billion during 2021–23, the region has yet to establish a prominent A.I. hotspot comparable to Paris or Heilbronn in Germany.[10]

While many examples to promote entrepreneurship in F.S.U.&C.E.E. economies exist, there are various inertia effects that have posed difficulties. One obvious problem concerns the absence of and difficult-to-construct key ingredients of entrepreneurial ecosystem such as appropriate political, legal, economic and commercial structures that are needed for a free-market economy. These problems are prevalent even in some F.S.U.&C.E.E. economies that are considered to be successful. For instance, in Poland, which is viewed as among the most successful F.S.U.&C.E.E. economies, in October 2023, the Supreme Audit Office (N.I.K.) uncovered "numerous irregularities" in how the National Centre for Research and Development (N.C.B.R.) allocated grants for a fast-track digital innovation initiative co-funded by the E.U. The report described the findings as "alarming", indicating potential corruption mechanisms within the N.C.B.R. and raising concerns about the integrity of E.U. fund management. According to the December 2022 results, N.C.B.R. funded 117 projects from 434 applications. The audit uncovered several irregularities, including the reinstatement of 4 projects that failed the initial review, approval of one non-compliant

project and 12 projects that did not meet the call's criteria. Issues were present at multiple stages, such as expert panel selection, notification of changes to applicants and currency conversion. N.I.K. emphasized the seriousness of these problems due to N.C.B.R.'s involvement in distributing €8 billion through the European Funds for a Modern Economy Programme.[11]

5.2 Effect on Entrepreneurship of Russia's Invasion of Ukraine

Russia's invasion of Ukraine, referred to by Moscow as a "special military operation"[12] in February 2022, had a profoundly negative impact on key aspects of entrepreneurship.

5.2.1 Sanctions

Sanctions are penalties imposed by one country to deter aggressive actions or breaches of international law, serving as a severe alternative to war.[13] In response to Russia's invasion of Ukraine, the United States, the United Kingdom and the European Union have applied significant sanctions. By February 2024, the United States has targeted more than 4,000 people and organizations, and the E.U. has imposed sanctions on over 2,000 individuals and entities, including Vladimir Putin and his inner circle[14] (In Focus 5.1).

IN FOCUS 5.1 THE RISE AND FALL OF SKOLKOVO: HOW "CORRUPTION, BRAIN DRAIN, AND PUTIN KILLED IT"

Russia's Skolkovo project was announced by then President Dmitry Medvedev in 2009 to reduce the country's reliance on commodities and develop a globally competitive knowledge-based economy. The vision was for it to serve as a launchpad for Russia's tech entrepreneurs, providing grants, education and office space.[15].

Led by Russian oligarch Viktor Vekselberg and ex-Intel head Craig Barrett, the Skolkovo Foundation's team also featured then-CEO of Google Erich Schmidt and the Finnish former prime minister Esko Aho. To ensure a steady flow of talent, Skoltech, a private graduate school backed by a US$300 million Massachusetts Institute of Technology (M.I.T.) partnership, was created with a cutting-edge curriculum and top global faculty.[16].

The plan is to transform 400 hectares farmland near Moscow to Silikonnovaya Dolina or Russia's Silicon Valley. The Skolkovo project includes five "clusters" specializing in I.T., energy, nuclear technologies,

biomedicine and space technologies. As of mid-2012, the government had allocated about US$4.2 billion for the project.[17] As of February 2012, the project had approved US$220 million in grants to 330 startups.[18]

Corporate and personal tax breaks and other incentives are promised for investors and about 200 laws had been amended as of mid-2012 to encourage high-tech investment in Skolkovo. High-level government officials visited foreign countries to promote the Skolkovo project. In 2010, Medvedev met with a group of U.S. venture fund managers in an attempt to attract venture capital in Silikonnovaya Dolina.[19] Likewise, in February 2012, executive directors of the five clusters of the Skolkovo project visited the United Kingdom to raise awareness of the opportunities available for researchers and companies and to attract partners and investors. These incentives have already attracted multinationals such as Microsoft, IBM, Siemens, Intel, Cisco and Nokia. As of early 2013, participant status was granted to over 300 companies. In 2012, Skolkovo announced its intention to open a similar innovation city in Vladivostok. By 2013, nearly a thousand companies had achieved resident status at Skolkovo, receiving close to US$300 million in government support, complemented by private investment. Major corporations like Nokia and Boeing also established research facilities there.[20].

Vladimir Putin Returns to Power

When Vladimir Putin's second presidential term ended in 2008, Russia's constitution limited him to two consecutive terms, leading him to serve as prime minister before returning to the presidency in 2012 for a third term.[21] Observers noted that after Vladimir Putin's return, the project has been relegated to a low-priority list.[22] Whereas Medvedev has placed a higher priority on innovation and economic development, Putin's priorities have been in fulfilling his campaign promises such as increasing the availability of emergency housing and public kindergartens.[23]

Several officials connected to Skolkovo faced political fallout, and the project was marred by corruption scandals, including a government audit revealing US$45 million in misused funds and investigations into embezzlement by two executives.[24] In 2013, criminal cases against two high-ranking officials of the Skolkovo project were filed. The two officials allegedly embezzled US$800,000 from the project, which was provided by the government to develop the infrastructure and support local startups.[25]

Ilya Ponomarev, Vekselberg's advisor, was charged with embezzlement related to Skolkovo funds, a case he argues was politically driven due to his dissenting vote on Crimea. He later moved abroad to work with startups

in the United States and Ukraine.[26] Ponomarev was left with frozen bank accounts and found himself stranded in the United States, unable to return to Russia.[27].

With Putin's government focusing on other priorities, Skolkovo's importance waned. The expected US$12 billion in private funding by 2020 was not realized, and the park now functions more as an upscale office area, with several planned structures still unbuilt.[28]

The Effect of Russia's Invasion of Ukraine

Like other economic sectors, the Skolkovo Innovation Center's prospects deteriorated after Russia's invasion of Ukraine on February 24, 2022. Following his rare public opposition to Moscow's military intervention in Ukraine, former Kremlin aide and ex-deputy prime minister Arkady Dvorkovich resigned as chair of the Skolkovo Foundation in March 2022.[29] Following the onset of the war, many international partners withdrew from the tech park.[30]

M.I.T. decided to end its partnership with Skolkovo Institute of Science and Technology (Skoltech). M.I.T. formally terminated the M.I.T. Skoltech Program on February 25, 2022 (https://skoltech.mit.edu/).

In August 2022, the U.S. Treasury imposed new sanctions on the Skolkovo Foundation and the Skolkovo Institute of Technology (Skoltech) (https://tass.com/economy/1488347). U.S. individuals and corporations must promptly terminate all collaborations and academic or publication-related activities with these sanctioned entities.[31]

The Collapse of Russia's Ambitious Tech Center

Despite billions invested, Skolkovo failed to create a startup hub, not producing a single unicorn or notable company.[32] Despite housing over 2,200 startups, Skolkovo attracted just US$214 million in private investment in 2019.[33] As a point of comparison, the US$214 million raised by Skolkovo's 2,200 startups in 2019 contrasts sharply with the US$10 billion raised by OpenAI and the US$6.5 billion by Anthropic in 2023.[34] Commenting on the failure of Skolkovo Innovation Center, a Foreign Policy article commented that "corruption, brain drain, and Putin killed it".[35]

The story of the Skolkovo project highlights essential lessons about the success of the broader economy. The Russian government's A.I. innovation efforts are likely to fail for the same reasons that Skolkovo did.[36]

5.2.2 Foreign Companies' Decreased Presence in Russia

Foreign-owned businesses in Russia faced threats of nationalization and ethical issues, leading to reduced operations. Over 1,000 companies had limited their operations in Russia by January 2024.[37] First, foreign businesses in Russia are facing increasing nationalization as the government intensifies its efforts to assert control over these enterprises. For instance, in July 2023, Russia took control of the Russian assets of Carlsberg, a Danish brewer, and Danone, a French yogurt producer.[38]

The number of foreign-affiliated businesses fell by 6,200 in 2022 and by 3,400 in the first ten months of 2023, reaching a total reduction of 9,600 entities. From March 2022 through October 2023, 23,500 foreign-owned companies were liquidated, which involves selling assets for cash to repay debts and close the company.[39] For instance, Dutch brewery Heineken concluded its exit from Russia in August 2023, divesting its operations to Arnest Group for a nominal fee of one euro.[40] Finnish and other Nordic businesses are the most proactive in withdrawing from Russia, unlike Chinese, Turkish and Indian firms, which have shown only a minimal inclination to exit.[41]

The proportion of companies registered in Russia from nations deemed "unfriendly" by the Kremlin (such as the United States and N.A.T.O. members) fell to 3% in 2023, down from 14% in 2021. In late 2023, the number of registered legal entities with foreign ties in Russia stood at 116,400, down 37% from the peak of 185,000 in 2017.[42] Following a terrorist attack in Moscow in March 2024, anti-migrant sentiment in Russia has surged, leading to the closure of 75% of cafes and restaurants run by Central Asian migrants in Moscow. Owners attribute the shutdowns to increased xenophobia and police harassment.[43]

For foreign companies exiting Russia, Moscow insists on a 50% discount based on government valuations, a 10% budget contribution and sometimes further discounting before finalizing approvals.[44] According to the *Financial Times*, Europe's top 600 companies collectively faced approximately US$100 billion in losses due to their withdrawal from the Russian market as of November 2023.[45]

5.2.3 Local Russian Companies Leaving the Country

Not only are foreign companies leaving Russia, but local Russian firms are also exiting the country. In July 2023 Arkady Volozh, co-founder of Yandex, the largest search engine in Russia and one of the largest in the world, announced a plan to launch an A.I. company in Europe with a team primarily composed of former Yandex employees. This initiative comes after Yandex's recent departure from Russia. Volozh, a notable critic of Moscow's invasion of Ukraine, will lead Nebius Group, which focuses

on A.I. infrastructure and was previously Yandex's Nasdaq-listed Dutch parent.[46]

Between March and September 2022, nearly 9,500 companies were established by Russians in Georgia. Since the war in Ukraine began in February 2022, over 400 Russian-owned businesses had been registered in Untsa by November 2022. In this village, which had a population of just 270 according to the 2014 census, there were now more Russian businesses than residents. Georgia's close geographic location, visa-free entry and streamlined business registration processes made it an attractive refuge for freelancers and entrepreneurs facing international sanctions imposed on Russia**.** The search for hidden Russian entrepreneurs points to Vakhani, where an unassuming house is home to over 200 registered Russian-owned companies.[47]

5.2.4 Decline in Quality by Local Entrepreneurs of Former Foreign Businesses

While many Western firms withdrew from Russia, local entrepreneurs took over. McDonald's former restaurants were rebranded and reopened in June as "Vkusno i Tochka", translating to "Tasty and That's It".[48] Likewise, Yum Brands completed its exit from Russia in April 2023, by transferring its KFC operations to Smart Service Ltd., a local company.[49] There have been cases in which the quality of products and services offered by local entrepreneurs has deteriorated. It has been reported that the performance of the local replacement for McDonald's falls short of the established McDonald's benchmarks. Vkusno i Tochka has faced criticism for issues like subpar food quality, including moldy buns and meatless cheeseburgers, as well as a limited menu selection.[50]

5.2.5 Reduction in Venture Capital Investment

The value of venture capital investment in Russian startups fell sharply to US$658 million in the first half of 2022, a significant decrease from nearly US$2 billion in the second half of 2021.[51] For 2022, V.C. investment in the country fell to US$1.1 billion, marking a 57% decrease from the previous year.[52] As depicted in Figure 5.1, Russia's venture capital sector saw a sharper decline from 2022 to 2023 than that of Ukraine and other C.E.E. economies.

5.2.6 Russian Firms Finding Ways to Circumvent Sanction Measures

Western sanctions have impacted key Russian financial institutions and payment systems, with Russia's central bank recognizing payment problems.

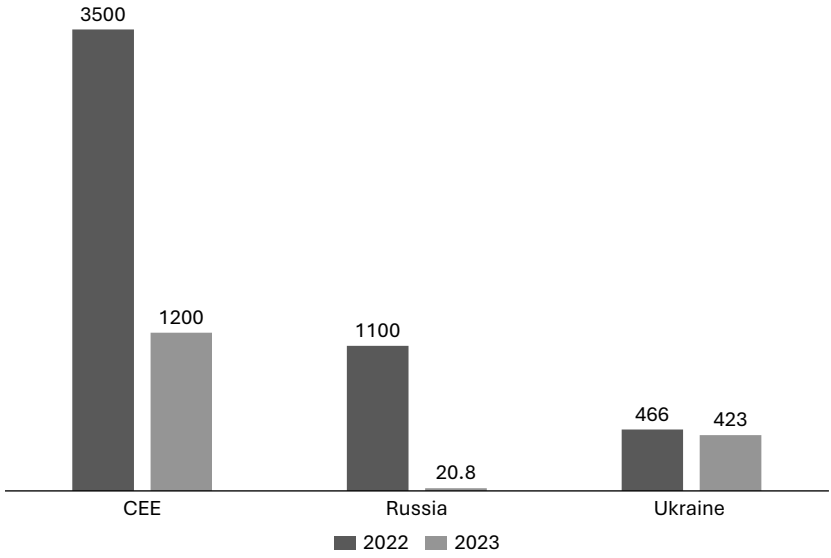

Figure 5.1 V.C. in F.S.U.&C.E.E. Economies (US$, million)

As a result, Russia has relaxed its regulations on using cryptocurrencies for international transactions.[53] Despite attempts to cut Russia off from the Western financial system, the sanctions have not been foolproof. Traders have found ways to evade these measures, including using barter, routing transactions through countries not participating in sanctions or employing cryptocurrencies.[54]

5.3 Variation across F.S.U.&C.E.E. Economies in Entrepreneurial Performance and Impact

5.3.1 Startup Ecosystem

Among F.S.U.&C.E.E. economies, Central and Eastern European economies that are part of the E.U. have exhibited remarkable entrepreneurial performance due to their robust startup ecosystems and rapid digital adoption (In Focus 5.2). These factors, coupled with a skilled workforce, have driven innovation and business growth in the region. During 2016–20, the number of startups in C.E.E. doubled, with a dozen achieving unicorn status. Poland led with over 3,000 active startups, supported by more than 130 V.C. firms and over 100 accelerators and incubators.[55]

IN FOCUS 5.2 NAVIGATING ESTONIA'S STARTUP BOOM: FROM E-RESIDENCY TO DEEP TECH INNOVATION

Estonia's digital transformation began when leaders and policy makers chose to make the country digital-first following its independence from the Soviet Union in 1991.[56] Prime Minister Kallas stated that after independence, Estonia used digitalization to rebuild its economy and society, embracing emerging technologies despite limited resources. Estonia's I.T. and engineering education is top-tier. The Kood/Jõhvi coding course, lasting 18 months, accepts students with secondary school education and prepares them to become stack developers right after graduation.[57]

With notable startups like Skype, Wise and Bolt, Estonia has traditionally ranked highest in Europe for startups per capita.[58] In 2023, StartupBlink data ranked Estonia as the leading country for startups in Central and Eastern Europe, achieving a total score of 17.67, with Lithuania in second place.[59] As of July 2024, Estonia has produced four unicorn startups.[60]

Estonia's advanced digital infrastructure and quick four-day business setup process position it as a top startup hub. The e-Residency program is well regarded for easing online business management, and the country's 20% business tax rate makes it a compelling choice for entrepreneurs.[61] Estonia offers a 0% tax rate on reinvested profits, making it a favorable environment for startups and businesses aiming to reinvest earnings into growth and development.[62] The e-Residency scheme in Estonia allows for rapid company registration, typically within hours, with an impressive record of just 15 minutes as of September 2023.[63]

Launched in 2014, Estonia's e-Residency offers a transnational digital identity, allowing global users to access the E.U. business environment and Estonian e-services, and manage a fully online, location-independent business (https://e-estonia.com/solutions/estonian-e-identity/e-residency/).

Estonia's e-Residency program aimed to attract entrepreneurs to one of the E.U.'s most startup-friendly countries. Liina Vahtras, Managing Director of e-Residency, observes that many e-residents come from within the E.U. itself. This trend suggests that Estonia's simplified business registration process is appealing even to those already in the single market, highlighting its role in cultivating a thriving tech ecosystem.[64] As of August 2024, there are over 29,000 e-resident companies and more than 109,000 e-residents (https://e-estonia.com/solutions/estonian-e-identity/e-residency/) Offering a notable competitive advantage, Estonia's e-residency program connects 38% of startups in the country with e-residents, bolstering its startup ecosystem.[65]

By the end of 2023, Estonia boasted around 130 deep tech startups, including companies such as Auve Tech, which focuses on autonomous

vehicles and transportation systems, and Pactum A.I., which is developing an A.I.-based negotiation platform.[66] Note that deep tech ventures are those where the innovative solutions are firmly rooted in advanced, research-driven technology grounded in scientific principles and technological advancements. More broadly, the term "deep tech" specifies a more focused category within the broader "high tech" field and mainstream consumer technology.[67] Deep tech includes companies in A.I., biotechnology, quantum computing, as well as sectors like agriculture, aerospace, green energy and mobility.[68]

In 2024, startups made up 2% and the I.C.T. sector 7% of the Estonian economy. Estonian startups aspire to reach a 30% share by 2030. According to Swedbank's Senior Economist Liis Elmik, achieving this target is unlikely, given the need for a tenfold growth in I.C.T. firms during 2023–30. A well-balanced economy in Estonia depends on diverse sectors and companies. Relying too heavily on one sector can create vulnerabilities, making the economy more susceptible to negative impacts if that sector faces difficulties.[69]

Romania was often cited as an unsuccessful example of F.S.U.&C.E.E. economies in promoting market entrepreneurship. Romania's development was often referred to as "stalled" or even "de-development".[70] It was observed that "the former party bosses are alive and, to the despair of many Romanians, well".[71] Earlier we discussed the roles of supranational institutions or outside anchors such as the E.U. and O.E.C.D. in facilitating the formation of market institutions. The significant improvements made by Romania in the past decade further illustrate this point. In 2000, there were at least 13 institutions involved in the process. It was observed that state officials in Romania lack accountability; it was impossible to sue them and formal complaints have no effect.[72]

Romania's startup ecosystem today is robust and dynamic; it saw significant financial backing in 2023, with approximately US$98 million (€89.6 million) in investments. The investment environment is supported by 13 venture capital funds, 5 angel investor networks and additional stakeholders. Currently, there are 2,500 startups active across multiple industries, including education, healthcare and fintech, illustrating Romania's burgeoning status as an innovation hub.[73]

Among the intermediate group of former Soviet republics, Ukraine is notable for having a well-developed startup ecosystem. Ukraine had over 500 startups, with Kyiv ranking 32nd globally for startup ecosystems.[74] The startup financing landscape in Georgia is still evolving.[75]

Among the bad-equilibrium countries, Russia had a vibrant technology startup ecosystem before the Russo-Ukraine war started. Technology was

one of the rare sectors in Russia where meritocracy prevailed over connections, and the industry retained a spirit of openness, with entrepreneurs securing international funding and striking global deals. Government figures indicate that around 100,000 I.T. specialists left Russia in 2022, which represents approximately 10% of the tech workforce, though this number is likely an underestimate.[76] Uzbekistan's startup ecosystem is nascent, characterized by a high volume of ventures at the pre-seed and seed stages.[77]

5.3.2 Poverty Reduction

Transitioning from poverty to wealth is an uncommon occurrence. Among the 195 economies monitored by the International Monetary Fund, only 39 are deemed "advanced". Since World War II, only 18 countries have achieved this status, generally in regional clusters. Southern Europe first saw Greece and Portugal join the ranks, followed by East Asia with South Korea and Taiwan. The latest additions are Eastern European nations such as the Czech Republic, Slovakia, Lithuania, Latvia, Estonia and Slovenia, as well as microstates including Puerto Rico and San Marino.[78]

These economies have also made a significant progress in reducing poverty. For instance, according to the Federal State Service for Statistics (Rosstat), absolute poverty in Russia fell from 29% in 2000[79] to 8.5% in 2023.[80] In his 2024 state-of-the-nation address, President Putin emphasized the importance of reducing poverty in Russia, stating that the number of people living in poverty should be brought down to 7% of the population.[81] Likewise, Uzbekistan has significantly reduced poverty since 2021. The national poverty headcount rate decreased from 17.0% in 2021 to 14.1% in 2022, and further to 11.0% in 2023.[82]

5.3.3 Economic Growth

The Russo-Ukrainian War should be highlighted in any analysis of gross domestic production (G.D.P.) growth, as it has profoundly influenced economic conditions in affected regions. The war has had profound negative effects on the economic growth of major F.S.U. economies (Figure 5.2). The G.D.P. of Ukraine dropped nearly 30% during 2022 (Figure 5.2).

The Russian economy is heavily influenced by the Kremlin's political goals, with economic decisions increasingly driven by wartime priorities.[83] Russia's economy experienced a 2.1% contraction in 2022, a much smaller decrease than the 12% initially forecasted, according to the national statistics agency. Predictions from the Institute for International Finance estimated a 15% decline in the Russian economy for 2022, and in March 2022, the then U.S. President Joe Biden claimed it was "on track to be cut in half".[84]

Countries with economic and political ties to Russia, such as Belarus and Estonia, were significantly affected. The Estonian economy has struggled

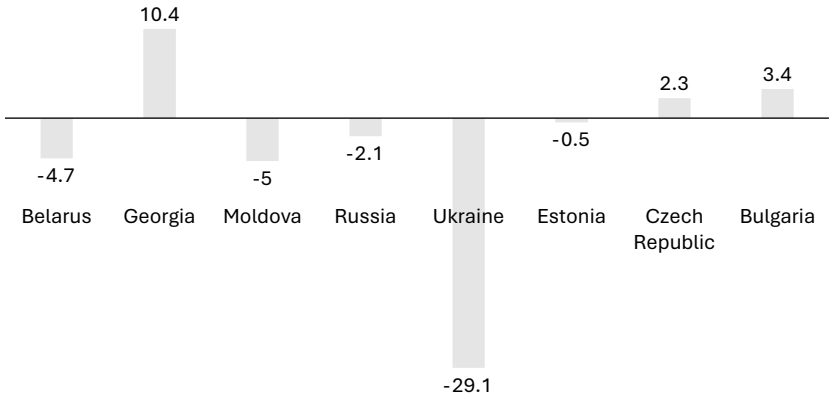

Figure 5.2 G.D.P. Growth Rates (%) in Some F.S.U.&C.E.E. Economies (2022)

since Russia's invasion of Ukraine in February 2022, showing a 6% drop in output compared to the end of 2021. Although direct trade with Russia and Belarus was limited, their inputs were crucial for Estonian exports in sectors like wood and manufacturing. The surge in energy prices caused inflation to peak at 25% in August 2022, which negatively impacted household consumption and led to a decline in trade with Nordic markets.[85]

5.4 Productive, Unproductive and Destructive Entrepreneurship in F.S.U.&C.E.E. Economies

Formal and informal institutions needed to support market entrepreneurship have not developed at the same rate across the F.S.U.&C.E.E. economies. There is more variation across F.S.U.&C.E.E. economies' reforms than many analysts predicted. While some F.S.U.&C.E.E. economies have made significant progress, the reform process has been relatively slow in others. Czech Republic, Estonia, Hungary and Poland are described as some examples of the successful F.S.U.&C.E.E. economies.

The bad-equilibrium countries noted above such as Russia and Uzbekistan, on the other hand, have been slow to develop institutional supports needed to promote productive free-market entrepreneurship. For one thing, political entrepreneurship, in which entrepreneurs use political power, capital and social networks to maximize economic rewards, is more readily apparent in Russian and some other F.S.U.&C.E.E. economies.[86] Moreover, as is the case of some other developing economies, the ruling elites and their family, friends and clients have lived a parasitic existence in some F.S.U.&C.E.E. economies. It is argued that the Russian

economy is a hybrid between Soviet capitalism and feudalism. Russian government officials also engage in predatory behaviors. During 2002–11, Russia imprisoned about 3 million entrepreneurs.[87] Many of them were put in prison without trial and unjustly. Some businessmen complained that their commercial rivals paid corrupt police officers to plant evidence against them.

Individuals in F.S.U.&C.E.E. economies do not necessarily have a lower propensity to engage in entrepreneurial activities than those in matured market economies. Most people in the F.S.U.&C.E.E. economies have accepted the idea of free market and capitalism.

The concept of entrepreneurship is, however, quite broad in F.S.U.&C.E.E. economies. Indeed, as noted earlier, entrepreneurs in F.S.U.&C.E.E. economies have come in various forms. One way to classify entrepreneurial activities is in terms of their legalities. There have been an increasing number of businesses within the legal boundary. In rapidly changing environments like those of F.S.U.&C.E.E. economies, however, entrepreneurs find attractive economic niches from outside the current institutional boundaries.[88] A significant proportion of entrepreneurial activities in these economies have been in quasi-legal and extra-legal areas.

A related point is that the inertia effects of socialism influence entrepreneurial activities in F.S.U.&C.E.E. economies. One scholar noted, "capitalism is built not *on* but *with* the ruins of socialism".[89] Socialism's ruins come in various forms including the influence of Marx-Leninism philosophy and the prominence of Communist Party members and bureaucrats in the entrepreneurship landscape. While Eastern Bloc countries broadly support transitioning to a multiparty system and market economy, Russians are less favorable, with only 38% approving of economic changes.[90]

Based on the two dimensions discussed above – legality and inertia effects of socialism – we have developed a 2×2 typology of entrepreneur types in F.S.U.&C.E.E. economies (Figure 5.3). While collective entrepreneurship (Cell 1) existed in Mao-era China, the other types of entrepreneurship depicted in this figure are associated with F.S.U.&C.E.E. contexts.

Our observations above also raise the interesting possibility that institutions in some F.S.U.&C.E.E. economies may do better in promoting entrepreneurship in unproductive and destructive forms than those in matured market economies. Note that free-market entrepreneurship, which relies on competition, supply and demand, is likely to add to the social product and is productive. Some forms of political entrepreneurship are also associated with criminal and quasi-criminal activities,[91] which are inefficient, unproductive or even destructive. A Carnegie Endowment for International Peace article notes: "For some, Russia's oligarchs are criminals, for others they are capitalists".[92]

Legality⇒ Ideology ⇓	Legal	Non-legal/illegal
Socialism dominated	[1] • Collective entrepreneurship (Existed in the Mao-era China)	[4] • Political entrepreneurship
Capitalism dominated	[2] • Market entrepreneurship	[3] • Institutional entrepreneurship

Figure 5.3 Entrepreneurship in Postsocialist Economies: A Typology

5.4.1 Productive Market Entrepreneurship

Market entrepreneurs in F.S.U.&C.E.E. economies depend upon the newly created market institutions. While economic systems in matured market economies are characterized by private enterprise and market entrepreneurship, this form of entrepreneurship is at the early stage of development in most F.S.U.&C.E.E. economies.

Contrary to the stereotypically different expectations that surround F.S.U.&C.E.E. economies, however, market entrepreneurship is growing rapidly in some F.S.U.&C.E.E. economies. A significant proportion of small and self-employed firms in F.S.U.&C.E.E. economies have ingredients of market entrepreneurship in their functioning. For instance, traditional Russian business values have changed gradually and are becoming more and more consistent with free-market entrepreneurship.[93]

5.4.2 Unproductive and Destructive Entrepreneurship

Compared to more matured market economies, unproductive and destructive forms of entrepreneurship tend to be more prevalent in F.S.U.&C.E.E. economies. For one thing, the introduction of market forces in F.S.U.&C.E.E. economies pushed a great deal of economic activity underground. Formalization of informal economy is a critical practical challenge facing F.S.U.&C.E.E. economies. In 2018, Russia's shadow economy, encompassing various questionable transactions, amounted to nearly 20% of the country's $1.85 trillion G.D.P.[94]

Entrepreneurial activities that are criminal and destructive have significant and substantial effects in F.S.U.&C.E.E. economies. Criminal entrepreneurs in the region are creating new drug trafficking routes, enhancing online markets and making a broader array of substances available.[95]

In 2017, Russian-based organized crime accounted for roughly one-third of the heroin on Europe's streets, a notable share of non-European human

trafficking and most of the illegal weapons imports.[96] Belarus, Moldova and Ukraine, which share borders with the E.U., are significant in the northern heroin trafficking route to Europe. On the other hand, the Southern Caucasus countries – Armenia, Azerbaijan and Georgia – are positioned near Afghanistan, a key producer of opium and heroin, and are also emerging as new centers for methamphetamine production.[97]

Although the Taliban has imposed a ban on opium cultivation, the Russian criminal networks' entrenched smuggling of Afghan heroin into Russia and Europe, including connections to groups in Chechnya and its leader Ramzan Kadyrov, remains undiminished.[98] Cocaine is an expensive drug predominantly used by high-income consumers and in nightclubs in Eastern Europe. The ongoing conflict in Ukraine, starting February 2022, is likely to have disrupted these trends and reduced cocaine availability. In Russia, despite a growing market for cocaine, the impact of the conflict and sanctions on consumption patterns is still uncertain. Additionally, smuggling operations may move from Ukrainian ports to Black Sea ports in Romania or Bulgaria as foreign criminal groups seek to bypass law enforcement.[99]

Finally, a remarkable example of parasitical existence of entrepreneurs upon the economy is the creation of firms to support criminal activities in some F.S.U.&C.E.E. economies. There are, for instance, companies whose primary purpose is to provide money-laundering services for criminal organizations.[100] Organized crime groups in Russia have been the driving force behind the rapid rise of the global cybercrime industry.

Russian-speaking criminals dominated ransomware crime in 2023, extorting over US$500 million and accounting for nearly 70% of all crypto proceeds from these attacks, according to TRM Labs.[101] Ransomware as a Service (RaaS) is a prominent business model among Russian criminals, mirroring the Software as a Service (SaaS) approach. This subscription-based model provides pre-developed ransomware tools to buyers, referred to as ransomware affiliates, who use them to conduct ransomware attacks.[102] It is believed that RaaS players such as REvil and DarkSide are taking advantage of Russia's lenient policy toward domestic cybercriminals who target victims outside of Russia or Russian-speaking territories.[103]

5.4.3 Political Entrepreneurship

One scholar makes an intriguing argument as to how political entrepreneurs emerge in F.S.U.&C.E.E. economies: postsocialist transition is not a transition from *plan* to *market* but from *plan* to *clan*.[104] The essence of the argument is simple: political entrepreneurs take advantage of their positional power to maximize economic rewards. They receive state subsidies and contracts in various forms. This emphasis on the exploitation of positional power is echoed in the political capitalism thesis, which argues that major winners of the P.S. transformations are the former nomenklatura.[105] Note

that the nomenklatura were people within the former Soviet Union and other Eastern Bloc countries who occupied key administrative positions. The Communist Party of the country needed to approve the positions. Political entrepreneurship goes against the idea of capitalism and describes a paradoxical situation of "making capitalism without capitalists".[106]

Russia differs from other transition economies in C.E.E. in several important aspects, inter alia its vast natural resources, which provides enormous opportunities for rent-seeking.[107] Unsurprisingly, state managers and new entrepreneurs benefited tremendously through rent seeking in the transition. In 2022, over US$17 billion in global assets, including offshore bank accounts, yachts, private jets and luxury properties in London, Tuscany and the French Riviera, were linked to 35 oligarchs and Russian officials reportedly close to Vladimir Putin.[108]

While political entrepreneurship also exists in mature market economies, this form of entrepreneurship is more readily apparent in F.S.U.&C.E.E. economies. A central feature of the privatization of state enterprises in C.E.E. economies is that privileged elites converted "limited de facto use and income rights into more de jure alienable rights".[109] In Russia, for instance, following the mass privatization, former nomenklatura appointees accounted for about two-thirds of the top positions in businesses and the government.[110] Likewise, beginning the mid-1980s in Hungary and Poland and in the late 1980s in Romania, political and administrative elites capitalized on their positional power to start their own businesses.

That is not to say that political entrepreneurship is absent in mature market economies such as the United States. For instance, in 2020, U.S. sugar producers and processors contributed more than US$6 million in campaign donations to congressional members across 48 states. This included both Republicans and Democrats, with most of these states lacking beet or cane sugar production but hosting members of the House and Senate agriculture committees.[111] Observers have pointed out the possibility that these political contributions might have an adverse effect on regulatory efforts to revise national nutritional policy. Over 150 programs managed by the U.S. Department of Agriculture offer direct subsidies and indirect support to farm businesses. However, the bulk of direct subsidies are given to major producers of corn, soybeans, wheat, cotton and rice, leaving livestock and fruit and vegetable growers with less support.[112] Likewise, large firms in the U.S. textile industry have received institutional favors in various forms such as subsidies and barriers to trade in textile products and thus benefited from political entrepreneurship.[113] In China, on the other hand, the manifest posture is that of the collective enterprise, while the latent reality is privatized enterprise owned by political entrepreneurs.

There are, however, important differences between political entrepreneurship in F.S.U.&C.E.E. economies and matured market economies. Part of the fascinating character of political entrepreneurship in F.S.U.&C.E.E.

economies stems from the fact that there is a symbiosis between economic and political elites, where political entrepreneurs take advantage of positional power to maximize economic rewards.[114] In some cases, bureaucrats are also capitalists and possess capability to penetrate into the government apparatus.[115] This situation is similar to economies in the Middle East[116] and is different from more matured market economies, in which economic and political elites tend to be different groups.

Studies conducted in Russia and Eastern European economies have found that the most important barrier to transition to free-market economy centered on Communist Party bureaucrats' resistance. This phenomenon is similar to that in the Middle East, where bureaucrats discourage policies favoring institutional reforms and remain a strong anti-reform force.[117]

Another way of viewing political entrepreneurship is in terms of the entrepreneurs' engagement in central versus peripheral positions. Political entrepreneurs in F.S.U.&C.E.E. economies tend to possess economic and noneconomic resources and are central players. In more mature market economies, on the other hand, political entrepreneurs tend to be peripheral players.[118]

A final issue that deserves mention relates to nepotism's influence on political entrepreneurship. Such a tendency can be attributed to the culture (e.g., strong kinship ties and obligations to family and friends). While some degree of nepotism is involved everywhere, influences of favoritism, nepotism and personal connections are more readily apparent in some F.S.U.&C.E.E. economies. For instance, nepotism in Uzbekistan has reached new heights under President Shavkat Mirziyoev, with the ruling family's deep entrenchment in both politics and business. A 2023 display of family members in influential positions showcases a broader pattern of consolidating power within the Mirziyoev clan. By positioning relatives in pivotal roles and major enterprises, Mirziyoev has created a political and economic environment where privilege and opportunity are restricted to a narrow circle, reinforcing a cycle of favoritism and diminishing prospects for merit-based advancement.[119]

5.4.4 Institutional Entrepreneurship

To understand the differences in entrepreneurial activities in F.S.U.&C.E.E. economies and mature market economies, we introduce the concept of institutional entrepreneurship. Actors with key strategic resources or power, who can play an important role in the creation of new institutions related to entrepreneurship, are called institutional entrepreneurs. Institutional entrepreneurs are driven by interests that they value, aware of the possible effects on new institutions they seek to create and calculative.[120] They can change existing models of social or economic orders in the process of starting or expanding businesses.

For the F.S.U.&C.E.E. economies' context, the most relevant issue concerns institutional holes. In many cases, institutional entrepreneurs benefit from such holes, which involve structural gaps between diverse institutional actors that control complementary resources.[121] In general, such holes tend to be more prevalent in transitional economies such as F.S.U.&C.E.E. economies, than in more matured market economies because institutional rules in the former group are incomplete and ambiguous. In many emerging economies, institutional entrepreneurs' access to political resources facilitates their attempts to create new market institutions.[122]

In 2019, Warsaw announced plans to establish a lobbying center in Brussels to enhance Polish entrepreneurs' influence on E.U. legislation. The Polish Ministry of Enterprise and Technology states that despite over 70% of E.U. regulations impacting Polish firms, their role in shaping these laws is significantly less than that of companies from Germany or France. The goal of the initiative includes representing Polish entrepreneurs' viewpoints, organizing events, publishing reports and overseeing legislative processes.[123] Nearly 50 Polish firms have joined the A.I. Chamber, a newly created lobby group focused on advancing responsible A.I. development in Central and Eastern Europe. The Chamber is dedicated to aiding early-stage companies by fostering networking, promoting favorable policies and navigating A.I. regulations. Members include space scaleup Iceye and fintech innovator Finiata.[124]

5.5 Formal and Informal Institutions

5.5.1 Formal Institutions

One encouraging trend in F.S.U.&C.E.E. economies concerns the governments' shifting basis of legitimacy. In most F.S.U.&C.E.E. economies, governments are moving from coercive control over the state and the legitimacy of MarxLeninism to economic legitimacy based on growth. Unsurprisingly, these economies have undertaken public policies to promote entrepreneurship as indicated by favorable regulatory climates to start new businesses.

As noted earlier, an important challenge in promoting entrepreneurship in F.S.U.&C.E.E. economies concerns the deficiency of formal institutions to support the functioning of the market. In overly politicized states, entrepreneurial efforts are diverted away from wealth creation into nonmarket behaviors, which entail securing protection from market forces. In many F.S.U.&C.E.E. economies, because of ineffective legal enforcement of private property rights, entrepreneurs considered it important to acquire political and administrative protection or depend on informal networks for security.[125] The absence of institutions to protect property rights and a strong judicial system hinders the growth of private entrepreneurship. In the absence of mechanisms to protect intellectual property and discourage

monopolies and unfair trade practices, market entrepreneurship cannot thrive. The existence of appropriate regulative institutions determines whether potential entrepreneurs are likely to engage in new wealth creation through productive entrepreneurship or transfers of existing wealth through unproductive political entrepreneurship.

The government's inability to strengthen the rule of law also raises the interesting possibility that some market entrepreneurs may go underground and many others into political entrepreneurs and rent-seeking activities.[126] Most private actors may be tempted to exploit short-term profit-making opportunities under the existing institutional arrangement rather than engage in long-term efforts at building new institutions. This is the obvious challenge for promoting market entrepreneurship in most F.S.U.&C.E.E. economies.

Russia, on the other hand, is not an E.U. member which may explain less developed market institutions. It is suggested the Russian government arguably acted like a "grabbing hand" and discouraged entrepreneurial activities. The "merchant capitalism" thesis suggested that the dominant direction of change in the former Soviet Union would be "backward" or toward a more primitive merchant capitalism rather than a free-market-based more advanced capitalism.[127]

Bribery and corruption have not yet been adequately addressed, even in some entrepreneurial successful C.E.E. countries. For instance, the stability and predictability of the Polish V.C. ecosystem are often questioned by founders, as its heavy dependence on governmental funds is undermined by ongoing concerns about corruption and nepotism in public financial management.[128]

5.5.2 *Informal Institutions*

The battle to promote market entrepreneurship is about more than just creating market friendly political and economic institutions. In this regard, it is important to note that socialism was characterized by a negative social perception of entrepreneurs and market entrepreneurship. Attempts to promote entrepreneurship in some F.S.U.&C.E.E. economies face crucial cultural, social and cognitive challenges related to skills and psychology. Societal norms and networks that provide support for entrepreneurial risk-taking in matured markets are lacking in P.S. economies. For instance, Russian managers with experience in state-owned enterprises tend to avoid risk.[129] In addition, overcoming institutional inertia such as those related to a lack of accountability, initiative and trust in others has been a problem.[130]

Some have attributed the degree of religious-secular differentiation to explain the heterogeneity in the F.S.U.&C.E.E. economies' entrepreneurial performance. Note that thanks to the communist history, some F.S.U.&C.E.E. economies have large populations of nonpracticing

believers and nonbelievers. Among the believers In Eastern Europe, however, Orthodoxy is the dominant religion, especially in Greece, Russia and the former Soviet republics of Moldova, Armenia, Georgia, Ukraine and Belarus, as well as in other ex-Eastern Bloc countries like Serbia, Romania and Bulgaria.[131] Various forms of Orthodox Christianity practiced in these countries lacked the religious-secular differentiation.[132] On the other hand, Roman Catholicism is the dominant religion in Croatia, Czech Republic, Estonia, Hungary, Lithuania, Poland and Slovakia. Pew Research Center surveys conducted from 2015 to 2017 among nearly 56,000 adults across 34 Western, Central and Eastern European countries show that most Europeans support keeping religion separate from government. In contrast, seven countries in Central and Eastern Europe, including Armenia, Georgia and Russia, show a preference for government endorsement of religious values.[133] Conversely, Western Europe generally supports maintaining a clear separation between religion and state policies. It is argued that in the Orthodox countries, informal institutions did not change at the same rate as formal institutions. The Orthodox tradition viewed entrepreneurship negatively and socialism further reinforced the stereotypes.

Starting a business in C.E.E. countries involves significant risks. An observer noted that while finding a new job after a startup failure is often straightforward in Ireland, it can be more challenging in Poland. People frequently choose employment with large, recognizable companies to enhance their C.V.s. However, this perception is beginning to evolve in Poland, with increasing recognition of the worth of taking the risk to start something new.[134]

5.6 Conclusion

F.S.U.&C.E.E. countries are undergoing a fundamental shift from a centrally planned economy to an entrepreneurial economy. Innovative entrepreneurial activities are emerging in the region. Even in non-E.U. F.S.U. countries the elements of entrepreneurial ecosystems are developing rapidly. One example to illustrate this point is Ukraine's Diia City established in February 2022.

Due to institutional inertia, formal and informal institutions in many F.S.U.&C.E.E. economies are currently less supportive of free-market entrepreneurship than in matured market economies. In many cases, the existing institutions tend to contribute to ineffective entrepreneurial thinking, behavior and decision making. The issue here thus is not that F.S.U.&C.E.E. economies lack entrepreneurship talents but that a significant proportion of entrepreneurial ventures in these economies lack the characteristics of productive free-market entrepreneurship. The promotion of productive free-market entrepreneurship in F.S.U.&C.E.E. economies requires drastic changes in formal and informal institutions.

Transition from central plan to free market is a complicated process requiring economic, political and social transformations for F.S.U.&C.E.E. economies. We noted above that F.S.U.&C.E.E. economies vary in terms of the development of free-market entrepreneurship as well as institutions to support private enterprises such as protection of property rights. While some economies have made a quantum leap on that front, institutional changes seem to be more of an upward drift rather than a surge in others' cases. At the same time, there is no clear definition of the type of market economy desired by these economies.

The differences between the entrepreneurially successful and unsuccessful economies, for instance, can be attributed to the entrepreneurial traditions during the communism and precommunism era. For instance, compared with the Czech Republic, Poland and Hungary, the state was the principal entrepreneur in Russia and private entrepreneurship had a weak tradition even before the revolution. Moreover, during the communist era, while some form of private entrepreneurship was allowed in Hungary and Poland, Russia and Romania entirely depended on the central planning.[135] Especially Russia spent eight decades under communism, which was a longer time than other F.S.U.&C.E.E. economies. The critical elements of the infrastructures of modern capitalism were destroyed in the country. It lacks an impartial court and secure private property rights. Commercial organizations lack transparency and accountability. Consequently, there has been a higher degree of resistance to construct market institutions.

We also discussed the existence of parasitic entrepreneurs in some F.S.U.&C.E.E. economies. If there is any lesson that biological parasites' actions in environmental ecology teach, it is that the parasitic entrepreneurs adversely affect the host (the state) and may also mediate the influence the state has on other components of the entrepreneurial ecosystem.[136] The presence of these parasitic entrepreneurs may negatively affect the health of the economy, economic growth, formation of new firms and their growth, and may increase firm mortality rates.

What conditions can transform the rules of the game so that various forms of unproductive and inefficient forms of entrepreneurship can be converted into productive and efficient free-market entrepreneurship? In most cases, formal institutions are easier to change compared to informal institutions. Deinstitutionalization and reinstitutionalization of social practices, cultural values and beliefs occur very slowly.[137] A related point is that formal institutions affect and are affected by informal institutions. For instance, entrepreneurship-friendly laws and regulations may erode the hostility to entrepreneurship and profit making at the societal level. Likewise, with the development of skills and expertise needed for free-market entrepreneurship, psychology of risk-taking and social networks to provide support for entrepreneurship, the governments are likely to face pressures to enact new laws and regulations.

One final, but not less important, aspect of informal institutions in F.S.U.&C.E.E. economies that renders it interesting to us is the fact entrepreneurs can take measures to change them in favor of private entrepreneurship. Indeed, as the cases of Chile and Ireland discussed in Chapter 4 suggest, negative social perception of profit-making behavior is not a phenomenon observed only in F.S.U.&C.E.E. economies. In this regard, F.S.U.&C.E.E. economies can also borrow a page from Timbro's lesson book (Chapter 2) to change the negative social perception of entrepreneurs and entrepreneurship.

5.7 Discussion Questions

1. In terms of legality and ideology, what are the different types of entrepreneurial activities in F.S.U.&C.E.E. economies?
2. How are formal and informal institutions affecting entrepreneurial activities in F.S.U.&C.E.E. economies?
3. What are some examples of productive, unproductive and destructive forms of entrepreneurship in F.S.U.&C.E.E. economies?
4. Give some examples of positive externalities generated by criminal and illegal enterprises?
5. Why do F.S.U.&C.E.E. economies differ in terms of their transition to market economies?
6. Select a F.S.U.&C.E.E. economy. What are the natures of formal and informal institutions for entrepreneurial activities in the economy you selected? How have they changed in recent years?
7. How can productive entrepreneurship be promoted in F.S.U.&C.E.E. economies?

5.8 End of the Chapter Case: Resilience amid Conflict: Ukraine's I.T. Sector Thrives despite War

The I.T. sector has been a bright spot in the Ukrainian entrepreneurial landscape. While Ukraine's G.D.P. dropped nearly 30% in 2022, tech sector revenue increased by nearly 1% to US$7.97 billion.[138] Indeed, since February 2022, the I.T. sector has been the sole segment of the wartime Ukrainian economy to experience growth, generating new jobs, launching projects and attracting investment.[139]

The establishment of Diia City in February 2022, just before Russia's invasion, marked a significant development in Ukraine's I.T. entrepreneurial landscape by introducing a special legal and tax regime designed to foster I.T. business growth. Diia City is considered the world's first virtual city. The Ukrainian parliament voted in April 2021 to create it, with the goal of driving Ukraine's digital transformation through a special legal framework

for the I.T. industry and fostering long-term growth in the digital economy. This initiative provides tax incentives, legal supports and a range of other incentives aimed at positioning Ukraine as a high-tech digital hub.[140] It has since evolved into the world's first wartime special environment for tech businesses, offering unique lessons in innovation and entrepreneurship.[141]

Since December 2022, the Ministry of Digital Transformation has taken charge of the Ukrainian Startup Fund, now the country's largest angel investor. The fund has supported over 350 startups and is shifting its focus toward defense tech projects.[142]

Ukraine's tech potential first gained international recognition in the early 2010s with the rise of Ukrainian-founded companies like Grammarly, GitLab, airSlate and Preply. These success stories led to speculation that Ukraine might become the next global "unicorn factory".[143] One ongoing trend in the I.T. industry is the dominant role of I.T. outsourcing, with pure product development currently constituting only 16% of Ukraine's I.T. sector.[144]

5.8.1 A Vibrant Tech Ecosystem

Ukraine boasts a vibrant and sophisticated tech sector with approximately 300,000 I.T. professionals.[145] In 2020, Ukraine had 200,000 developers, and Daxx reports that 20% of Fortune 500 companies have Ukrainian remote development teams.[146] Ukraine is also drawing I.T. specialists from Eastern Europe who are dissatisfied with the limitations in their own countries. It was reported in 2021 that about 13,000 I.T. professionals from Belarus had relocated to Ukraine.[147]

Situated just 30 kilometers south of the Russian border, Kharkiv, Ukraine's second-largest city, is well known for its I.T. entrepreneurship and is home to numerous local tech companies. Kharkiv is also referred to as the Silicon Valley of Ukraine.[148] Before February 2022, when the Russo-Ukrainian war started, Kharkiv had over 50,000 software engineers and 14 universities offering nearly 100 related programs.[149] Kharkiv's tech sector exemplifies resilience amid conflict. Despite ongoing attacks, 500 of 511 prewar tech companies remain operational, with engineers now spread across Ukraine. Many tech firms have adjusted their business strategies to aid the Ukrainian military, focusing on mapping, cybersecurity and drone technology, which have significantly impacted the war effort.

Before February 2022, software engineers in Kharkiv were well compensated by Ukrainian standards, earning an average monthly salary of €2,600.[150] As of 2024, the average gross monthly salary in Ukraine is approximately €445.[151] In the United States, the average base salary for a Software Engineer is US$105,331 per year, which translates to approximately US$8,777 per month (https://www.indeed.com/career/software-engineer/salaries).

5.8.2 Digital Culture Embedded in Ukrainian Society

This robust I.T. industry is supported by a digital culture deeply embedded in Ukrainian society.[152] The government has created Chief Digital Transformation Officers for each ministry, positioned at the deputy minister level. Their role is to foster digital culture, improve communication among government bodies, update technology and ensure electronic service delivery to citizens.[153] The growth of Ukraine's tech sector is accelerating the digitization of its society, leading to a significant rise in cashless payments and other fintech innovations in recent years.[154]

5.8.3 Competitive Advantage in Defense Technologies

Ukraine's focus on defense technologies, crucial for overcoming Russia, is set to drive the future of its tech ecosystem. As a testing ground for advanced defense innovations, Ukraine is positioning itself to become a global leader in the defense tech sector, with significant potential for shaping its digital economy.[155] Ukrainian tech companies possess unique real-time battlefield data with the potential to sell this information to other countries, positioning Ukraine as a future hub for military technology. The sector envisions itself becoming a prominent player in the global defense tech market, drawing inspiration from Tel Aviv's industry success.[156]

Notes

1 Åslund, A. (2017). The three regions of the old Soviet bloc. *Journal of Democracy*, *28*(1), 89–101. Johns Hopkins University Press. https://doi.org/10.1353/jod.2017.0008
2 U.S. Department of State. (2024). *2024 investment climate statements: Georgia*. https://www.state.gov/reports/2024-investment-climate-statements/georgia/
3 Asian Development Bank. (2023, March 9). *Georgia's tech startup ecosystem needs to develop*. https://www.adb.org/news/georgia-tech-startup-ecosystem-needs-develop
4 Carnegie Endowment for International Peace. (2002, February 27). *Oligarchic capitalism in Russia: The past, present and future*. https://carnegieendowment.org/events/2002/02/oligarchic-capitalism-in-russia-the-past-present-and-future?lang=en
5 Rosalsky, G. (2022, March 22). *How 'shock therapy' created Russian oligarchs and paved the path for Putin*. NPR. https://www.npr.org/sections/money/2022/03/22/1087654279/how-shock-therapy-created-russian-oligarchs-and-paved-the-path-for-putin
6 Baltic Times. (2023, October 12). *Estonia hailed as the European epicenter of entrepreneurship*. https://www.baltictimes.com/estonia_hailed_as_the_european_epicenter_of_entrepreneurship/
7 Grzegorczyk, M. (2024, June 10). *The future of manufacturing in CEE: Transitioning to a high-tech, added value era*. Emerging Europe. https://emerging-europe.com/news/the-future-of-manufacturing-in-cee-transitioning-to-a-high-tech-added-value-era/

8 Rosenbaum, E. (2022, March 5). *Eastern Europe created its own Silicon Valley. Russia's invasion of Ukraine risks it all.* CNBC. https://www.cnbc.com/2022/03/05/eastern-europe-created-its-own-silicon-valley-russias-invasion-of-ukraine-risks-it-all.html
9 Prokopenko, A. (2024, April 10). *Is the Kremlin overconfident about Russia's economic stability?* Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2024/03/is-the-kremlin-overconfident-about-russias-economic-stability?lang=en
10 Wanat, Z. (2024, January 26). *Why the Poles are building AI giants abroad, not at home.* Sifted. https://sifted.eu/articles/why-the-poles-are-building-ai-giants-abroad-not-at-home
11 Rzhevkina, A. (2023, October 18). Audit uncovers 'corruption mechanisms' at Polish research funding agency. *Science Business*. https://sciencebusiness.net/news/international-news/audit-uncovers-corruption-mechanisms-polish-research-funding-agency
12 Fabrichnaya, E., & Marrow, A. (2023, August 25). Moscow demands bigger discounts from foreign companies exiting Russia. *Reuters*. https://www.reuters.com/markets/europe/moscow-demands-bigger-discounts-foreign-companies-exiting-russia-sources-2023-08-25/
13 BBC. (2024, February 23). *What are the sanctions on Russia and have they affected its economy?* https://www.bbc.com/news/world-europe-60125659
14 Hussein, F., Boak, J., & Burrows, E. (2024, February 23). *So many sanctions on Russia. How much impact do they really have?* Associated Press. https://apnews.com/article/russia-ukraine-war-sanctions-us-treasury-state-827008882162cc95a9dba4e4f93411d3
15 Borak, M. (2023, April 4). *How Russia killed its tech industry*. MIT Technology Review. https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/
16 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
17 Corcoran, J., & Galouchko, K. (2012). "Russian Silicon Valley plans first IPO as venture capital booms. www.bloomberg.com/news/2012-07-20/russian-silicon-valley-plans-first-ipo-as-venture-capital-booms.html
18 Neate, R. (2012, February 18). Russia reaches for the stars with its own Silicon Valley. *The Observer*. www.guardian.co.uk/business/2012/feb/19/russia-investment-drive-skolkovo-silicon-valley
19 Fedynsky, P. (2010). High risk for venture capital in Russia. www.voanews.com/english/news/economy-and-business/High-Risk-for-Venture-Capital-in-Russia-94929299.html
20 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
21 Britannica. (n.d.). *Why is Vladimir Putin still in power?* Retrieved July 24, 2024, from https://www.britannica.com/question/Why-is-Vladimir-Putin-still-in-power
22 France-Presse, A. (2013). Russian invsestigators search Skolkovo hi-tech hub. www.globalpost.com/dispatch/news/afp/130418/russian-invsestigators-search-skolkovo-hi-tech-hub
23 Barry, E. (2013). Video shows an angry Putin threatening to dismiss officials. www.nytimes.com/2013/04/18/world/europe/video-shows-putin-threatening-to-dismiss-officials.html

24 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
25 RIA Novosti. (2013). Investigators Search Russian "Silicon Valley", April 18, http://en.ria.ru/crime/20130418/180707737.html .
26 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
27 Borak, M. (2023, April 4). *How Russia killed its tech industry*. MIT Technology Review. https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/
28 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
29 The Moscow Times. (2022, March 18). *Russian official who spoke out against 'war' leaves post*. https://www.themoscowtimes.com/2022/03/18/russian-official-who-spoke-out-against-war-leaves-post-a76993
30 Borak, M. (2023, April 4). *How Russia killed its tech industry*. MIT Technology Review. https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/
31 Zuber, M. T. (2022, August 5). *New U.S. sanctions prohibit collaborations with certain Russian entities*. MIT Office of the Vice President for Research. https://orgchart.mit.edu/letters/new-us-sanctions-prohibit-collaborations-certain-russian-entities
32 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
33 Klebanov, S. (2022, April 27). *Skolkovo: The story of Russia's failed attempt to build its own Silicon Valley*. Business of Business. https://www.businessofbusiness.com/articles/skolkovo-russias-failed-silicon-valley-tech-putin
34 Teare, G. (2024, June 6). The portion of US VC funding that went to female founders hit a new peak in 2023, thanks to massive AI deals. *Crunchbase News*. https://news.crunchbase.com/diversity/us-vc-funding-female-founders-peaked-2023-ai-openai-anthropic/#:~:text=For%20example%2C%20OpenAI%20raised%20the,four%20funding%20rounds%20that%20year
35 Appell, J. (2015, May 6). *The short life and speedy death of Russia's Silicon Valley*. Foreign Policy. https://foreignpolicy.com/2015/05/06/the-short-life-and-speedy-death-of-russias-silicon-valley-medvedev-go-russia-skolkovo/
36 Bateman, A. (2019, June 12). Russia's quest to lead the world in AI is doomed. *Defense One*. https://www.defenseone.com/ideas/2019/06/russias-quest-lead-world-ai-doomed/157663/
37 Yale School of Management. (2024, January 28). *Over 1,000 companies have curtailed operations in Russia—But some remain*. https://som.yale.edu/story/2022/over-1000-companies-have-curtailed-operations-russia-some-remain
38 Fabrichnaya, E., & Marrow, A. (2023, August 25). Moscow demands bigger discounts from foreign companies exiting Russia. *Reuters*. https://www.reuters.com/markets/europe/moscow-demands-bigger-discounts-foreign-companies-exiting-russia-sources-2023-08-25/
39 Times of Central Asia. (2024, May 7). *Central Asian entrepreneurs in Russia shutting down hospitality businesses due to xenophobia, police inspections*. https://timesca.com/central-asian-entrepreneurs-in-russia-shutting-down-hospitality-businesses-due-to-xenophobia-police-inspections/

40 Fabrichnaya, E., & Marrow, A. (2023, August 25). Moscow demands bigger discounts from foreign companies exiting Russia. *Reuters*. https://www.reuters.com/markets/europe/moscow-demands-bigger-discounts-foreign-companies-exiting-russia-sources-2023-08-25/
41 BOFIT. (2023, November 16). *Hundreds of foreign firms continue to do business in Russia despite huge risks*. bne IntelliNews. https://bneintellinews.com/hundreds-of-foreign-firms-continue-to-do-business-in-russia-despite-huge-risks-266870
42 The Moscow Times. (2024, January 11). *10K foreign-affiliated companies have exited Russia since Ukraine invasion – Report*. https://www.themoscowtimes.com/2024/01/11/10k-foreign-affiliated-companies-have-exited-russia-since-ukraine-invasion-report-a83694
43 Times of Central Asia. (2024, May 7). *Central Asian entrepreneurs in Russia shutting down hospitality businesses due to xenophobia, police inspections*. https://timesca.com/central-asian-entrepreneurs-in-russia-shutting-down-hospitality-businesses-due-to-xenophobia-police-inspections/
44 Fabrichnaya, E., & Marrow, A. (2023, August 25). Moscow demands bigger discounts from foreign companies exiting Russia. *Reuters*. https://www.reuters.com/markets/europe/moscow-demands-bigger-discounts-foreign-companies-exiting-russia-sources-2023-08-25/
45 BOFIT. (2023, November 16). *Hundreds of foreign firms continue to do business in Russia despite huge risks*. bne IntelliNews. https://bneintellinews.com/hundreds-of-foreign-firms-continue-to-do-business-in-russia-despite-huge-risks-266870
46 Seddon, M., & Murgia, M. (2024, July 16). Yandex founder to build AI business in Europe after Russia exit. *Financial Times*. https://www.ft.com/content/4cee9d1b-6a9a-4ca8-8cfd-e387e373075e
47 Lomsadze, G. (2022, December 2). Georgia's "Russian" villages: Nearly 10,000 Russian businesses have been registered in Georgia since the beginning of the war in Ukraine. Many of them are in places you wouldn't expect. *Eurasianet*. https://eurasianet.org/georgias-russian-villages
48 Timmins, B., & King, B. (2023, February 20). Russia's economy shrinks by less than expected. *BBC News*. https://www.bbc.com/news/business-64708832
49 Littman, J. (2023, April 18). *Yum completes exit of Russia with sale of KFC units*. Restaurant Dive. https://www.restaurantdive.com/news/Yum-brands-completes-Russian-exit-with-sale-of-KFC-units/647907/
50 Goble, P. (2022, August 4). *Russian replacement for McDonald's restaurants collapsing because of bad food and worse service – OpEd*. Eurasia Review. https://www.eurasiareview.com/04082022-russian-replacement-for-mcdonalds-restaurants-collapsing-because-of-bad-food-and-worse-service-oped/
51 Statista Research Department. (2023, October 6). *Value of venture capital investment in Russia 2017–2022*. Statista. https://www.statista.com/statistics/1062075/venture-capital-amount-invested-in-russia/
52 Borak, M. (2023, April 4). *How Russia killed its tech industry*. MIT Technology Review. https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/
53 Fabrichnaya, E. (2024, July 3). *Russian regulator encourages use of crypto to counter sanctions*. Reuters. https://www.reuters.com/business/finance/russian-regulator-encourages-use-crypto-counter-sanctions-2024-07-03/
54 Timmins, B., & King, B. (2023, February 20). Russia's economy shrinks by less than expected. BBC News. https://www.bbc.com/news/business-64708832

55 Krajewski, R. (2021, February 26). *Four reasons to outsource IT to CEE (and none of them is cheap labor)*. Forbes. https://www.forbes.com/sites/forbestech-council/2021/02/26/four-reasons-to-outsource-it-to-cee-and-none-of-them-is-cheap-labor/#:~:text=Success%20stories%20abound%20here.,of%20them%20enjoy%20unicorn%20status
56 Olszowska, L. (2023, September 12). *E-stonia: How the Baltic minnow became a tech powerhouse*. The Stack. https://www.thestack.technology/estonia-technology-hub-digital/
57 Olszowska, L. (2023, September 12). *E-stonia: How the Baltic minnow became a tech powerhouse*. The Stack. https://www.thestack.technology/estonia-technology-hub-digital/
58 Wanat, Z. (2024, April 2). *The Baltics' fastest-growing startup teams: Startups and scaleups across Estonia, Lithuania and Latvia have grown in employee headcount despite the economic odds — here's how*. Sifted. https://sifted.eu/articles/baltics-startup-fastest-growth
59 Sas, A. (2024, June 19). *Top countries for startups in the CEE region 2023, by total score*. Statista. https://www.statista.com/statistics/1318672/cee-top-countries-for-startups-by-total-score/
60 Tracxn. (2024, July 29). *List of unicorn startups in Estonia*. https://tracxn.com/d/unicorns/unicorns-in-estonia/__sj7qZ69n7dtIoVkgC6f1OJDoGt-vfTppg0-zhvv4980
61 Metingil, N. (2024, April 16). *Finland, Estonia, and Lithuania shine as top startup havens in BNG's latest rankings*. ArcticStartup. https://arcticstartup.com/top-countries-to-launch-a-startup/
62 Olszowska, L. (2023, September 12). *E-stonia: How the Baltic minnow became a tech powerhouse*. The Stack. https://www.thestack.technology/estonia-technology-hub-digital/
63 Olszowska, L. (2023, September 12). *E-stonia: How the Baltic minnow became a tech powerhouse*. The Stack. https://www.thestack.technology/estonia-technology-hub-digital/
64 Clawson, T. (2023, December 26). Beyond Brexit: Why Estonia's eResidency scheme attracts E.U. startups. Forbes. https://www.forbes.com/sites/trevorclawson/2023/12/26/beyond-brexit-why-estonias-e-residency-scheme-attracts-eu-startups/
65 ERR News. (2024, May 21). *E-residents drive 38 percent of Estonia's startup scene*. https://news.err.ee/1609347882/e-residents-drive-38-percent-of-estonia-s-startup-scene
66 BNS. (2023, November 30). *Estonian startups secure nearly €150 million in funding over three quarters*. Estonian World. https://estonianworld.com/business/estonian-startups-secure-nearly-e150-million-in-funding-over-three-quarters/
67 Basilio Ruiz de Apodaca, O., Murray, F., & Frolund, L. (2023). *What is "Deep Tech" and what are Deep Tech Ventures?* MIT-Rafael del Pino Fellow, MIT School of Management. https://reap.mit.edu/assets/What_is_Deep_Tech_MIT_2023.pdf
68 Glover, E. (2024, January 26). *Deep tech, explained: From AI to quantum computing and bioengineering, deep tech is being used to solve tomorrow's problems today*. Built In. https://builtin.com/artificial-intelligence/deep-tech
69 ERR. (2024, March 20). Analyst: Startups will not make up 30% of Estonia's GDP by 2030. https://news.err.ee/1609288179/analyst-startups-will-not-make-up-30-of-estonia-s-gdp-by-2030
70 Negoita, M. 2006. "The social bases of development: Hungary and Romania in comparative perspective. *Socio-Economic Review*, 4(2), pp. 209–238.

71 Stoica, C. A. (2004). From good communists to even better capitalists? Entrepreneurial pathways in post-socialist Romania. *East European Politics and Societies*, *18*(2), 236–277.
72 OECD. (2002). *OECD economic surveys: Romania*. Organization for Economic Co-operation and Development.
73 Ghinita, E. (2024, January 17). Romania's startup landscape in a nutshell: 6 key figures. *The Recursive*. https://therecursive.com/romania-s-startup-landscape-in-a-nutshell-6-key-figures/
74 Krajewski, R. (2021, February 26). *Four reasons to outsource IT to CEE (and none of them is cheap labor)*. Forbes. https://www.forbes.com/sites/forbestech-council/2021/02/26/four-reasons-to-outsource-it-to-cee-and-none-of-them-is-cheap-labor/#:~:text=Success%20stories%20abound%20here.,of%20them%20enjoy%20unicorn%20status
75 Asian Development Bank. (2023, March 9). *Georgia's tech startup ecosystem needs to develop*. https://www.adb.org/news/georgia-tech-startup-ecosystem-needs-develop
76 Borak, M. (2023, April 4). *How Russia killed its tech industry*. MIT Technology Review. https://www.technologyreview.com/2023/04/04/1070352/ukraine-war-russia-tech-industry-yandex-skolkovo/
77 Zufarov, D., Hampel-Milagrosa, A., Potluri, V. A., & Vandenberg, P. (2023). *Uzbekistan's ecosystem for technology startups*. Asian Development Bank. https://www.adb.org/sites/default/files/publication/905251/uzbekistan-ecosystem-technology-startups.pdf
78 Sharma, R. (2021, September 13). The rise of eastern Europe is a forgotten economic success story. *Financial Times*. https://www.ft.com/content/b7e2c18b-e1c9-452d-b9d6-13db4d28fb89
79 OECD Economic Surveys. (2009). Russian federation, stabilisation and renewed growth: Key challenges, 2009(6), 19–51.
80 Interfax Information Group. (2024, May 2). Rosstat lowers estimate of poverty level in Russia in 2023 to 8.5% from 9.3%. *Interfax*. https://interfax.com/newsroom/top-stories/101901/#:~:text=MOSCOW.,service%20said%20in%20a%20statement
81 *The Bell*. (2024, March 1). Less capitalism, more state. https://en.thebell.io/less-capitalism-more-state/
82 World Bank. (2024). *Uzbekistan: Poverty and equity brief*. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099062824104017042/p1746031dfc05b0d31b699103096082711c
83 Prokopenko, A. (2024, April 10). *Is the Kremlin overconfident about Russia's economic stability?* Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2024/03/is-the-kremlin-overconfident-about-russias-economic-stability?lang=en
84 Timmins, B., & King, B. (2023, February 20). Russia's economy shrinks by less than expected. *BBC News*. https://www.bbc.com/news/business-64708832
85 Smidova, Z. (2024, May 7). *Estonia: Getting back on track to strong, more inclusive and more sustainable growth*. OECD. https://oecdecoscope.blog/2024/05/07/estonia-getting-back-on-track-to-strong-more-inclusive-and-more-sustainable-growth/#:~:text=The%20Estonian%20economy%20has%20been,at%20the%20end%20of%202021
86 Stoica, C. A. (2004). From good communists to even better capitalists? Entrepreneurial pathways in post-socialist Romania. *East European Politics and Societies*, *18*(2), 236–277.

87 Kesby, R. (2012). Why Russia locks up so many entrepreneurs. www.bbc.com/news/magazine-18706597
88 Yang, K. (2002). Double entrepreneurship in China's economic reform: An analytical framework. *Journal of Political and Military Sociology*, *30*(1), 134–148; Yang, K. (2004). Institutional holes and entrepreneurship in China. *Sociological Review*, *52*(3), 371–389.
89 Stark, D. (1996). Recombinant property in East European capitalism. *American Journal of Sociology*, *101*, 993–1027.
90 Wike, R., Poushter, J., Silver, L., Devlin, K., Fetterolf, J., Castillo, A., & Huang, C. (2019, October 14). *European public opinion three decades after the fall of communism: Political and economic changes since the fall of communism*. Pew Research Center. https://www.pewresearch.org/global/2019/10/14/political-and-economic-changes-since-the-fall-of-communism/
91 Warner, M., & Daugherty, C. W. (2004). Promoting the 'Civic' in entrepreneurship: The case of rural Slovakia. *Journal of the Community Development Society*, *35*(1), 117–134.
92 Carnegie Endowment for International Peace. (2002, February 27). *Oligarchic capitalism in Russia: The past, present and future*. https://carnegieendowment.org/events/2002/02/oligarchic-capitalism-in-russia-the-past-present-and-future?lang=en
93 McCarthy, D. J., & Puffer, S. M. (2008). Interpreting the ethicality of corporate governance decisions in Russia: Utilizing integrative social contracts theory to evaluate the relevance of agency theory norms. *Academy of Management Review*, *33*(1), 11–31.
94 Newsweek. (2019, February 22). Black market and illegal dealing now accounts for 20 percent of Russia's GDP: Report. https://www.newsweek.com/russia-black-market-shadow-economy-gdp-recession-poverty-1340510
95 European Monitoring Centre for Drugs and Drug Addiction. (2022, November 21). *EMCDDA releases new findings on drug markets in the eastern and southern European Neighbourhood Policy regions: New regional drug market analyses* (News release No. 9/2022). https://www.euda.europa.eu/news/2022/9/emcdda-releases-new-findings-drug-markets-eastern-and-southern-european-neighbourhood-policy-regions_en
96 Galeotti, M. (2017, April 18). *Crimintern: How the Kremlin uses Russia's criminal networks in Europe*. European Council on Foreign Relations. https://ecfr.eu/publication/crimintern_how_the_kremlin_uses_russias_criminal_networks_in_europe/
97 European Monitoring Centre for Drugs and Drug Addiction. (2022, November 21). *EMCDDA releases new findings on drug markets in the eastern and southern European Neighbourhood Policy regions: New regional drug market analyses* (News release No. 9/2022). https://www.euda.europa.eu/news/2022/9/emcdda-releases-new-findings-drug-markets-eastern-and-southern-european-neighbourhood-policy-regions_en
98 Felbab-Brown, V., & Paz García, D. (2024, February 6). *Russia, Ukraine, and organized crime and illicit economies in 2024*. Brookings. https://www.brookings.edu/articles/russia-ukraine-and-organized-crime-and-illicit-economies-in-2024/
99 United Nations. (2023, March). *Global report on cocaine 2023: Local dynamics, global challenges*. United Nations Office on Drugs and Crime. https://www.unodc.org/documents/data-and-analysis/cocaine/Global_cocaine_report_2023.pdf

100 Kuznetsov, A., McDonald, F., & Kuznetsova, O. (2000). Entrepreneurial qualities: A case from Russia. *Journal of Small Bus Management*, *38*(1), 101–108.
101 Millard, M. (2024, July 27). Russian-speaking hackers dominate ransomware attacks, TRM research says. *DL News*. https://www.dlnews.com/articles/people-culture/russian-speaking-actors-dominate-ransomware-crime-trm-says/
102 Palo Alto Networks. (n.d.). *What is ransomware as a service (RaaS)?* Palo Alto Networks. https://www.paloaltonetworks.com/cyberpedia/what-is-ransomware-as-a-service#:~:text=Ransomware%20as%20a%20service%20(RaaS)%20is%20a%20malicious%20adaptation%20of,affiliates%2C%20to%20execute%20ransomware%20attacks
103 https://www.scmagazine.com/analysis/ransomware/ransomware-that-avoids-russian-speakers-get-90-of-ransoms
104 Stark, D. (1996). Recombinant property in East European capitalism. *American Journal of Sociology*, *101*, 993–1027.
105 Hankiss, E. (1990). *East European alternatives*. Clarendon.
106 Eyal, G., Szelényi, I., & Townsley, E. (1998). *Making capitalism without capitalists: The new ruling elites in Eastern Europe*. Verso.
107 Guriev, S., & Rachinsky, A. (2006). The evolution of personal wealth in the former Soviet Union and Central and Eastern Europe. http://siteresources.worldbank.org/INTDECINEQ/Resources/Evolution_of_personal_wealth.pdf
108 Goodley, S., Makortoff, K., & Jolly, J. (2022, March 21). $17bn of global assets linked to 35 Russians with alleged ties to Putin. *The Guardian*. https://www.theguardian.com/world/2022/mar/21/global-assets-russians-alleged-ties-putin-wealth-oligarchs-navalny
109 Feige, E. (1997). Underground activity and institutional change: Productive, protective, and predatory behavior in transition economies. In J. Nelson, C. Tilly, & L. Walker (Eds.), *Transforming post-communist political economies*. National Academy Press.
110 Lazarev, V. (2005). Economics of one-party state: Promotion incentives and support for the Soviet regime. *Comparative Economic Studies*, *47*(2), 346.
111 Lincicome, S. (2023, September 21). *The Farm Bill is a case study in what's wrong with Washington: Just because legislation is bipartisan doesn't make it good*. Cato Institute. https://www.cato.org/commentary/farm-bill-case-study-whats-wrong-washington
112 Edwards, C. (2023, August 31). *Cutting federal farm subsidies: Farm subsidies are costly to taxpayers and can distort planting decisions, induce overproduction, and inflate land values* (Briefing Paper No. 162). Cato Institute. https://www.cato.org/briefing-paper/cutting-federal-farm-subsidies
113 Rivoli, P. (2005). *The travels of a T-shirt in the global economy: An economist examines the markets, power, and politics of world trade*. John Wiley and Sons.
114 Stoica, C. A. (2004). From good communists to even better capitalists? Entrepreneurial pathways in post-socialist Romania.
115 Chen, A. (2002). Capitalist development, entrepreneurial class, and democratization in China. *Political Science Quarterly*, *117*(3), 401–422.
116 Kshetri, N., & Ajami, R. (2008). Institutional reforms in the Gulf Cooperation Council economies: A conceptual framework. *Journal of International Management*, *14*(3), 300–318.
117 Atkine, N. B. D. (2006). Islam, Islamism and terrorism. *Army*, *56*(1), 55–62.
118 Greenwood, R., & Suddaby, R. (2006). Institutional entrepreneurship in mature fields: The big five accounting firms. *Academy of Management Journal*, *49*, 27–48.

119 RFE/RL's Uzbek Service, & Rickleton, C. (2023, July 13). *It's great to be us! Nepotism runs deep within Uzbekistan's powerful and wealthy ruling family*. Radio Free Europe/Radio Liberty. https://www.rferl.org/a/uzbekistan-nepotism-mirziyoev--ruling-family-investigation/32502477.html
120 RFE/RL's Uzbek Service, & Rickleton, C. (2023, July 13). *It's great to be us! Nepotism runs deep within Uzbekistan's powerful and wealthy ruling family*. Radio Free Europe/Radio Liberty. https://www.rferl.org/a/uzbekistan-nepotism-mirziyoev--ruling-family-investigation/32502477.html
121 Yang, K. (2004). Institutional holes and entrepreneurship in China. *Sociological Review*, *52*(3), 371–389.
122 Groenewegen, J., & van der Steen, M. 2007. "The evolutionary policy maker. *Journal of Economic Issues*, *41*(2), 351–358.
123 Bodalska, B. (2019, January 8). *Poland to increase number of lobbyists in Brussels*. EURACTIV Poland. https://www.euractiv.com/section/central-europe/news/poland-to-increase-number-of-lobbyists-in-brussels/
124 Wanat, Z. (2024, April 24). *CEE gets a new AI Chamber to represent the interest of AI startups: The group has almost 50 members from Poland, but hopes to expand to other CEE countries too*. Sifted. https://sifted.eu/articles/ai-startup-chamber-cee-news
125 Yang, K. (2002). Double entrepreneurship in China's economic reform: An analytical framework. *Journal of Political and Military Sociology*, *30*(1), 134–148.
126 Alexeev, M. (1999). The effect of privatization on wealth distribution in Russia. *Economics of Transition*, 7(2), 449–465.
127 Burawoy, M., & Krotov, P. (1992). The Soviet transition from socialism to capitalism: Worker Control and Economic Bargaining in the Wood Industry. *American Sociological Review*, *57*, 16–38.
128 Wanat, Z. (2024, January 26). *Why the Poles are building AI giants abroad, not at home*. Sifted. https://sifted.eu/articles/why-the-poles-are-building-ai-giants-abroad-not-at-home
129 Taylor, T. C., & Kazakov, A. Y. (1997). Business ethics and civil society in Russia. *International Study of Management of Organization*, *27*, 5–18.
130 Taylor, T. C., & Kazakov, A. Y. (1997). Business ethics and civil society in Russia. *International Study of Management of Organization*, *27*, 5–18.
131 Pew Research Center. (2018, October 29). *Eastern and Western Europeans differ on importance of religion, views of minorities, and key social issues*. https://www.pewresearch.org/religion/2018/10/29/eastern-and-western-europeans-differ-on-importance-of-religion-views-of-minorities-and-key-social-issues/
132 Pipes, R. (1992). *Russia under the Old Regime*. Collier Books.
133 Pew Research Center. (2018, October 29). *Eastern and Western Europeans differ on importance of religion, views of minorities, and key social issues*. https://www.pewresearch.org/religion/2018/10/29/eastern-and-western-europeans-differ-on-importance-of-religion-views-of-minorities-and-key-social-issues/
134 Wanat, Z. (2024, January 26). *Why the Poles are building AI giants abroad, not at home*. Sifted. https://sifted.eu/articles/why-the-poles-are-building-ai-giants-abroad-not-at-home
135 Stoica, C. A. (2004). From good communists to even better capitalists? Entrepreneurial pathways in post-socialist Romania.
136 Wood, C. L., Byers, J. E., Cottingham, K. L., Altman, I., Donahue, M. J., & Blakeslee, A. M. H. (2007). Parasites alter community structure. *Proceedings of the National Academy of Sciences*. www.pnas.org/content/104/22/9335.short
137 Zweynert, J., & Goldschmidt, N. (2006). The two transitions in central and eastern Europe as processes of institutional transplantation.

138 Reuters. (2024, March 22). Ukrainian women's presence in tech sector has become 'more pronounced' since Russia's invasion, reports reveal. *Fox News*. https://www.foxnews.com/world/ukrainian-womens-presence-tech-sector-become-more-pronounced-russias-invasion-reports-reveal
139 Fedorov, M. (2023, August 17). *Ukraine's vibrant tech ecosystem is a secret weapon in the war with Russia*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-vibrant-tech-ecosystem-is-a-secret-weapon-in-the-war-with-russia/
140 President of Ukraine. (2022, February 8). The launch of "Diia City" will allow Ukraine to become the largest IT hub in Europe. https://www.president.gov.ua/en/news/zapusk-diya-city-dast-ukrayini-zmogu-stati-najbilshim-it-hab-72753
141 Bornyakov, O. (2023, January 29). How Ukraine's tech incubator is defying the wartime odds. *Fast Company*. https://www.fastcompany.com/90837704/how-ukraine-tech-incubator-defying-wartime-odds
142 Fedorov, M. (2023, August 17). *Ukraine's vibrant tech ecosystem is a secret weapon in the war with Russia*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-vibrant-tech-ecosystem-is-a-secret-weapon-in-the-war-with-russia/
143 Duplichen, D. (2022, October 21). *Ukraine's growing tech sector offers hope amid wartime economic pain*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-growing-tech-sector-offers-hope-amid-wartime-economic-pain/
144 Duplichen, D. (2022, October 21). *Ukraine's growing tech sector offers hope amid wartime economic pain*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-growing-tech-sector-offers-hope-amid-wartime-economic-pain/
145 Fedorov, M. (2023, August 17). *Ukraine's vibrant tech ecosystem is a secret weapon in the war with Russia*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-vibrant-tech-ecosystem-is-a-secret-weapon-in-the-war-with-russia/
146 Turak, N. (2022, March 4). *'Ukrainians are built different': The software developers still working under Russian bombing*. CNBC. https://www.cnbc.com/2022/03/04/ukrainians-are-built-different-the-coders-still-working-under-russian-bombing.html
147 Yevtushenko, C. (2021, August 19). Making the most of Ukraine's tech talent. *Atlantic Council*. https://www.atlanticcouncil.org/blogs/ukrainealert/making-the-most-of-ukraines-tech-talent/
148 Adler, N. (2022, January 20). *Fears of Russian invasion trouble Ukraine's 'Silicon Valley'*. Al Jazeera. https://www.aljazeera.com/news/2022/1/20/fears-of-russian-invasion-trouble-ukraines-silicon-valley
149 Russell, A. (2024, February 18). How Kharkiv's tech start-ups became the ultimate test of business resilience. *Financial Times*. https://www.ft.com/content/248c4ac0-2e20-4900-bb21-625c0e260b66
150 Russell, A. (2024, February 18). How Kharkiv's tech start-ups became the ultimate test of business resilience. *Financial Times*. https://www.ft.com/content/248c4ac0-2e20-4900-bb21-625c0e260b66
151 Viladrich Farré, M. (2024, March 7). Average salary in Ukraine. TalentUp. https://talentup.io/blog/average-salary-in-ukraine/
152 Fedorov, M. (2023, August 17). *Ukraine's vibrant tech ecosystem is a secret weapon in the war with Russia*. Atlantic Council. https://www.atlanticcouncil.org/blogs

/ukrainealert/ukraines-vibrant-tech-ecosystem-is-a-secret-weapon-in-the-war-with-russia/

153 Ingram, G., & Vora, P. (2024). *Digital resilience in a time of war* (Working Paper No. 185). Brookings Institution. https://www.brookings.edu/wp-content/uploads/2024/01/Digital-resilience-in-a-time-of-war-Final.pdf

154 Duplichen, D. (2022, October 21). *Ukraine's growing tech sector offers hope amid wartime economic pain*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-growing-tech-sector-offers-hope-amid-wartime-economic-pain/

155 Fedorov, M. (2023, August 17). *Ukraine's vibrant tech ecosystem is a secret weapon in the war with Russia*. Atlantic Council. https://www.atlanticcouncil.org/blogs/ukrainealert/ukraines-vibrant-tech-ecosystem-is-a-secret-weapon-in-the-war-with-russia/

156 Russell, A. (2024, February 18). How Kharkiv's tech start-ups became the ultimate test of business resilience. *Financial Times*. https://www.ft.com/content/248c4ac0-2e20-4900-bb21-625c0e260b66

Chapter 6

Entrepreneurship in the Gulf Cooperation Council Economies

This chapter's objectives are:

1. To demonstrate an understanding of the natures of entrepreneurial activities in G.C.C. economies.
2. To analyze the facilitators and hindrances of entrepreneurship in G.C.C. economies.
3. To evaluate some of the barriers to changes in institutions needed for promoting entrepreneurship in G.C.C. economies.
4. To assess the roles of various institutional changes agents in G.C.C. economies in bringing institutional changes related to entrepreneurship.
5. To demonstrate an understanding of various sources of finance in G.C.C. economies and their differences with the rest of the world.

6.1 Introduction

The six Gulf Cooperation Council (G.C.C.) member states – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (U.A.E.) (Figure 6.1) – have demonstrated an increasingly strong interest in entrepreneurial activities. Especially young people in the region are reported to have a desire to engage in entrepreneurial activities. ASDA'A BCW commissioned SixthFactor Consulting to interview 3,600 Arab citizens aged 18 to 24 face-to-face in early 2023. The survey, the largest in its history, included 53 cities across 18 Arab states, including South Sudan for the first time. It found that 42% of young Arabs want to start their own business within the next five years, with the highest interest in G.C.C. states (53%), followed by the Levant (Syria and Lebanon) (39%) and North Africa (37%).[1]

However, entrepreneurship faces various political, social and cultural challenges in G.C.C. economies. Institutional reforms required to promote productive entrepreneurship have been slow in the region. Although G.C.C. regimes have agreed on the necessity to strengthen the rule of law

DOI: 10.4324/9781003565154-6

Figure 6.1 G.C.C. Economies

Source: File:Saudi Arabia map.png – Wikimedia Commons.

and move toward free enterprise economy, there have been only superficial reforms. Political and economic liberalizations, which are insignificant in most cases, are responses to crises rather than as the systematic pursuit of stated reform objectives, and reluctantly carried out. The Third Wave of democratization, which started with the fall of the last dictatorships in Western Europe such as Portugal, Greece and Spain in the mid-1970s and continued in Latin America in the 1980s, has failed to touch the Arab world. There is not a single full-fledged democracy in the G.C.C. region, and some new repressive institutions have also emerged. G.C.C. economies are also characterized by a symbiosis of political and economic elites.

In the G.C.C. region, energy exports continue to dominate, while a key aspect of entrepreneurship patterns. The United Arab Emirates relies on oil

and natural gas for 40% of its exports, while other major exports include pearls and precious metals (28%), machinery and sound recording devices (9%) and transport vehicles (6%).[2] From 2014 to 2018, hydrocarbon exports represented between 92% and 94% of Qatar's total exported commodities, underscoring the country's ongoing dependence on this sector.[3] There has been a drive toward economic diversification. For instance, the U.A.E. aims to diversify its exports by focusing on high technology sectors such as artificial intelligence (A.I.). Likewise, despite past weaknesses, new legislation aims to boost small and medium-sized enterprise (S.M.E.) services, support economic diversification and generate employment. As part of its National Vision 2030, Qatar is focusing on strengthening S.M.E.s to diversify its economy.[4]

Similarly, to diversify its economy beyond fossil fuels, Oman introduced the New Foreign Capital Investment Law in 2019. This new legislation, which replaces earlier laws, allows international investors to undertake commercial activities in or from Oman without needing a local legal entity or commercial agent. As a result, the country has successfully attracted 235 foreign direct investment (F.D.I.) projects from 2019 to 2023, according to GlobalData's F.D.I. Projects Database. The leading sectors for inbound investment are communications and media, spurred by a national fiber network installation, and tourism.[5]

A related point is that G.C.C. economies often use state-guided capitalism to achieve economic growth. In this model, the government directs the market by supporting specific industries anticipated to perform well.[6] This contrasts with entrepreneurial capitalism seen in economies like the United States, where high-impact entrepreneurs with radical ideas and small, innovative firms play a significant role.

An upshot is that the public sector has been the main source of employment for their citizens. In Kuwait, for instance, more than 373,000 Kuwaitis were employed in the public sector in 2023 versus only 76,000 in the private sector.[7] While G.C.C. economies have been able to achieve a sustained economic growth and macroeconomic stability, development of entrepreneurship and job creation have remained a challenge.

For startups to thrive, a supportive entrepreneurial ecosystem and leading universities are essential. While G.C.C. nations such as the U.A.E., Saudi Arabia and Qatar are catching up in these aspects, they are still searching for unique advantages and new expansion opportunities.[8]

A genuinely entrepreneurial class, which is lacking in the region, would be the single most important force for change in the region. G.C.C. economies' reform is likely to have far-reaching implications for their own populations as well as those outside the region.

6.2 Current State of Entrepreneurship in the G.C.C. Region

To start with, there is no equivalent word for "entrepreneurship" in Arabic. Unsurprisingly, as noted above, G.C.C. economies lack essential ingredients for the creation of an effective ecosystem for entrepreneurship and innovations.

6.2.1 Startup Ecosystems

The region's startup ecosystem is rapidly developing. Sortlist, a platform that connects companies with service providers in marketing, advertising, design and web development, identified Riyadh as the top Middle East and North Africa (M.E.N.A.) city for startups. Riyadh excels with high broadband speeds (94.64 Mbps), a 95% literacy rate, a happiness rating of 6.49/10 and low electricity costs (4.2 p/kWh).[9] A national program in Saudi Arabia offers a range of services to accelerate high-growth technology companies to unicorn status (https://saudiunicorns.net/en). Dubai, ranked second, boasts the fastest average internet speed in M.E.N.A. (189.07 Mbps), which enhances efficiency for hybrid work and international interactions.[10]

Unsurprisingly among the region's startup ecosystems, the U.A.E. and Saudi Arabia stand out for their development and the highest concentration of unicorns**.** In Saudi Arabia, more than 1,600 startups were active in 2023, with support from over 140 programs and a network of venture capital (V.C.) firms.[11]

The U.A.E. holds the 17th position worldwide for unicorns as of July 2024. The country is home to 11 unicorns.[12] Saudi Arabia holds the 46th position worldwide for unicorns as of July 2024. The country is home to two unicorns: 1) Tamara, which became a unicorn in December 2023, with US$340 million in Series C funding from Alahli Capital and Sanabil; 2) stc pay, which achieved unicorn status in November 2020, after raising US$200 million in Series D funding from Western Union, valuing it at US$1 billion.[13] The rise of sectors like healthtech, edtech and fintech is expected to lead to up to 100 unicorns in the region by 2030, according to RedSeer Strategy Consultants. Dubai has set a goal to reach 30 unicorns by that year.[14]

From 2016 to 2023, Qatar saw the founding of 187 startups and experienced 224 venture capital transactions.[15] In 2024, the Investment Promotion Agency Qatar (Invest Qatar) launched Startup Qatar, a comprehensive online platform designed to meet all the needs of startup businesses in Qatar.[16] The Startup Qatar Investment Program is supported by a US$100 million fund managed by the Qatar Development Bank (Q.D.B.). Q.D.B. has disclosed that its program will allocate funding of up to US$500,000 for early-stage startups establishing a foothold in Qatar and up to US$5 million

for growth-stage companies expanding in the region. In addition to financial support, the program will offer startups access to market resources and expert guidance. It targets a range of over 15 sectors, such as fintech, clean tech, agritech, business-to-business (B2B) software-as-a-service (SaaS), health tech, marketplaces, proptech, artificial intelligence (AI) & machine learning (ML) and robotics.[17] In 2024, the Qatar Investment Authority unveiled its first US$1 billion "Fund of Funds", which is expected to energize the startup ecosystem in the region. This fund will be directed toward investments in both global and regional venture capital funds.[18]

The development of startup ecosystems in some economies in the region is slow. The absence of international tech events and forums in Kuwait means that local founders and entrepreneurs have limited chances to interact with global peers and investors. Furthermore, the country has a minimal number of incubators and accelerators. This lack of infrastructure, coupled with bureaucratic inefficiencies and a closed-off governmental approach, has resulted in Kuwait falling behind other G.C.C. countries.[19]

6.2.2 S.M.E.s' Contribution to the Economy

The density of small businesses is notably smaller in the G.C.C. compared to advanced countries. In 2024, the United States had 33.2 million small businesses, equating to 100 per 1,000 people,[20] while Saudi Arabia had 35 small businesses per 1,000 people (Figure 6.2).

In its effort to become a global leader in entrepreneurship, the U.A.E. Ministry of Economy has launched Entrepreneurial Nation 2.0. This initiative seeks to develop over 8,000 small and medium enterprises and startups

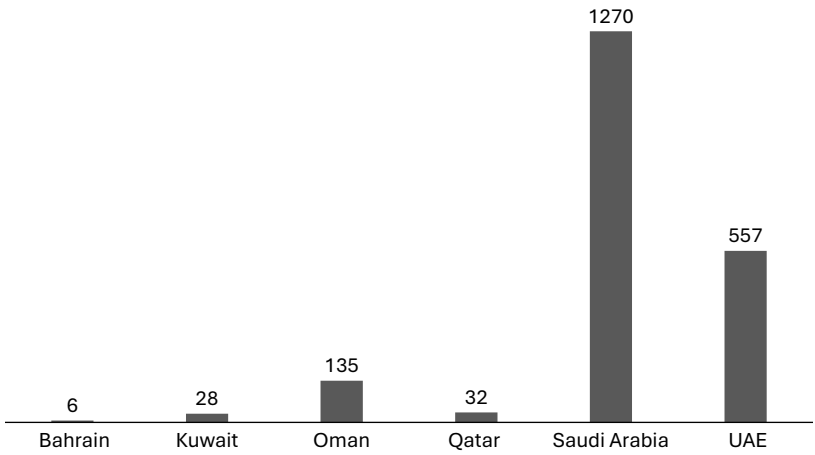

Figure 6.2 Number of S.M.E.s in G.C.C. Economies (thousands)

by 2030, following the 2021 launch of the first initiative, which included 10 programs and around Dh20 million in private-sector funding. The program also targets the creation of 20 unicorns by 2031.[21]

In Bahrain, the S.M.E. Development Board, founded in 2017, aims to enhance S.M.E. growth by facilitating access to financing, markets and efficient processes. Its strategic plan also focuses on skill development and innovation. Key initiatives include licensing business incubators and accelerators, setting up Export Bahrain, supporting crowdfunding efforts, giving S.M.E.s preference in government procurement and implementing an S.M.E. registration system to classify enterprises by size for appropriate advantages.[22] The International Finance Corporation and Bahrain's Ministry of Industry and Commerce have unveiled a new online platform aimed at helping S.M.E.s grow and enhance their performance. The S.M.E. Toolkit, developed with IBM, is freely available at http://bahrain.smetoolkit.org. It provides comprehensive advice and resources on various aspects of business management, including accounting, finance, human resources, legal issues and marketing.[23]

The Qatar Authority for the Development of S.M.E.s, created by Emiri Decision No. (17) of 2011, is charged with advancing S.M.E. growth through technical assistance and cooperation with banks and government institutions for project financing and marketing.[24]

Likewise, in Oman, as reported by the Oman News Agency, Oman's Small and Medium Enterprises Development Authority had allocated more than 24.6 million Omani rials (US$63.9 million) in funding to S.M.E.s by February 2024. The number of financed projects reached 224 by then.[25]

Despite the above efforts, S.M.E.s currently contribute significantly less to gross domestic product (G.D.P.) in this region compared to advanced economies (Figure 6.3). In Qatar, the nonhydrocarbon S.M.E.s sector makes up 10% of the G.D.P. and offers 15% of the employment. This is considerably less than the 30% G.D.P. share and 71% employment rate observed in the Middle East and North Africa regions (Qatar Development Bank).[26] Likewise, S.M.E.s account for over 50% of G.D.P. in most Organisation for Economic Co-operation and Development (O.E.C.D.) countries, with global estimates reaching up to 70%. Their influence is particularly strong in the service sector, where S.M.E.s make up 60% or more of G.D.P. in nearly all O.E.C.D. nations.[27]

In the G.C.C. economies, S.M.E.s often lack external audits from other fields, including evaluations by certified independent third parties such as financial audits. Many S.M.E.s in Bahrain, including small restaurants, Abaya shops and car garages, forgo financial audits – 95% of them – due to either a lack of knowledge or the desire to avoid costs during incorporation. Nevertheless, audited financial statements and auditor reports are essential for S.M.E.s. They offer internal advantages in performance assessment and

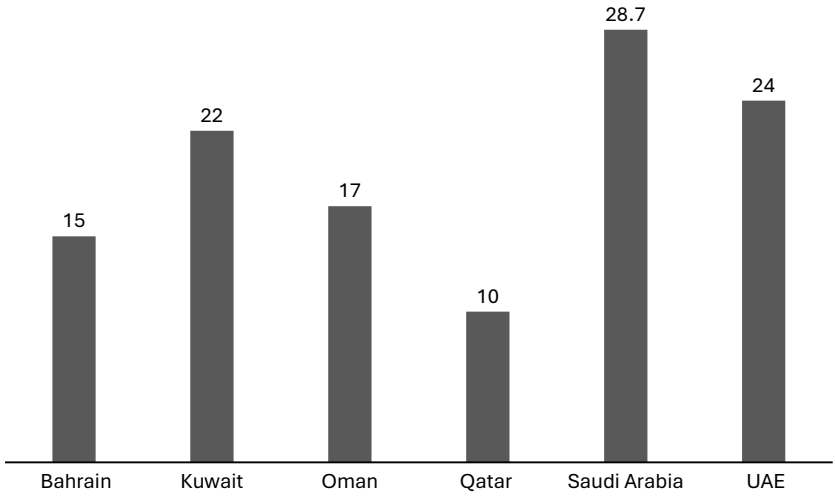

Figure 6.3 S.M.E.s' Contribution to the G.D.P. in G.C.C. Economies (%)

future planning, while also fostering trust with external stakeholders such as banks, suppliers, customers and employees.[28]

6.2.3 Women and Entrepreneurship

There has been considerable progress in women's entrepreneurship in some economies within the region. Between 2017 and 2021, Saudi Arabia's female labor force participation rate doubled from 17.4% to 35.6%, surpassing the Vision 2030 target of 30%.[29] In 2023, Saudi women represented 39% of the country's total entrepreneurs, a significant increase from just 4% a decade ago.[30] According to Monsha'at, the Saudi authority overseeing the sector, the Kingdom had 1.27 million S.M.E.s by the third quarter of 2023. Monsha'at reported in January 2023 that women were leading 45% of Saudi Arabia's S.M.E.s. Their representation in the information technology sector has also increased notably, climbing from 11% in 2017 to 24% in 2021, which is 8% higher than in Silicon Valley.[31]

An important benefit that stems from female-owned firms is that such firms in the region tend to hire more women and do so in higher positions than male-owned firms. For instance, female workers accounted for about 25% of the workforce in female-owned firms compared with 22% in male-owned firms. The qualitative differences are even more remarkable as female-owned firms employed a higher proportion of female workers at professional and managerial levels while male-owned firms employed more women in unskilled positions.[32]

6.3 Islam's "Holistic Order" and the Effect on Entrepreneurship

Institutionalists and historians have argued that institutions' propensity to change can arguably be described with two ideal types of social organizations – the holistic order and the extended/functionally differentiated order. A holistic society is often characterized by an ideology, mostly in the form of a religion, that "claims validity for all spheres of action and thought" and an action's legitimacy is evaluated on the basis of "general binding moral prescripts imposed by a superior authority" rather than by economic, political or juridical logics.[33] To take an example, conservative Islamist factions such as Islamic Salvation Front view Islam "as a holistic order whose societal organization is perfect and does not allow individual beliefs".[34] In some cases, the ideology concerns the value system such as the Asian values.

From the standpoint of institutional reforms in G.C.C., the most relevant issue concerns the notion of a holistic society. Islam's influence is readily apparent in businesses and economics. Islamic economics, which differs from Western capitalism by several measures, claims that Islam provides an "all-encompassing model for social, economic, and political life".[35] Commercial shariah, for instance, differs drastically from Western business laws in several notable respects. It is probably hard to imagine democracy in the G.C.C. region involving English common law, which is likely to bring a disruption in the society. For instance, Saudi Arabia is focusing on economic diversification by expanding into industries, agriculture and mining, while fostering private sector growth within a free market framework aligned with Islamic principles.[36]

Some concepts related to entrepreneurship are considered to be too Western and face strong resistance. For instance as "angel investors" sounded too Christian for many Arabs, the promoters needed to replace it with a more religion-neutral term – "uncles' network".[37]

6.3.1 Absolute Monarchies' Religious and Political Power

The absolute monarchies possessing both religious and political power also benefit from the holistic order. For instance, despite facing significant threats, the survival of the Saudi royal family has never been at risk. The Arab Spring, which caused political upheavals in countries such as Egypt and Yemen, did not destabilize Saudi Arabia. The key to the Saudi regime's resilience lies in the influence of the Wahhabi doctrine known as "ta'at wali al-amr", which underscores loyalty to the ruler.[38] Accordingly, most G.C.C. rulers lack accountability; can survive through repression, cooptations and manipulation; and maintain control over opponents.[39] Beyond all that, being a "reformist" by complying with the West is an unpopular

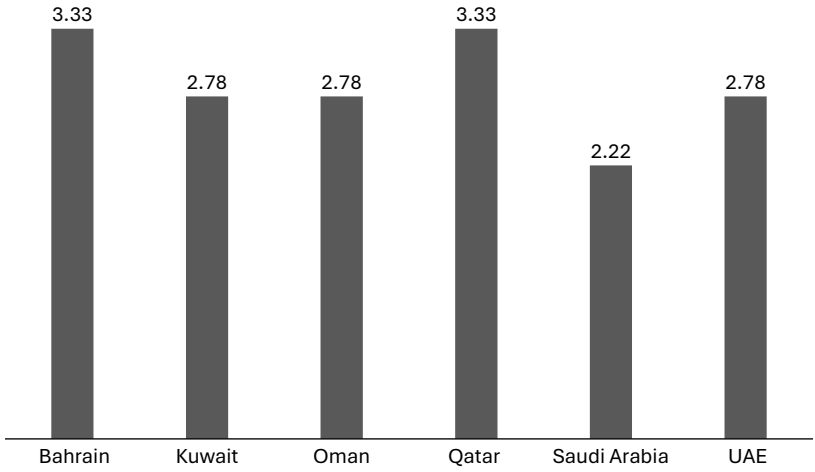

Figure 6.4 Political participation index of G.C.C. economies (2023)

option for G.C.C. rulers. For instance, in the Arab world, Qatar is perceived as "little more than an American military base".[40]

Notwithstanding some institutional reforms in G.C.C. economies, a close look indicates a lack of substantiveness. For instance, more than two decades ago, a scholar observed that in most cases, holding elections is the only measure taken to promote democracy and the elections arguably tend to be merely "rubber-stamp affairs".[41] This observation is still true. The 2023 Political Participation Index by the Economist Intelligence Unit evaluates the extent of citizen engagement in politics. None of the countries in the region scored above 3.33 on a scale from 0 to 10, where 10 signifies the most active participation (Figure 6.4).[42] According to the Index, Gulf states encounter numerous issues with elections and political systems. While there have been attempts to establish parliamentary and Shura Councils, these efforts have been curtailed by restrictive laws, including arbitrary voter disenfranchisement and restricted powers for elected bodies, which impede their effectiveness and accountability.[43]

6.3.2 Unequal Treatment of Women

In a holistic Islamic society, the unequal treatment of women adversely affects entrepreneurial endeavors. For instance, in 2013, King Abdullah of Saudi Arabia appointed 30 women to the previously all-male Shura Council and decreed that women must hold at least one-fifth of the council's 150 seats.[44] While the inclusion of women in the Shura Council is supported by

many Saudi leaders and media, some clerics oppose it, claiming it conflicts with shari'a and the prohibition on men and women mingling.[45] A cleric tweeted addressing the Grand Mufti, who is the highest religious and legal authority in the country, and is appointed by the King:

> Honorable Mufti, how offensive we found the picture of the female Shura Council members marching in front of you, some of them with uncovered [faces] and wearing makeup. Do not Allah's laws [prohibit this]?! Is this what you would like for your daughters?![46]

In March 2022, Saudi Arabia introduced its first codified personal status law, governing aspects of family life. This law limits a married woman's freedom to choose her residence and travel, and mandates her obedience to her husband.[47] Saudi Arabia imposes severe restrictions on women human rights defenders, including travel bans and constraints on freedom of expression. Activists supporting women's rights on social media have been sentenced to extraordinarily long prison terms, such as 45 and 27 years, according to Amnesty International.[48]

While progress has been made, women's representation in business remains low in the G.C.C. and M.E.N.A., with less than 5% of businesses led by women in M.E.N.A., in contrast to a global average of up to 26%.[49] Sociocultural ideas regarding what is an appropriate career for women limit their opportunities to study S.T.E.M.-related subjects. In the U.A.E., for instance, the proportion of female students enrolled in the Information Technology field is only 2%.[50]

As reported by Wamda and TiE Dubai, a striking 66% of women founders in M.E.N.A. think investors are less inclined to fund women-led startups.[51] This perception is corroborated by the fact that less than US$50 million was invested in female-only startups in the first nine months of 2022, making up only about 2% of the total startup investment in the region.[52]

6.3.3 Islam and Entrepreneurial Financing

The presence of a holistic society and religious motivations can prevent S.M.E.s from tapping into traditional sources of finance. For instance, some entrepreneurs lack willingness to use banking services that are not Shariah-compliant. Muslims, as a large demographic, are subject to religious and normative prohibitions on interest-based loans.[53] Because interest payments are prohibited in Islamic finance, Muslims often avoid traditional banking. Sharia law also bans investments in harmful activities, such as speculation and gambling.[54] In Saudi Arabia, about 90% of S.M.E.s look for Shariah-compliant banking services.[55] In this way, due to their unwillingness to use non-Islamic finance, they are locked out of the lending market.

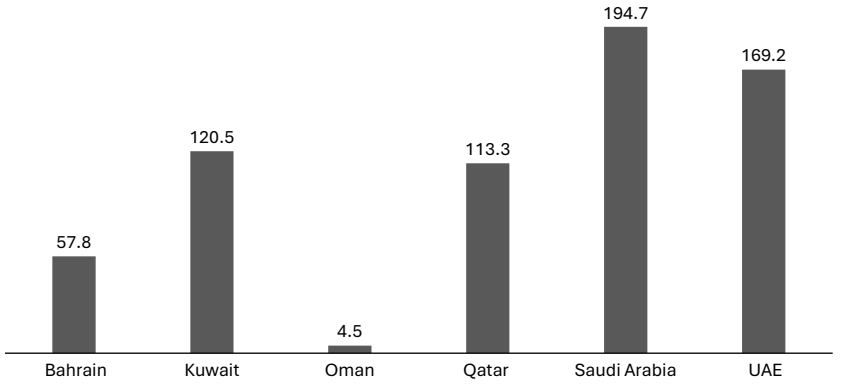

Figure 6.5 Sharia-Compliant Assets in G.C.C. Economies (US$, billion)

Consequently, there has been a rise in the development of sharia-compliant financial solutions (Figure 6.5). Riyad Bank provides Islamic credit facilities tailored for startups, covering both capital expenditure and working capital needs, with a maximum repayment period of one year.[56] With over 90% of the sharia-compliant assets in the M.E.N.A. region, the G.C.C. plays a dominant role in Islamic finance.[57] Saudi Arabia holds 25% of the global total of sharia-compliant assets.[58] Among the ten largest Islamic banks of the M.E.N.A., all are located in the G.C.C. and had approximately US$477 billion in assets by Q2 2020. These institutions frequently establish branches abroad, such as Bahrain's Bank al Baraka, which has a presence in more than 15 countries.[59]

For foreign financial institutions, combining components from the existing institutional environment and reorganizing them strategically – also known as bricolage[60] – has been an important way to operate in the G.C.C. region. Western financial institutions such as J.P. Morgan (https://www.jpmorgan.com/SA/en/about-us), for instance, operate in the G.C.C. region according to the principle of commercial shariah and have helped boost G.C.C. regimes' performance legitimacy by bringing jobs and F.D.I. in the region. This approach can also be viewed as complementarity as two seemingly contradictory phenomena (Western capitalism and commercial shariah) are combined and essential characteristics of each component are preserved.

6.4 Institutional Reform and Policy Development

Institutional reforms and policy updates are significantly impacting the development of entrepreneurship in the G.C.C.

6.4.1 New Laws to Promote Gender Equality

Traditionally Saudi Arabian women were required to have a male guardian to handle important decisions for them, including those related to travel, starting a business and education.[61] They were also prohibited from driving, among other limitations. In February 2018, the Ministry of Commerce and Investment announced that women no longer require their male guardian's permission to start a business.[62] This update was shared on Twitter by the Ministry of Commerce and Investment, which stated, "No need for a guardian's position. Saudi women are free to start their own businesses freely. #NoNeed" (Women's Post, 2023).[63] Saudi Arabia also enacted laws to protect women from sexual harassment, prohibit gender discrimination in employment and finance and remove all restrictions on women's employment.[64] Saudi Arabia has limited the authority of its religious police, who were once responsible for upholding public morality. They no longer have the power to conduct investigations or make arrests and are unable to penalize behaviors deemed morally inappropriate.[65]

6.4.2 New Laws to Attract Foreign Companies

New laws have been introduced to attract foreign companies. For example, the Dubai International Financial Center (D.I.F.C.) operates under its own legal system and courts, handling corporate, commercial, civil, employment and trust issues. Dubai Healthcare City focuses on providing medical services.

The Qatar Financial Centre Authority (Q.F.C. Authority), established in 2005 in Doha, provides a legal, regulatory, tax and business environment for financial services and related sectors.[66] A key goal of the Q.F.C. is to bring global best practices to Qatar and focus on investment opportunities at the local and regional levels. The general law is that foreign firms are required to have a local partner that owns at least 51% of the shares.[67] In 2004, Qatar amended the law to allow foreign investment in the banking and insurance sectors with the approval of the Cabinet of Ministers. Moreover, foreign financial services firms established at the Q.F.C. are allowed 100% ownership. In 2009, Qatar amended the law to allow foreign investors to hold 100% ownership in certain sectors including business consultancy and technical services, information and communication services, cultural services, sports services, entertainment services and distribution services. However, in response to complaints by local firms of unfair competition, in 2015 the Q.F.C. stopped issuing new licenses to foreign law firms.[68] The Q.F.C. is one of two authorities under which 100% foreign-owned companies are allowed to operate in Qatar. It also allows 100% repatriation of profits. Businesses can trade in any currency. The Q.F.C. also has an internationally

competitive tax system. The corporate tax rate is 10% on locally generated profits.[69]

These free zones have adopted data protection laws akin to the European Union (E.U.) directive for personal data. While Qatar follows Sharia law, the Qatar Financial Centre operates under English common law, including data protection regulations modeled after the E.U. directive.[70]

6.4.3 Bankruptcy Laws

G.C.C. economies have made progress in bankruptcy-related policy issues. For instance, In reaction to the global financial crisis of 2007/2008, the U.A.E. implemented Federal Decree Law No. 9 of 2016, also known as the U.A.E. Bankruptcy Law. This legislation, which draws from bankruptcy practices in the United States, England, Wales and France, outlines three court-supervised procedures for distressed businesses: (i) preventive composition led by the debtor, (ii) court-supervised bankruptcy rescue and (iii) court-supervised liquidation.[71] The U.A.E. Bankruptcy Law offers several paths to help companies facing financial difficulties.[72] For instance, insolvency with restructuring allows a company's debts to be restructured with the approval of creditors. The process is overseen by the courts. Likewise, protective composition is a debtor-led, court-sponsored process to rescue a business that is in financial difficulty but not yet insolvent.[73] Note that this law does not extend to the D.I.F.C. or Abu Dhabi Global Market (ADGM), which have independent insolvency frameworks.[74]

The Saudi Bankruptcy Law, introduced in 2018 after comprehensive international and domestic reviews, significantly improves Saudi Arabia's insolvency framework. Influenced by U.S. and U.K. models, it facilitates debtor reorganization and fair creditor treatment, and supports Saudi Arabia's Vision 2030 through three main procedures: protective settlements, financial restructuring and liquidation.[75]

Likewise, in March 2018, Bahrain revised bankruptcy law that allows room for entrepreneurial risk and failure.[76] The country was reported to study similar laws in entrepreneurially successful countries such as Singapore, the United Kingdom and the United States as well as neighboring countries to provide more flexibility to business owners in areas related to capital restructuring.

6.4.4 A.I. as a Key Component of State-Guided Capitalism

G.C.C. governments have integrated A.I. into their national visions and strategic planning processes (Table 6.1). The A.I. industry, in particular, is receiving strong support from the region's two largest economies – Saudi Arabia and the U.A.E.

Table 6.1 A.I.'s Roles in National Strategic Frameworks of the G.C.C. Countries

	Key strategy document/ vision	*Some key goals*	*Major activities*
Bahrain	Digital Strategy 2022	Use digital technologies to strengthen government services, processes and decision making and data sharing capability.[i]	2020: launched the first A.I. academy.[ii]
Kuwait	New Kuwait 2035 Vision 2035	Adopt A.I. within government agencies to contribute to the vision.[iii]	The Central Agency for Information Technology Agency has teamed up with Microsoft to launch a training program for senior government officials. The goals are to enhance knowledge and confidence in A.I.[iv]
Oman	Vision 2040 e.Oman 2030	Build a foundation to utilize and benefit from digital technologies, mainly A.I. in order to increase productivity and create jobs.[v]	The Information Technology Authority hosted the 4.0 Digital Trends Forum, which stressed the importance of A.I. as a key fourth industrial revolution technology.[vi]
Qatar	National Vision 2030 National A.I. Strategy (launched in 2019).	Produce "world-class A.I. applications" and establish the country as an efficient consumer of A.I., with "a properly educated citizenry, sound laws and ethical guidelines".[vii]	Focuses on education, research, data access, employment, business and ethics.
Saudi Arabia	Vision 2030	Transform the country into "an Industrial Powerhouse and global logistics". Reduce dependence on oil, diversify the economy and develop public service sectors.	Plans to open a National Centre for A.I., an A.I. regulator, a National Data Management Office, an A.I. college. Established an Intellectual Property Office in 2017.

(*Continued*)

	Key strategy document/ vision	*Some key goals*	*Major activities*
United Arab Emirates	Vision 2021 Artificial Intelligence Strategy 2031	Contribute to the objectives of U.A.E. Centennial 2071, boost government performance and create new markets with high economic value.[viii]	2015–18: Dubai attracted US$21.6 billion in foreign direct investments for A.I. and robotics.[ix] 2019: Abu Dhabi established the world's first research-based A.I. university which specializes in computer vision, machine learning and natural language processing. February 2024: A.T.R.C. announced a US$500 million investment in A.I. and emerging technologies at the World Governments Summit in Dubai.[x]

[i] Government of Bahrain's Digital Transformation Journey, eGovernment Authority, July 18, 2021, https://tinyurl.com/pups9az7

[ii] "Kuwait is absent from the Gulf initiatives for artificial intelligence", Tantalumforce.com, June 6, 2021, https://tantalumforce.com/kuwait-is-absent-from-the-gulf-initiatives-for-artificial-intelligence

[iii] "Kuwait confirms the importance of artificial intelligence techniques in achieving the objectives of vision (New Kuwait 2035)", Citra, December 19, 2018, https://citra.gov.kw/sites/en/Pages/NewsDetails.aspx?NewsID=55

[iv] "Kuwait Leaders to Maximize The Use Of Smart Technologies In New Microsoft AI Program", Microsoftcaregh, July 8, 2021, https://microsoftcaregh.com/2021/07/08/kuwait-leaders-maximize-smart-technologies-in-microsoft-ai-training-program/

[v] "Digital Oman 2030", Omanuna, accessed September 8, 2021, https://tinyurl.com/2h6e2awa

[vi] "Five strategies for Omani organisations to harness AI in 2019", Oman Observer, January 27, 2019, https://www.omanobserver.om/article/38849/Business/five-strategies-for-omani-organisations-to-harness-ai-in-2019

[vii] "Qatar forms artificial intelligence committee", Global Data Technology, March 12, 2021, https://www.verdict.co.uk/qatar-artificial-intelligence-committee

[viii] "UAE Strategy for Artificial Intelligence", UAE, August 18, 2021, https://u.ae/en/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/uae-strategy-for-artificial-intelligence

[ix] R. Santosdiaz, "Artificial Intelligence Strategy In The Middle East", The Fintech Times, November 7, 2020, https://thefintechtimes.com/artificial-intelligence-strategy-in-the-middle-east/

[x] Arab News. (2024, July 30). UAE announces $500m investment in AI, research platform. Arab News. https://www.arabnews.com/node/2459401/business-economy

With a US$40 billion investment in A.I., Saudi Arabia is set to become one of the top investors in the sector.[77] For instance, about 70% of 96 strategic goals under Saudi Arabia's Vision 2030 is related to data and A.I.[78] In October 2020, the Saudi national A.I. strategy was announced, which plans to train 20,000 data and A.I. specialists and experts and develop an

entrepreneurial ecosystem consisting of 300 active data and A.I. startups.[79] The Center of Digital Entrepreneurship is a tech hub designed to harness the rapid growth of Saudi Arabia's digital economy. It focuses on advancing digital knowledge, empowering local talent and supporting digital entrepreneurship through networking events, incubators, accelerators and the development of digital skills.[80] Saudi Arabia also aims to rank among the world's top 15 nations for A.I. by 2030.

Since naming Omar Sultan Al Olama as its inaugural A.I. minister in 2017, the U.A.E. has become a hotspot for A.I. businesses, with more than 1,000 now active in the region as of early 2024. The country's strategy includes relaxed regulations, generous tax breaks and "golden visas" designed to bring in A.I. experts. Hub71, a tech hub in Abu Dhabi backed by Mubadala Ventures, also plays a key role in drawing startups to the U.A.E.[81]

In early 2024, the U.A.E. government founded MGX, a new technology investment firm designed to target investments in artificial intelligence and semiconductor sectors. The firm aims to accumulate over US$100 billion in assets.[82]

An integral part of G.C.C. economies' national visions is to create favorable conditions for entrepreneurship and investment in the A.I. sector. The success of startups in Saudi Arabia is largely due to reforms driven by Saudi Vision 2030, which are designed to boost small business G.D.P. contribution and foreign direct investment.[83] Saudi Arabia's Vision 2030 aims to train 40% of its workforce in essential data and A.I. skills. This involves investments to enhance digital skills for 100,000 people and US$1.4 billion to support entrepreneurship. Under Vision 2030, Saudi Arabia is targeting a rise in S.M.E.s' G.D.P. contribution from 20% to 35%, showcasing its drive to build a dynamic entrepreneurial ecosystem. Emerging Saudi V.C. firms like STV and RAED Ventures, combined with government-backed funds such as Jada and SVC (US$2.2 billion in total in 2022), have significantly contributed to local V.C. funding growth.[84]

Saudi Arabia has invested in A.I.-driven tech companies through its stake in the Softbank Vision Fund and the national public investment agency.[85] The country has set a goal of attracting US$20 billion in investments by 2030 from foreign and local sources.[86]

Likewise, the U.A.E. aims to enhance the country's competitive advantage in A.I. investments. For example, during the 2008–18 period, the U.A.E. invested US$2.15 billion in A.I.[87]

G.C.C. economies have also established the organizational and administrative infrastructures to enhance their A.I. readiness. The U.A.E. established the world's first Ministry of A.I.[88] In March 2021, Qatar's cabinet approved the establishment of an A.I. committee under the Transport & Communications Ministry. The committee will supervise the programs and initiatives related to A.I. launched by the state and coordinate with relevant agencies in developing plans and programs. In Bahrain government agencies

such as Information and eGovernment Authority, Tamkeen (tasked to modernize the labor market), the Central Bank of Bahrain and the Economic Development Board have launched initiatives to develop A.I. and other technologies.[89]

6.4.5 Decline in Production/Price of Oil as a Possible Jolt to the Existing Institutions

The interesting question for the G.C.C. region is what factors could give a jolt to the existing institutions. Decline in production and/or price of oil is probably the single-most important force that can threaten G.C.C. regimes' performance-based legitimacy. As noted earlier, in the early 1990s, Kuwait and Saudi Arabia were at the preinstitutionalization phase but subsequent increased oil prices reduced their incentives to take substantive actions to move toward full institutionalization of reforms. In the current interaction pattern of institutional actors in the G.C.C. context, decline in oil price is likely to shift the power balance in favor of proreform actors such as foreign multinationals and Western governments. In this regard, in 2023, Saudi Arabia's oil G.D.P. contracted by 9% largely due to OPEC+ and voluntary oil production cuts, resulting in a 0.8% decrease in overall G.D.P.[90] The decline intensifies the need for further reforms in Saudi Arabia's economy, which is already undergoing transformation by focusing on reducing oil reliance, broadening income sources and improving competitiveness.[91]

6.4.6 Diminishing Influence of Antireform Actors

An observation made two decades ago was that proreform constituents tend to be "generally unorganized, silent, and nearly invisible politically", whereas antireform actors are "frequently organized and vocal".[92] Those with a voice often have more influence in the political process, allowing opponents of reform to effectively resist change. This situation has been reported to be changing. Mohammed bin Salman, the de facto ruler of Saudi Arabia, reportedly said that only a small proportion of clerics in the kingdom were too dogmatic to be influenced. He suggested that more than half could be persuaded to support his reforms through dialogue, with the rest being either indifferent or not in a position to challenge his reforms.[93]

6.5 Innovation, Research and Development, Technology and Skills

G.C.C. economies have exhibited a culture of heavy reliance on low-cost and low-skilled imported labor, mainly in the labor-intensive industries such as construction and services. This culture has favored low-quality entrepreneurship in the region by encouraging inefficient production techniques.

Due to an easy availability of cheap labor, organizations in the G.C.C. region have also faced little pressure to reform their organizational structures, develop the skills of their workforce and introduce superior technologies.

Figure 6.6 compares gross domestic expenditure on research and development (R&D) as a percentage of G.D.P. in G.C.C. economies. R&D activities are notably low in most economies across the region, limiting innovation and technological advancement. Due to their lack of emphasis on R&D and technology adoption, most G.C.C. economies remain in a low-productivity trap.

Encouraging developments in recent years include significant increases in R&D activities in the U.A.E. and Saudi Arabia. Saudi Arabia is prioritizing R&D across sectors such as energy, technology and sustainability as part of its Vision 2030 strategy to diversify its oil-dependent economy. The General Authority for Statistics reported a rise in R&D personnel in Saudi Arabia, with the workforce reaching 49,337 by the end of 2023, marking a 12.2% increase year on year.[94] In the United Arab Emirates, research and development expenditure as a percentage of G.D.P. increased from 0.49% in 2011 to 1.4952% in 2021.[95] This exceptional growth positions the U.A.E. as a leader in R&D investment among G.C.C. countries.

Due to the appeal of substantial non-monetary perks, long vacations and reduced working hours, the public sector is often the employer of choice for G.C.C. nationals. This situation is creating economic challenges by limiting

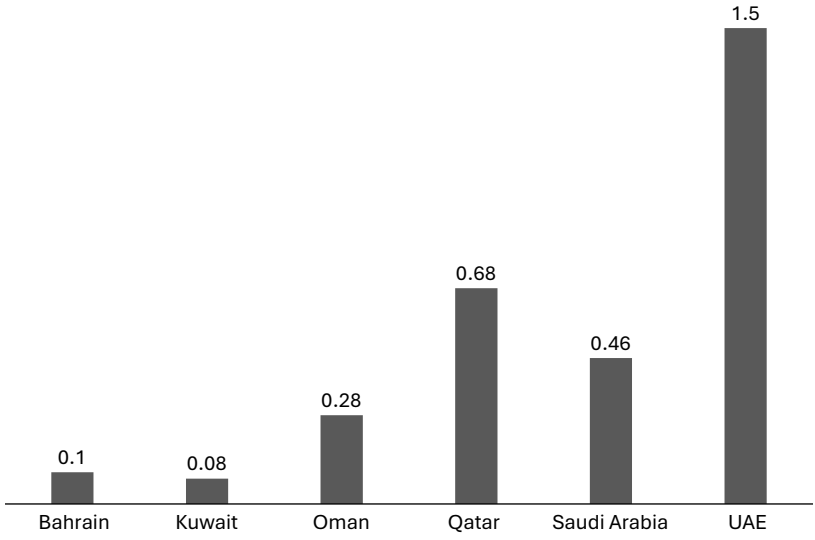

Figure 6.6 Gross Domestic Expenditure on R&D as a Percentage of G.D.P. in G.C.C. Economies

the private sector's access to skilled individuals, resulting in increased wage demands or a reliance on expatriates.[96] Foreign workers made up over 80% of the total labor force and nearly 90% of private sector employment in the G.C.C. as of 2021, with Qatar and Abu Dhabi showing even greater reliance, with migrant workers comprising more than 90% of the labor force.[97]

6.6 Access to Finance

A major challenge for startups is securing capital. Despite the increasing presence of venture capital firms and investors in the region, many startups still face difficulties in obtaining the funding needed to expand their operations. The risk-averse nature of many investors and their lack of experience in assessing early-stage companies contribute to a funding gap, which makes it challenging for startups to expand and compete internationally. Startups in the region face considerable difficulties due to regulatory hurdles. The variation in legal frameworks can lead to complex and time-consuming licensing, compliance and permit procedures, which may hinder expansion and increase costs. Startups in these thriving hubs face intense competition from globally recognized blue-chip companies alongside flourishing businesses from around the world.[98]

6.6.1 State-Owned Sovereign Wealth Funds

State-Owned Sovereign Wealth Funds, which are created from a country's excess reserves or government revenues. have played a crucial role in providing entrepreneurial financing in the region. These funds are intended to manage and invest surplus capital, which can originate from budgetary surpluses, foreign reserves or proceeds from natural resources.

With control over US$4 trillion in assets in 2024, Middle Eastern wealth funds have established themselves as major global bankers.[99] According to GlobalSWF's 2024 report, the combined assets of the G.C.C.'s 19 sovereign funds are projected to reach US$7.6 trillion by 2030, doubling from 2023 and matching the combined annual G.D.P.s of the United Kingdom and Germany.[100]

Abu Dhabi's ruling family controls numerous major sovereign wealth funds, which collectively amount to roughly US$1.5 trillion**.** By historically directing the U.A.E.'s oil wealth into growth sectors, these funds have become a perfect fit for A.I. company leaders in need of substantial capital to engage in the A.I. competition.[101]

Oman has created a sovereign Oman Technology Fund to attract foreign entrepreneurs. Its projects include: a) pre-seed fund program Techween, b) Wadi Accelerator, which provides startups funding of up to US$100,000 and c) Jasoor Ventures to support companies' growth.[102] In 2024, a new sovereign wealth fund of OMR 2 billion (US$5.2 billion) was launched by

the Oman Investment Authority to attract foreign direct investment and enhance support for small and medium-sized local businesses. The *Oman Observer* reports that 90% of this fund will be directed toward F.D.I., while the other 10% will be invested in S.M.E.s and venture capital.[103]

6.6.2 Bank Loans

The primary challenge is financing, particularly for small firms. In the G.C.C. economies, banks provide very limited lending to S.M.E.s. For instance, S.M.E. lending accounted for only about 4% of total bank lending in the U.A.E. The proportion in Saudi Arabia, Kuwait and Oman was 2%. It was even lower in Bahrain and Qatar at 1% and 0.5%, respectively.[104] In Saudi Arabia, out of 1.3 million S.M.E.s, 1.14 million are microenterprises with fewer than six employees. Banks are hesitant to lend to these small, unproven businesses, hindering their growth. To address this, Saudi Arabia is implementing initiatives to boost S.M.E. financing, aiming for financial institutions to allocate 20% of their loan portfolios to S.M.E.s, up from the current 8.7%.[105]

6.6.3 Capital Markets

In 2023, companies from the G.C.C. region raised US$10.79 billion through initial public offerings (I.P.O.s) (Figure 6.7).[106] This is a significant decline from US$22.7 billion raised in 2022.[107] However, given the size of G.C.C. economies, capita raised through I.P.O.s in 2023 compares favorably with China's US$45.3 billion[108] and US$19.4 billion raised by the United States' initial public offering market in that year.[109]

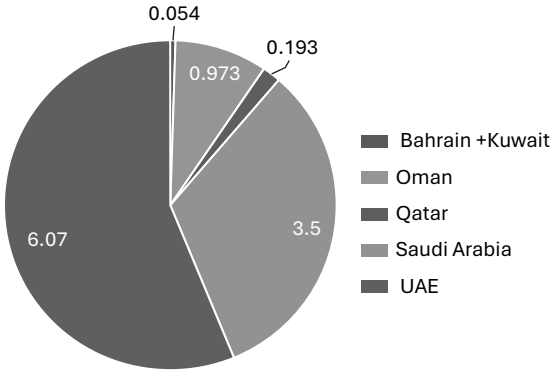

Figure 6.7 Capital Raised in I.P.O.s in G.C.C. Economies 2023 (US$, billion)

The debt capital market in the G.C.C. region reached US$940 billion outstanding by the end of Q1 2024, with Saudi Arabia holding 43% and the U.A.E. 30% of the market share.[110] Note that in the debt capital market, securities such as bonds and promissory notes are traded to secure long-term funding for companies and governments. The market provides liquid, safe investment options for institutional investors.[111]

6.7 Barriers to Entrepreneurship

The G.C.C. economies' entrepreneurial landscapes face various barriers. First, sociocultural barriers have historically restricted female employment and entrepreneurship, resulting in low participation rates for women in economic activities. Major challenges to advancing women's equality in the Arab region are discriminatory laws, gender-based violence, inadequate childcare options, wage disparities, uneven distribution of domestic duties and diminishing civil society space.[112] For instance, according to the World Bank's Doing Business 2020, in the U.A.E., the Personal Status law, art. 71 and 72, required a married woman to seek her husband's consent in order to leave the marital home. This process takes one day to complete.[113]

Second, civil society organizations in the Middle East and North Africa are increasingly hindered by severe challenges, particularly in authoritarian regimes. These obstacles include forced closures, targeted persecution and damaging smear campaigns, all of which impede their essential work in promoting human rights, good governance and inclusive development.[114] Civil society, particularly women-led organizations, is crucial in driving progress toward gender equality.[115]

A third barrier for entrepreneurs in the region is the widespread negative perception of capitalism and private sector jobs, which contrasts with Islamic ethical traditions and makes it challenging to attract qualified employees. Many of the consumption habits associated with global capitalism are considered to be "antithetical" to Islamic ethical traditions.[116] Observers note that people in the region look down on capitalism. There has also been a widespread negative attitude toward entrepreneurship involving small businesses as well as toward menial and low-paying works. Since private sector jobs in these economies suffer from an image problem, entrepreneurs face barriers to hire qualified employees. For instance, in Kuwait public sector jobs continue to be more favored culturally.[117] The G.C.C. tradition of family businesses has also been a barrier to entrepreneurship development and economic growth.

Fourth, some barriers are industry- or sector-specific. A major barrier to the growth of the metaverse gaming industry in Saudi Arabia is the limited number of professional esports players, which significantly hinders the country's competitive presence compared to other global markets. Considering

the metaverse gaming industry, for instance, Saudi Arabia has only about 100 pro esports players, which is 0.0005% of total gamers. The proportions for the United States and France are about six times higher. Saudi players who aspire to become pro esports players have complained about unfavorable conditions in the country such as a lack of funding to compete full-time, and a lack of local competition. There is also a social stigma associated with an esports career.

Fifth, sociocultural and legal barriers have become significant obstacles to attracting international investments and forging global partnerships, For instance, in 2020, the U.S. video game developer, publisher and esports tournament organizer Riot Games announced a sponsor partnership with NEOM for the European championship for the game League of Legends. NEOM would have benefited from the partnership. However, the partnership faced strong opposition from various stakeholders, especially LGBTQ gamers since Saudi Arabia prohibits same-sex relationships as well as open LGBTQ activities. Within 24 hours of its NEOM deal announcement, Riot Games withdrew from the commitment. Danish tournament organizer BLAST also terminated its partnership with NEOM.[118] BLAST's deal with NEOM involved helping the megacity develop a regional esports hub, advising on the creation of an esports academy and expanding esports in Saudi Arabia.[119]

Sixth, while expatriates constitute a significant proportion of population in most G.C.C. economies, their involvement in high-quality entrepreneurship is limited. One problem is that G.C.C. economies have viewed immigrants merely as an extra source of labor.[120] Recruiters organize most of the movements of workers on fixed-term contracts. A key feature of contemporary labor migration to the Gulf is that migrants are always contract workers, with little chance of permanent settlement or naturalization, despite the potential for contract renewals.[121] In most cases, contract workers are required to depart the receiving country upon completion of the contract.[122] In the G.C.C., Kuwait stands out for its prohibition on foreign ownership of businesses and real estate. Foreign investors must partner with a Kuwaiti national who holds the majority stake to establish a business. The process of setting up a business in Kuwait can also be lengthy, often exceeding one month.[123] This contrasts with countries that have high-quality entrepreneurial ecosystems, such as the United States, where foreigners play key roles in driving innovation and business growth. For instance, the National Foundation for American Policy study indicated that 55% of American startups valued at over US$1 billion had immigrant founders, with nearly 64% of these companies being started by immigrants or their children, and about a quarter featuring founders who first came to the United States as international students.[124]

6.8 Concluding Comments

While some positive steps have been taken toward increasing investments in education, developing entrepreneurship and capital markets and reforming economic and political institutions, there exists an urgent need to intensify these efforts. Compared to the successful East Asian economies, G.C.C. economies have failed to take a sensible and considered approach to the development of human and physical capital. A heavy reliance on imported labor has led to a negative perception of many jobs as unattractive, due primarily to the fact that they are associated with poor working conditions. At the same time, employers try to gain as much as possible from the expatriate workers.

Entrepreneurship development faces various social issues and cultural challenges in the Arab region. An aspect of G.C.C. is "the holistic order" of the society, which tends to shift power balance toward antireform groups. Institutional change processes that go against Islam's logic face resistance. Islam's influence is readily apparent in politics (e.g., perception of no distance between Islam and democracy) and in business (e.g., commercial shariah). Moreover, Islam has provided credibility and added legitimacy to G.C.C. regimes because of absolute monarchies' possession of religious power. The preference for public sector jobs also acts as a barrier to entrepreneurship in the G.C.C. economies.

The above analysis indicates that transition to Western forms of capitalism is a big jump from the current institutional arrangements of G.C.C. economies. Progressive institutional changes are sustainable only if there is a "minimal dislocation". Put differently, the incorporation of a new behavior must have a minimally disruptive effect in the community. In this regard, transition of G.C.C. businesses to the principles of Islamic economics is likely to be a more feasible option than to Western forms of capitalism.

6.9 Discussion Questions

1. What are the key factors driving the growth of startup ecosystems in the G.C.C. region, and how do they compare to other global startup hubs?
2. How do the initiatives and reforms aimed at supporting S.M.E.s in the G.C.C. address the challenges these businesses face, and what additional measures could enhance their contribution to the economy?
3. How do cultural and legal restrictions on women's participation in business impact entrepreneurial activity in G.C.C. countries, and what measures could be taken to improve gender equality in the business environment?
4. What are the challenges and opportunities associated with Sharia-compliant financial systems for S.M.E.s in the G.C.C., and how do these systems affect their access to capital and growth prospects?

5. How might a decline in oil production and prices affect the current institutional balance within G.C.C. economies, and what potential reforms could emerge as a result of such economic shifts?
6. What role do sociocultural, financial and sector-specific barriers play in shaping the entrepreneurial landscape in G.C.C. countries, and how can these challenges be addressed to foster a more dynamic and innovative business environment?
7. How do sociocultural barriers, such as gender discrimination and negative perceptions of capitalism, impact the development of entrepreneurship in G.C.C. countries, and what strategies could be implemented to address these challenges?
8. In what ways do sector-specific barriers, such as the lack of professional esports players and restrictive regulations on foreign ownership, hinder the growth of specific industries in the G.C.C., and what can be done to create a more conducive environment for international investments and entrepreneurial innovation?

6.10 End of the Chapter Case: The Rise of Falcon: U.A.E.'s Emerging Leadership in A.I. Innovation

While the United States and China remain the foremost global players in A.I., the United Arab Emirates is increasingly making its mark in this competitive arena.[125] Falcon, the A.I. named after the U.A.E.'s national bird, is the best example to illustrate the rise of the U.A.E. as a global A.I. player. The Technology Innovation Institute (T.I.I.), which is a branch of the Abu Dhabi Government's Advanced Technology Research Council, was responsible for founding and developing it. Falcon cost several million dollars to train. Upon its public release in September 2023, it achieved significant acclaim, with some viewing it as the premier open-source large language model (L.L.M.) at that moment, outshining the top offerings from Meta and Google. Falcon represented a key milestone in the U.A.E.'s fast-growing presence in A.I.[126]

The model is multilingual and supports English, German, Spanish, French, Dutch, Italian, Romanian, Portuguese, Czech, Polish and Swedish.

Falcon 40B achieved the top rank on the open-source data science and machine learning platform Hugging Face leaderboard for large language models, standing out as the leading open-source A.I. model in the community.[127]

The Falcon 2, launched by the Technology Innovation Institute, is distinguished by its notable features. It is open-source, promoting broad access and collaborative improvement. The model includes advanced multilingual and multimodal capabilities.[128] Falcon 2 features 11 billion parameters and is available in two versions: a standard model and an optimized variant for

visual tasks (with innovative vision-to-language processing). Falcon 2 11B VLM is the first multimodal model, capable of processing images and generating text. It can identify objects in visuals, making it useful for healthcare (e.g., analyzing X-rays) and finance (e.g., analyzing charts and trends).[129] Performance-wise, it was reported to exceed Meta's Llama 3 8B and performs comparably to Google's Gemma 7B, as independently verified by the Hugging Face leaderboard.[130]

6.10.1 Falcon 40B Released as Open Source for Both Research and Commercial Use

The Advanced Technology Research Council (A.T.R.C.) announced that the initial Falcon model, Falcon 40B, was released under the Apache 2.0 software license, adhering to open-source standards. This large-scale A.I. model is available as open source for both research and commercial applications. With 40 billion parameters and trained on one trillion tokens, Falcon 40B is a foundational L.L.M. developed by the Technology Innovation Institute, a research center associated with the A.T.R.C.[131]

The Falcon 40B is a member of the Falcon family of large language models developed by the Technology Innovation Institute. This family also includes the Falcon 7B and Falcon 180B. Falcon 40B is specifically designed for a range of natural language generation tasks.[132]

6.10.2 Strategic Advantages

Highlighting their strategic advantages, Emirati officials point to substantial financial resources for cutting-edge computing hardware.[133] For instance, to train their 180 billion parameter model, the Falcon team used transformers and an extensive array of 4,000 GPUs.[134]

Other factors include a robust energy infrastructure supported by oil, natural gas and solar power that facilitates the construction of new data centers.[135] The country also has an appealing environment for top researchers.

By early 2024, the A.T.R.C. had established a comprehensive R&D ecosystem with 850+ researchers from more than 70 nations.[136] As of June 2024, T.I.I.'s A.I. Cross-Center Unit comprised more than 40 A.I. scientists.[137]

The U.A.E.'s consistent sunshine and tax-free status are seen as strong incentives for high-caliber talent, even though the majority of the foreign workforce is employed in low-wage jobs. The U.A.E. has dedicated the last two decades to digitizing its government services and takes a more lenient approach than many Western nations in using anonymized citizen data for A.I. training. The country's autocratic, state-capitalist system is seen as beneficial, providing the capacity to swiftly mobilize its considerable resources for what it views as a transformative initiative.[138]

6.10.3 Commercializing Falcon

In 2023, the U.A.E. Government's A.T.R.C. established AI71, an A.I. company aimed at commercializing the Falcon model across medical, educational and legal sectors. According to the press release, AI71 will leverage extensive anonymized data from these sectors, providing a significant edge over other A.I. markets due to the U.A.E.'s highly digitized and advanced e-infrastructure.[139] In February, the T.I.I. launched the non-profit Falcon Foundation to advance open-source generative A.I. models and build sustainable ecosystems. T.I.I. will contribute US$300 million to support these projects. Announced at the World Governments Summit 2024, the foundation aims to promote transparency and collaboration in A.I. development.[140]

One method open-source companies use to generate revenue is by developing enterprise or commercial versions of their software that include extra features or support, and then selling licenses for these advanced editions.[141] The Technology Innovation Institute launched a call for proposals in mid-2024, seeking scientists, researchers and S.M.E. entrepreneurs to deploy Falcon 40B for cutting-edge applications. T.I.I. supports groundbreaking project ideas by granting access to training compute power, seen as a strategic investment. This compute power enhances developers' ability to manage complex, resource-intensive tasks more effectively. By utilizing Falcon 40B, the leading global open-source L.L.M., developers can push boundaries, innovate swiftly and explore new possibilities in A.I. solutions.[142]

The A.T.R.C. of the U.A.E. and Uzbekistan's Ministry of Digital Technologies formalized their partnership in February 2024 through a Memorandum of Understanding. This collaboration is designed to incorporate A.T.R.C.'s Falcon A.I. models into various sectors in Uzbekistan, including technology and government services. As part of the agreement, Uzbekistan will encourage the use of Falcon L.L.M.s and Falcon-powered solutions, support the Falcon Foundation and contribute to the development of open-source Falcon models, further extending Falcon's international influence.[143] The A.T.R.C. and the Government of the Republic of Serbia also established a Memorandum of Understanding to integrate Falcon A.I. models into various Serbian sectors, support the Falcon Foundation and contribute to the development of open-source Falcon models.[144]

Notes

1 ASDA'A BCW. (2023, July 18). *Nearly half of Arab youth aspire to start their own business in the next five years*. https://www.bcw-global.com/newsroom/middle-east/nearly-half-of-arab-youth-aspire-to-start-their-own-business-in-the-next-five-years

2 Trading Economics. (2024). *United Arab Emirates exports*. https://tradingeconomics.com/united-arab-emirates/exports

3 Elsharnouby, T. H., Elbanna, S., Farha, A.A., et al. (2024). Exploring critical internal enablers to SMEs export performance: evidence from Qatar. *Humanities and Social Sciences Communications*, *11*, 428. https://doi.org/10.1057/s41599-024-02845-5
4 El Haddad, F. (n.d.). *Small and medium enterprises in Qatar*. Clyde & Co LLP. https://www.inhousecommunity.com/wp-content/uploads/2016/07/v10i2_jur_Qatar.pdf
5 Dojan, S.-A. (2024, January 17). *Oman launches $5.2bn Future Fund for FDI and SMEs*. Investment Monitor. https://www.investmentmonitor.ai/news/oman-launches-future-fund-fdi-sme/
6 Baumöl, W. S., Litan, R. E., & Schramm, C. J. (2007). *Good capitalism, bad capitalism, and the economics of growth and prosperity*. Yale University Press.
7 Abdel Azim, N. (2023, November 23). *Why has Kuwait's startup ecosystem fallen behind?* Wamda. https://www.wamda.com/2023/11/kuwaits-startup-ecosystem-fallen
8 Schneider, F. (2024, May 31). *GCC economy & innovation* [Commentary]. Gulf International Forum. https://gulfif.org/obstacles-to-unleashing-the-gulfs-entrepreneurial-potential/
9 SME10X. (2022, October 9). *Riyadh, Dubai, and Kuwait were named top three cities in MENA for startups*. SME10X. https://www.sme10x.com/10x-industry/riyadh-dubai-and-kuwait-were-named-top-three-cities-in-mena-for-startups
10 SME10X. (2022, October 9). *Riyadh, Dubai, and Kuwait were named top three cities in MENA for startups*. SME10X. https://www.sme10x.com/10x-industry/riyadh-dubai-and-kuwait-were-named-top-three-cities-in-mena-for-startups
11 Stauffer, D. (2023, November 16). *How the Saudi startup ecosystem was built*. Dealroom. https://dealroom.co/blog/ecosystem-spotlight-code-saudi-arabia
12 Tracxn. (2024, July 22). *List of 11 unicorn startups in United Arab Emirates*. Tracxn. https://tracxn.com/d/unicorns/unicorns-in-united-arab-emirates/__3OiAv3pREWpxnktEnzWFLJSYAQglJ5zhPRSqNSmDIKs
13 Tracxn. (2024, July 22). *List of 2 unicorn startups in Saudi Arabia (Jul 2024)*. https://tracxn.com/d/unicorns/unicorns-in-saudi-arabia/___pcaRzSx7V6lM1peTKubyaIgeBwBLDSZ-hRILoZ2k4g
14 Fast Company. (2023, October 30). *Not enough unicorns in MENA? Here's what it will take to produce more*. https://fastcompanyme.com/news/not-enough-unicorns-in-mena-heres-what-it-will-take-to-produce-more/
15 Dutton, J. (2024, March 23). *Middle East sees 23% drop in VC funding: Qatar, Bahrain, UAE hardest hit*. Al-Monitor. https://www.al-monitor.com/originals/2024/03/middle-east-sees-23-drop-vc-funding-qatar-bahrain-uae-hardest-hit
16 Entrepreneur Middle East Staff. (2024, April 9). *Enabling entrepreneurs: Invest Qatar launches Startup Qatar*. Entrepreneur. https://www.entrepreneur.com/en-ae/starting-a-business/enabling-entrepreneurs-invest-qatar-launches-startup-qatar/472332
17 Kene-Okafor, T. (2024, March 4). *Qatar reportedly has a $100M fund for startups*. TechCrunch. https://techcrunch.com/2024/03/04/qatar-reportedly-has-a-100m-fund-for-startups/
18 Dutton, J. (2024, February 27). *Qatar's first VC fund of $1B expected to 'fuel startup ecosystem in region'*. Al-Monitor. https://www.al-monitor.com/originals/2024/02/qatars-first-vc-fund-1b-expected-fuel-startup-ecosystem-region
19 Abdel Azim, N. (2023, November 23). *Why has Kuwait's startup ecosystem fallen behind?* Wamda. https://www.wamda.com/2023/11/kuwaits-startup-ecosystem-fallen

20 Ferguson, S., Hoover, M., & Lucy, I. (2024, May 20). *Small business data center*. U.S. Chamber of Commerce. https://www.uschamber.com/small-business/small-business-data-center
21 Cabral, A. R. (2022, October 13). *UAE launches updated programme to develop 8,000 SMEs and start-ups by 2030*. The National. https://www.thenationalnews.com/business/start-ups/2022/10/13/uae-launches-updated-programme-to-develop-8000-smes-and-20-start-ups-with-1bn-valuation/
22 Bahrain News Agency. (2023, June 26). *Bahrain SME sector achieves remarkable growth of 14%*. Bahrain News Agency. https://www.bna.bh/en/news?cms=q8FmFJgiscL2fwIzON1%2BDkIz%2FCTA%2B0J%2F2D6UpmUDODM%3D
23 International Finance Corporation (IFC). (2023, May 10). *IFC, Government of Bahrain support smaller businesses with new web platform*. International Finance Corporation. https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=17974
24 El Haddad, F. (n.d.). *Small and medium enterprises in Qatar*. Clyde & Co LLP. https://www.inhousecommunity.com/wp-content/uploads/2016/07/v10i2_jur_Qatar.pdf
25 Arab News. (2024, March 14). Omani authority injects $63.9m into 244 SMEs across different sectors. *Arab News*. https://arab.news/6gusc
26 Qatar Development Bank. (2017) Strategic Trade Development Roadmap for SME Competitiveness in Qatar 2018–2022., https://www.qdb.qa/en/Documents/STDR_EN.pdf
27 International Labour Organization. (2019, October). *The power of small: Unlocking the potential of SMEs*. https://webapps.ilo.org/infostories/en-GB/Stories/Employment/SMEs#engines
28 TradeArabia. (2018, September 9). *Bahrain SMEs need to improve accounting standards: Study*. TradeArabia. https://www.tradearabia.com/news/BANKING_349085.html
29 Callen, T. (2024, January 31). *Four indicators to track Saudi reform progress*. Blog Post. https://agsiw.org/four-indicators-to-track-saudi-reform-progress/
30 Abouther. (2023, November 25). *The growth of Saudi women entrepreneurs*. Abouther. https://www.abouther.com/node/6886/people/features/growth-saudi-women-entrepreneurs
31 El-Shaeri, N. (2024, April 12). Saudi Arabia a beacon for female entrepreneurship, according to industry leaders. *Arab News*. https://www.arabnews.com/node/2491916/business-economy
32 El-Shaeri, N. (2024, April 12). Saudi Arabia a beacon for female entrepreneurship, according to industry leaders. *Arab News*. https://www.arabnews.com/node/2491916/business-economy
33 Zweynert, J., & Goldschmidt, N. (2006). The two transitions in Central and Eastern Europe as Processes of Institutional Transplantation. *Journal of Economic Issues*, *40*(4), 895–918. https://doi.org/10.1080/00213624.2006.11506966
34 Zoubir, Y. H. (1996). Algerian Islamists' conception of democracy. *Arab Studies Quarterly*, *18*(3), 65–85.
35 Heftier, R. W. (2006). Islamic economics and global capitalism. *Society*, *44*(1), 16–22..
36 Chamber of Commerce of Ashraqia. (n.d.). About Kingdom. Retrieved July 29, 2024, from https://www.chamber.org.sa/sites/English/AboutKingdom
37 Theil, S. (2007). Teaching entrepreneurship in the Arab world. *Newsweek International*, 14 August, German Marshall Fund of the United States www.gmfus.org/publications/article.cfm?id=332

38 Abu Sulaib, F. M. (2020). The role of religion in the politics of Saudi Arabia. *Contemporary Arab Affairs*, *13*(3), 51–78.
39 Hudson, M. C. (2002). Imperial headaches: Managing unruly regions in an age of globalization. *Middle East Policy*, *9*(4), 61–74.
40 Kéchichian, J.A. 2004. Democratization in gulf monarchies: A new challenge to the GCC"; Power, C. 2003. Hillary Clinton stand back", *Newsweek*, 10 November, 31–32.
41 Hudson, M. C. (2002). Imperial headaches: Managing unruly regions in an age of globalization. *Middle East Policy*, *9*(4), 61–74; Jamal, A. A. (2006). Reassessing support for Islam and democracy in the Arab World? Evidence from Egypt and Jordan. *World Affairs*, *169*(2), 51–63.
42 Our World in Data. (2024). *Political participation index*. Retrieved May 22, 2024, from https://ourworldindata.org/grapher/political-participation-index-eiu?tab=chart&country=ARG~AUS~BWA~CHN~ARE~SAU~QAT~OMN~KWT~BHR
43 Al Talei, R. (2021, December 14). *Why did GCC countries record disappointing results in the political participation index?* Carnegie Endowment for International Peace. https://carnegieendowment.org/sada/2021/12/why-did-gcc-countries-record-disappointing-results-in-the-political-participation-index?lang=en
44 BBC News. (2013, January 11). Saudi Arabia's king appoints women to Shura Council. https://www.bbc.com/news/world-middle-east-20986428
45 Admon, Y. (2013, June 21). *Women's rights in Saudi Arabia: Historic nomination of women to Shura Council – Alongside harsh action by regime against women's rights activists*. Middle East Media Research Institute. https://www.memri.org/reports/womens-rights-saudi-arabia-historic-nomination-women-shura-council-%E2%80%93-alongside-harsh-action#_edn23
46 Admon, Y. (2013, June 21). *Women's rights in Saudi Arabia: Historic nomination of women to Shura Council – Alongside harsh action by regime against women's rights activists*. Middle East Media Research Institute. https://www.memri.org/reports/womens-rights-saudi-arabia-historic-nomination-women-shura-council-%E2%80%93-alongside-harsh-action#_edn23
47 International Bank for Reconstruction and Development / The World Bank. (2023). *Women, business and the law 2023*. https://globalcompact.at/wp-content/uploads/2023/03/2023_Women_Business_Law.pdf
48 Amnesty International. (2024, March 22). Saudi Arabia to be appointed chair of UN's gender equality forum amid ongoing assault on women's rights. https://www.amnesty.org/en/latest/news/2024/03/saudi-arabia-to-be-appointed-chair-uns-gender-equality-forum-amid-ongoing-assault-on-womens-rights/#:~:text=%E2%80%9CSaudi%20Arabia's%202022%20Personal%20Status,women%20from%20gender%2Dbased%20violence
49 Monzer, L. (2023, March 10). *Women on a mission: MENA female entrepreneurs are making waves in the region*. Atlantic Council. https://www.atlanticcouncil.org/blogs/menasource/women-on-a-mission-mena-female-entrepreneurs-are-making-waves-in-the-region/
50 Why STEM fields don't attract more GCC Women. Tahseen Consulting. Retrieved September 8, 2021, from https://tahseen.ae/insights/why-stem-fields-dont-attract-more-gcc-women/
51 Wamda & TiE Dubai. (2022). *The gender gap in startup investment*. https://www.wamda.com/research/pdf/gender-gap-startup-investment
52 Hamid, T. (2022, October 12). *The gender gap in startup investment*. Wamda. https://www.wamda.com/2022/10/gender-gap-startup-investment

53 Brekke, T., & Larsen, M. (2020). Allah, villa, Volvo: Muslim professionals in the Nordic countries and their financial attitudes and practices. *Open Library of Humanities*, *6*(2), 5. https://doi.org/10.16995/olh.570
54 Elsonbaty, E., & Yousif, S. (2023, May 17). *Understanding Sharia transactions*. DLA Piper. https://www.dlapiper.com/en/insights/publications/middle-east-initiative-series/2023/understanding-sharia-transactions
55 Alam, N. (2015). Islamic finance: An opportunity for SME financing. www.ifac.org/global-knowledge-gateway/islamic-finance/discussion/islamic-finance-opportunity-sme-financing
56 Riyad Bank. (2024). *Islamic credit facilitation for start-ups*. https://www.riyadbank.com/business-banking/finance/monshaat/credit-facilitation-start-ups
57 Domat, C. (2024, January 1). *Islamic finance: Just for Muslim-majority nations?* Global Finance. https://gfmag.com/banking/islamic-finance-just-muslim-majority-nations/
58 Domat, C. (2024, January 1). *Islamic finance: Just for Muslim-majority nations?* Global Finance. https://gfmag.com/banking/islamic-finance-just-muslim-majority-nations/
59 Domat, C. (2024, January 1). *Islamic finance: Just for Muslim-majority nations?* Global Finance. https://gfmag.com/banking/islamic-finance-just-muslim-majority-nations/
60 Campbell, J. L. (2004) Institutional Change and Globalization, Princeton, NJ, Princeton. University Press.
61 RT. (2014, January 15). *Saudi women celebrate: Monitoring system of cross-border movements suspended*. https://www.rt.com/news/saudi-suspends-women-travel-619/
62 Bureau of Democracy, Human Rights, and Labor. (n.d.). *Human rights report: Saudi Arabia*. U.S. Department of State. https://www.state.gov/report/custom/ea29757544/
63 Women's Post. (2023, December 23). *Reforms allow women in Saudi Arabia to be entrepreneurs*. Women's Post. https://womenspost.ca/reforms-allow-women-in-saudi-arabia-to-be-entrepreneurs/
64 International Bank for Reconstruction and Development / The World Bank. (2023). *Women, business and the law 2023*. https://globalcompact.at/wp-content/uploads/2023/03/2023_Women_Business_Law.pdf
65 French, N. (2023, September 5). *Saudi reforms are softening Islam's role, but critics warn the kingdom will still take a hard line against dissent*. The Conversation. https://theconversation.com/saudi-reforms-are-softening-islams-role-but-critics-warn-the-kingdom-will-still-take-a-hard-line-against-dissent-210537
66 Bloomberg. (2016). Qatar financial centre authority appoints Haitham Al-Salama as chief economic adviser. www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=22549074
67 Reuters. (2016). New Qatar financial city will be open to non-licensed foreign firms. www.thenational.ae/business/new-qatar-financial-city-will-be-open-to-non-licensed-foreign-firms-1.207577
68 U.S. Department of State. (2015). 2015 investment climate statement Qatar. www.state.gov/e/eb/rls/othr/ics/2015/241709.htm
69 The European. (2017). Qatar financial centre: A platform for growth. www.the-european.eu/story-12529/qatar-financial-centre-a-platform-for-growth.html
70 Latham & Watkins LLP. (2013). Data protection and privacy laws in the middle East. www.jdsupra.com/legalnews/data-protection-and-privacy-laws-in-the-24928/

71 Lorenzo-Perez, M., Terrace, R., Fath, K. R., Morrison, P. R., & Peramatukorn, T. (2023, November 23). *Routes to reorganisation: A comparative study of the insolvency procedures available in the UAE, KSA, US, and England and Wales*. Restructuring GlobalView. Squire Patton Boggs (US) LLP. https://natlawreview.com/article/routes-reorganisation-comparative-study-insolvency-procedures-available-uae-ksa-us
72 Gulf Business. (2017). Unravelling the UAE's bankruptcy law. http://gulfbusiness.com/unravelling-uaes-bankruptcy-law/
73 Gulf Business. (2017). Unravelling the UAE's bankruptcy law. http://gulfbusiness.com/unravelling-uaes-bankruptcy-law/
74 Lorenzo-Perez, M., Terrace, R., Fath, K. R., Morrison, P. R., & Peramatukorn, T. (2023, November 23). *Routes to reorganisation: A comparative study of the insolvency procedures available in the UAE, KSA, US, and England and Wales*. Restructuring GlobalView. Squire Patton Boggs (US) LLP. https://natlawreview.com/article/routes-reorganisation-comparative-study-insolvency-procedures-available-uae-ksa-us
75 Lorenzo-Perez, M., Terrace, R., Fath, K. R., Morrison, P. R., & Peramatukorn, T. (2023, November 23). *Routes to reorganisation: A comparative study of the insolvency procedures available in the UAE, KSA, US, and England and Wales*. Restructuring GlobalView. Squire Patton Boggs (US) LLP. https://natlawreview.com/article/routes-reorganisation-comparative-study-insolvency-procedures-available-uae-ksa-us
76 Semcow, K., (2018), "Bahrain launches major fintech hub", March 6, at https://www.thenational.ae/business/bahrain-launches-major-fintech-hub-1.710688.
77 Perrigo, B. (2024, March 20). *The UAE is on a mission to become an AI power*. TIME. https://time.com/6958369/artificial-intelligence-united-arab-emirates/
78 Santosdiaz, R. (2020, August 29). "Artificial Intelligence Can Contribute $135 Billion to This Country's GDP by 2030. *The Fintech Times*. https://thefintechtimes.com/artificial-intelligence-can-contribute-135-billion-to-this-countrys-gdp-by-2030/
79 Malin, C. (2020, October 21). Saudi national AI strategy sets $20 billion investment target. Carringtonmalin.com. https://www.carringtonmalin.com/2020/10/21/saudi-national-ai-strategy-announced-with-investment-target-of-20-billion/
80 Stauffer, D. (2023, November 16). *How the Saudi startup ecosystem was built*. Dealroom. https://dealroom.co/blog/ecosystem-spotlight-code-saudi-arabia
81 Dutton, J. (2024, March 20). *With $40B fund, Saudi Arabia looks to become world leader in AI*. Al-Monitor. https://www.al-monitor.com/originals/2024/03/40b-fund-saudi-arabia-looks-become-world-leader-ai
82 Bartenstein, B. (2024, March 11). *Abu Dhabi targets $100 billion AUM for AI investment firm*. Bloomberg. https://www.bloomberg.com/news/articles/2024-03-11/abu-dhabi-said-to-target-100-billion-aum-for-ai-investment-firm
83 Monsha'at. (2023, February 21). *How Saudi Arabia is fostering a supportive startup ecosystem*. Harvard Business Review. https://hbr.org/sponsored/2023/02/how-saudi-arabia-is-fostering-a-supportive-startup-ecosystem
84 Aad, E. (2023, April 24). *The rise of entrepreneurship in Saudi Arabia: A transformative landscape*. Roland Berger. https://www.rolandberger.com/en/Insights/Publications/The-Rise-of-Entrepreneurship-in-Saudi-Arabia-A-Transformative-Landscape.html

85 The global AI agenda: The Middle East and Africa. MIT Technology Review Insights, June 19, 2020. https://www.technologyreview.com/2020/06/19/1004121/the-global-ai-agenda-the-middle-east-and-africa/
86 Malin, C. (2020, October 21). Saudi national AI strategy sets $20 billion investment target. Carringtonmalin.com. https://www.carringtonmalin.com/2020/10/21/saudi-national-ai-strategy-announced-with-investment-target-of-20-billion/
87 Santosdiaz, R. (2020, November 7). Artificial intelligence strategy in the Middle East. *The Fintech Times*. https://thefintechtimes.com/artificial-intelligence-strategy-in-the-middle-east/
88 Santosdiaz, R. (2020, November 7). Artificial intelligence strategy in the Middle East. *The Fintech Times*. https://thefintechtimes.com/artificial-intelligence-strategy-in-the-middle-east/
89 Bricker, A. (2021). *Q&A: How Bahrain plans to be a regional AI leader*. CIO. https://www.cio.com/article/3600188/qanda-how-bahrain-plans-to-be-a-regional-ai-leader.html
90 International Monetary Fund. (2024, June 14). *Saudi Arabia: Concluding statement of the 2024 Article IV mission*. https://www.imf.org/en/News/Articles/2024/06/13/mission-concluding-statement-saudi-arabia-concluding-statement-of-the-2024-article-iv-mission#:~:text=Oil%20GDP%20contracted%20by%209,percent%20contraction%20in%20overall%20GDP
91 Mati, A., & Rehman, S. (2023, September 28). *Saudi Arabia's economy grows as it diversifies*. International Monetary Fund. https://www.imf.org/en/News/Articles/2023/09/28/cf-saudi-arabias-economy-grows-as-it-diversifies
92 Kikeri, S., & Nellis, J. (2004). An assessment of privatization. *The World Bank Research Observer*, *19*(1), 87.
93 Reuters. (2017, January 9). *Saudi prince readies strategy if clerics oppose reforms-report*. https://www.reuters.com/article/world/saudi-prince-readies-strategy-if-clerics-oppose-reforms-report-idUSKBN14T1HZ/
94 Narayanan, N. (2024, December 4). *Saudi Arabia boosts R&D spending to $6bn in 2023 amid Vision 2030 push*. Arab News. Retrieved from https://www.arabnews.com/node/2581035/business-economy
95 Trading Economics. (n.d.). *United Arab Emirates - Research and development expenditure (% of GDP)*. https://tradingeconomics.com/united-arab-emirates/research-and-development-expenditure-percent-of-gdp-wb-data.html
96 Radwan, I., & Malik, A. (2021, August 25). *Tackling the public sector wage bill in the GCC*. World Bank. https://blogs.worldbank.org/en/governance/tackling-public-sector-wage-bill-gcc
97 Gupta, Z. S. (2021, February 15). *Expat exodus adds to Gulf region's economic diversification challenges*. S&P Global. https://www.spglobal.com/ratings/en/research/articles/210215-expat-exodus-adds-to-gulf-region-s-economic-diversification-challenges-11800970
98 Fast Company. (2023, October 30). *Not enough unicorns in MENA? Here's what it will take to produce more*. https://fastcompanyme.com/news/not-enough-unicorns-in-mena-heres-what-it-will-take-to-produce-more/
99 Nair, A. (2024, July 1). *Saudi Arabia, UAE bet on semiconductor chips to power post-oil future*. Bloomberg. https://www.bloomberg.com/news/articles/2024-07-01/saudi-arabia-uae-bet-on-semiconductor-chips-to-power-post-oil-future
100 Global Finance. (2024, July 29). *GCC: A magnet for global capital*. Global Finance. https://gfmag.com/economics-policy-regulation/gcc-fdi-global-capital-investment/

101 Nair, A. (2024, July 1). *Saudi Arabia, UAE bet on semiconductor chips to power post-oil future*. Bloomberg. https://www.bloomberg.com/news/articles/2024-07-01/saudi-arabia-uae-bet-on-semiconductor-chips-to-power-post-oil-future
102 Smith, M. (2021, January 23). *The Middle East's other revolution: Tech trends from Morocco to Oman*. Wired. https://wired.me/technology/middle-east-technology-trends-from-morocco-to-oman/
103 Dojan, S.-A. (2024, January 17). *Oman launches $5.2bn Future Fund for FDI and SMEs*. Investment Monitor. https://www.investmentmonitor.ai/news/oman-launches-future-fund-fdi-sme/
104 Augustine, B. D. (2016). Venture capitalists come to the rescue of GCC SMEs. http://gulfnews.com/business/sectors/banking/venture-capitalists-come-to-the-rescue-of-gcc-smes-1.1871070
105 Funding Souq Editorial Team. (2024, April 15). *Saudi Arabia's SME financing programs*. Funding Souq. https://fundingsouq.com/sa/en/blog/saudi-arabia-sme-financing-program/
106 Das Augustine, B., & Rahman, F. (2024, February 5). Can GCC markets sustain the IPO momentum in 2024? *The National News*. https://www.thenationalnews.com/business/markets/2024/02/06/can-gcc-markets-sustain-the-ipos-momentum-in-2024/
107 Press Release. (2024, January 16). *GCC IPOs raise $10.1 billion during FY 2023, a decline of 55% YoY*. ZAWYA. https://www.zawya.com/en/press-release/research-and-studies/gcc-ipos-raise-101bln-during-fy-2023-a-decline-of-55-yoy-cbsbq1cd
108 Das Augustine, B., & Rahman, F. (2024, February 5). Can GCC markets sustain the IPO momentum in 2024? *The National News*. https://www.thenationalnews.com/business/markets/2024/02/06/can-gcc-markets-sustain-the-ipos-momentum-in-2024/
109 Linnane, C. (2024, July 29). *U.S. IPO market's $23.2 billion in year-to-date proceeds exceeds the $19.4 billion raised for all of 2023*. MarketWatch. https://www.marketwatch.com/amp/story/u-s-ipo-markets-23-2-billion-in-year-to-date-proceeds-exceeds-the-19-4-billion-raised-for-all-of-2023-52a34b9c
110 ZAWYA. (2024, July 30). *GCC debt capital market to reach $1 trillion mark by next year: Fitch*. ZAWYA. https://www.zawya.com/en/economy/gcc/gcc-debt-capital-market-to-reach-1trln-mark-by-next-year-fitch-lemc9j05
111 BBVA CIB. (2024, May 20). *The debt capital market (DCM): What is it and how does it work?* BBVA CIB. https://www.bbvacib.com/insights/news/the-debt-capital-market-dcm-what-is-it-and-how-does-it-work/
112 Arab Center Washington DC. (2022, April 22). *Going backward is not an option: The challenge of equality for Arab women*. Arab Center Washington DC. https://arabcenterdc.org/resource/going-backward-is-not-an-option-the-challenge-of-equality-for-arab-women/
113 World Bank. (2020). *Economy profile: United Arab Emirates*. https://www.doingbusiness.org/content/dam/doingBusiness/country/u/united-arab-emirates/ARE.pdf
114 Saliba, I. (2023). *Shrinking spaces in the Middle East and North Africa: Supporting civil society resilience* (IDOS Policy Brief 17/2023). Deutsches Institut für Entwicklungspolitik (IDOS). https://www.idos-research.de/uploads/media/PB_17.2023.pdf
115 UN Women. (2020). *Women's civil society organizations of the future*. UN Women. https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Trust%20Funds/FundGenderEquality/FGE%20Brochure%20Womens%20CSOs%20of%20the%20Future_2020_web.pdf

116 Heftier, R. W. (2006). Islamic economics and global capitalism. *Society*, *44*(1), 16–22.
117 Abdel Azim, N. (2023, November 23). *Why has Kuwait's startup ecosystem fallen behind?* Wamda. https://www.wamda.com/2023/11/kuwaits-startup-ecosystem-fallen
118 The global AI agenda: The Middle East and Africa. MIT Technology Review Insights, June 19, 2020. https://www.technologyreview.com/2020/06/19/1004121/the-global-ai-agenda-the-middle-east-and-africa/
119 Fitch, A. (2020). BLAST terminates deal with Saudi city NEOM. https://esportsinsider.com/2020/08/blast-neom-terminated
120 Simon, G. (1998). Who goes where? *UNESCO Courier*, *51*(11), 23–25.
121 Longva, A. N. (1999). Keeping migrant workers in check: The Kafala system in the Gulf. *Middle East Report*, 211. https://merip.org/1999/06/keeping-migrant-workers-in-check/
122 Lucas, R. E. B. (2001). Diaspora and development: Highly skilled migrants from East Asia. Report prepared for the World Bank, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.147.6620&rep=rep1&type=pdf
123 Abdel Azim, N. (2023, November 23). *Why has Kuwait's startup ecosystem fallen behind?* Wamda. https://www.wamda.com/2023/11/kuwaits-startup-ecosystem-fallen
124 Anderson, S. (2024, May 23). Immigrant entrepreneurs bring jobs and innovation, new research shows. *Forbes*. https://www.forbes.com/sites/stuartanderson/2024/05/23/immigrant-entrepreneurs-bring-jobs-and-innovation-new-research-shows/
125 Perrigo, B. (2024, March 20). *The UAE is on a mission to become an AI power*. TIME. https://time.com/6958369/artificial-intelligence-united-arab-emirates/
126 Perrigo, B. (2024, March 20). *The UAE is on a mission to become an AI power*. TIME. https://time.com/6958369/artificial-intelligence-united-arab-emirates/
127 Technology Innovation Institute. (2023, June 7). *Falcon 40B: World's top AI model rewards most creative use cases in call for proposals with training compute power*. https://www.tii.ae/news/falcon-40b-worlds-top-ai-model-rewards-most-creative-use-cases-call-proposals-training-compute
128 Business Wire. (2024, May 13). *Falcon 2: UAE's Technology Innovation Institute releases new AI model series, outperforming Meta's new Llama 3*. https://www.businesswire.com/news/home/20240513516248/en/Falcon-2-UAE%E2%80%99s-Technology-Innovation-Institute-Releases-New-AI-Model-Series-Outperforming-Meta%E2%80%99s-New-Llama-3
129 Wodecki, B. (2024, May 16). New Falcon AI model: A small yet powerful challenger to Meta's Llama 3. *AI Business*. https://aibusiness.com/nlp/new-falcon-ai-model-a-small-yet-powerful-challenger-to-meta-s-llama-3
130 Business Wire. (2024, May 13). *Falcon 2: UAE's Technology Innovation Institute releases new AI model series, outperforming Meta's new Llama 3*. https://www.businesswire.com/news/home/20240513516248/en/Falcon-2-UAE%E2%80%99s-Technology-Innovation-Institute-Releases-New-AI-Model-Series-Outperforming-Meta%E2%80%99s-New-Llama-3
131 Barrington, L. (2023, May 25). *Abu Dhabi makes its Falcon 40B AI model open source*. Reuters. https://www.reuters.com/technology/abu-dhabi-makes-its-falcon-40b-ai-model-open-source-2023-05-25/

132 DataCamp. (2023, October). *Introduction to Falcon 40B: Architecture, training data, and features*. https://www.datacamp.com/tutorial/introduction-to-falcon-40b
133 Perrigo, B. (2024, March 20). *The UAE is on a mission to become an AI power*. TIME. https://time.com/6958369/artificial-intelligence-united-arab-emirates/
134 Williams, A. (2024, May 30). *How training data differentiates Falcon, the LLM from the UAE*. The New Stack Makers. https://thenewstack.io/how-training-data-differentiates-falcon-the-llm-from-the-uae/?utm_referrer=https%3A%2F%2Fwww.google.com%2F
135 Perrigo, B. (2024, March 20). *The UAE is on a mission to become an AI power*. TIME. https://time.com/6958369/artificial-intelligence-united-arab-emirates/
136 Antara News. (2024, February 13). UAE's ATRC launches global tech R&D platform at WGS 2024: Allocates US$200 million fund to accelerate innovation for developing nations. https://en.antaranews.com/news/305784/uaes-atrc-launches-global-tech-rd-platform-at-wgs-2024-allocates-us200-mn-fund-to-accelerate-innovation-for-developing-nations
137 Technology Innovation Institute. (2023, June 7). *Falcon 40B: World's top AI model rewards most creative use cases in call for proposals with training compute power*. https://www.tii.ae/news/falcon-40b-worlds-top-ai-model-rewards-most-creative-use-cases-call-proposals-training-compute
138 Perrigo, B. (2024, March 20). *The UAE is on a mission to become an AI power*. TIME. https://time.com/6958369/artificial-intelligence-united-arab-emirates/
139 Kaur, G. (2024, May 15). *UAE gets serious about dominating in GenAI with launch of model Falcon*. Fierce Network. https://www.fierce-network.com/modernization/uae-launches-new-version-genai-model-falcon
140 Business Wire. (2024, February 13). UAE's Technology Innovation Institute launches 'Falcon Foundation' to champion open-sourcing of generative AI models. https://www.businesswire.com/news/home/20240213101024/en/UAE%E2%80%99s-Technology-Innovation-Institute-Launches-%E2%80%98Falcon-Foundation%E2%80%99-to-Champion-Open-sourcing-of-Generative-AI-Models
141 Tao, J. (2023, February 2). *How to make open source profitable*. Forbes Technology Council. Forbes. https://www.forbes.com/sites/forbestechcouncil/2023/02/02/how-to-make-open-source-profitable/?sh=1b9fcd1e7e57
142 Technology Innovation Institute. (2023, June 7). *Falcon 40B: World's top AI model rewards most creative use cases in call for proposals with training compute power*. https://www.tii.ae/news/falcon-40b-worlds-top-ai-model-rewards-most-creative-use-cases-call-proposals-training-compute
143 Business Wire. (2024, February 19). *Uzbekistan partners with UAE's Advanced Technology Research Council to accelerate Falcon AI adoption*. https://www.businesswire.com/news/home/20240219748628/en/Uzbekistan-Partners-With-UAE%E2%80%99s-Advanced-Technology-Research-Council-to-Accelerate-Falcon-AI-Adoption
144 AETOSWire. (2024, February 14). *Serbia signs with UAE's ATRC to encourage use of Falcon AI models at WGS 2024*. Business Wire. https://www.businesswire.com/news/home/20240214719869/en/Serbia-Signs-with-UAE%E2%80%99s-ATRC-to-Encourage-Use-of-Falcon-AI-Models-at-WGS-2024

Chapter 7

Entrepreneurship in Africa

This chapter's objectives are:

1. To demonstrate an understanding of the natures of entrepreneurial activities in African economies.
2. To analyze the facilitators and hindrances of entrepreneurship in African economies and compare them with other regions of the world.
3. To evaluate some of the successful as well as unsuccessful activities related to entrepreneurship in African economies.
4. To evaluate the roles of foreign companies in driving entrepreneurship development in Africa and their roles to the local economy.
5. To demonstrate an understanding of Western response to the low level of entrepreneurial activities in Africa.

7.1 Introduction

Africa is arguably the richest continent in terms of the stock of minerals and natural resources. However, the continent's entrepreneurial performance has been weak. Although entrepreneurial activities arguably existed in Africa before colonization, such activities slowed down since the colonial period.[1] It is argued that Africa's entrepreneurial failure can be attributed to factors such as the lack of sensitivity of raw agricultural products to international prices, lack of human and financial capital and government policies that are not entrepreneurship-friendly.[2] Other challenges include poor infrastructure, such as limited access to electricity and inadequate road networks, which hinder economic development and connectivity (Figure 7.1). Productive entrepreneurship in African economies has also been hindered by a lack of quality standards and inappropriate trade policies.

However, there are many successful entrepreneurs in Africa who come from various demographic, cultural and educational backgrounds. Studies have also found the existence of many competitive small businesses in the region. Some successful businesses in the continent have found creative

DOI: 10.4324/9781003565154-7

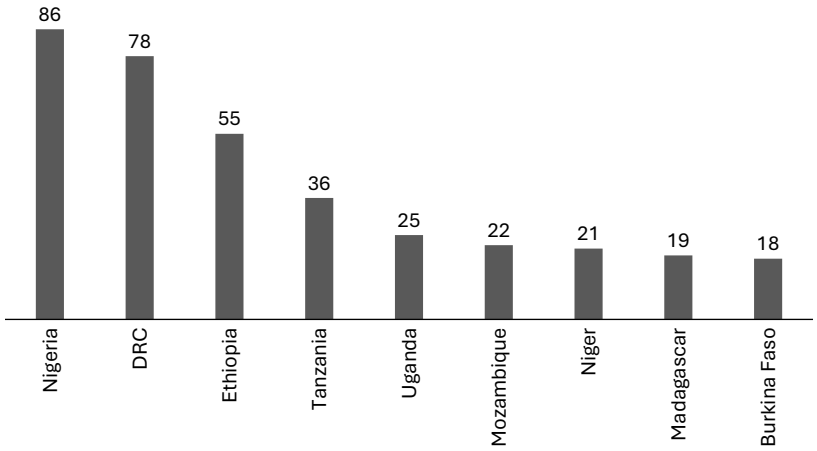

Figure 7.1 Population without Access to Electricity (million, 2022)

ways to overcome economic, social, political and institutional barriers to entrepreneurship. For instance, Mazzuma, a Ghana-based mobile-payments startup, combines mobile money, blockchain and artificial intelligence (A.I.) to create an innovative payment ecosystem. By late 2022, Mazzuma had processed over US$150 million in transactions, showcasing its rapid growth and impact in Africa's fintech sector.[3] MazzumaGPT, launched by Mazzuma in 2022, serves as an A.I. tool specifically crafted to generate smart contract code for Web3 decentralized applications (https://blogs.nvidia.com/blog/generative-ai-startups-africa-middle-east/). One of the primary objectives of MazzumaGPT is to transform remittances in emerging markets (https://tinyurl.com/mwtf3bz8). During its inaugural month, approximately 400 developers from around 70 countries utilized MazzumaGPT, with over 10,000 developers awaiting access on its waitlist (https://afridigest.com/generative-ai-in-africa/). While developers have access to various other A.I. tools such as ChatGPT, GitHub Copilot and Google's Gemini (formerly known as Bard), thanks to the rapid expansion of generative artificial intelligence (GAI), MazzumaGPT stands out by its specialization in Web3 code, offering greater precision for applications involving blockchain technology. MazzumaGPT integrates Plutus and Solidity, two Web3 programming languages, facilitating the creation of smart contract code through natural language prompts. Priced at just US$1.99, it offers a cost-effective and user-friendly solution for developing fully operational Web3 protocols. With over 10,000 developers already on its waiting list, MazzumaGPT demonstrates significant demand and accessibility in the market (https://

zycrypto.com/mazzuma-introduces-ai-powered-smart-contract-generator-mazzumagpt/).

7.2 Revitalizing Africa's Entrepreneurial Landscape: Addressing Challenges and Unlocking Opportunities

Observers have noted that while entrepreneurial activities existed in Africa before colonization such activities have slowed down since the colonial period.[4] Most African economies have failed to productively utilize their natural and human resources.

In 2023, over 25% of young people in Africa's economies were neither employed, enrolled in education nor engaged in training.[5] The African Development Bank estimates that Africa's workforce grows by 12 million youths annually, with only 3.1 million jobs available, thus requiring the creation of 1.7 million additional jobs every month to meet employment needs.[6]

A lack of jobs and high prices were major factors that contributed to mass protests, leading to the Arab Spring in 2011, which affected some economies in Africa.[7] South Africa, the most prosperous economy in Sub-Saharan Africa (S.S.A.), faces a significant youth unemployment crisis, with a staggering 45.5% unemployment rate among individuals aged 15–34 in the first quarter of 2024. This figure starkly contrasts with the national average of 32.9%, highlighting the disproportionate challenges young people encounter in securing employment.[8]

According to the World Bank, the share of Africans that are poor declined from 56% in 1990 to 43% in 2012. However, due to population growth, the number of poor people has increased. For instance, about 330 million Africans were estimated to be living in extreme poverty in 2012 compared to 280 million in 1990.[9] The World Bank projects that "the world's extreme poor will be increasingly concentrated in Africa".[10]

Although some African economies are growing fast, because of high-income inequality the population at the bottom of the economic pyramid has seen virtually no improvement in living standards. Among the world's ten countries with the highest income inequalities, seven are in Africa.[11] South Africa, Namibia, Botswana and Central African Republic are among five countries with the most unequal income distribution – based on the Gini index (http://databank.worldbank.org/data/reports.aspx?source=2&series=SI.POV.GINI&country=).

A problem hindering entrepreneurial efforts in Africa is the large size of the region's informal economy. In Africa, 85% of the population works in the informal sector, with Sub-Saharan Africa seeing 90% of its workforce engaged in informal labor. This sector also contributes 62% of gross

domestic product (G.D.P.). Informal cross-border trade, which involves unregulated markets and bypassing formal trade procedures, accounts for 30%–40% of regional trade.[12] This highlights the significant role of informal labor and trade in Africa's economy.

7.2.1 Positive and Encouraging Signs

There are a number of positive and encouraging signs in Africa's entrepreneurial landscape. Some African economies have made significant strides in improving their entrepreneurial climate.

Contrary to the widespread belief that indigenous entrepreneurship is less well represented in Africa, various studies have shown that Africa doesn't lack entrepreneurial talent. The continent has an abundance of entrepreneurs who possess the ability to identify business opportunities and to exploit them,[13] and recent surveys conducted in some African economies have confirmed this view. For instance, Africa has the highest rates of entrepreneurship globally, with over 20% of working-age individuals starting businesses.[14] Additionally, Ichikowitz Foundation's 2022 survey showed that more than 75% of African youth aspired to launch a business within the next five years.[15]

Some cities in Africa have rapidly developed a strong startup ecosystem. According to a report from Startup Genome, the local startup ecosystem in Lagos, Nigeria was valued at US$2 billion. According to the report, Lagos was the most valuable city although there were only 400–700 active startups, compared to 1,200 in Cape Town.[16]

7.2.1.1 Entrepreneurship Support Programs

Entrepreneurship in the continent has access to support programs such as incubators and accelerators. Community-based organizations, such as coworking spaces, are a relatively new phenomenon in Africa. They are, however, diffusing rapidly. In 2017, there were over 250 coworking spaces in Africa, 80% of which were established after 2015.[17] By 2024, the number of coworking spaces in Africa reached about 630. Nigeria leads with over 100 coworking spaces, while Kenya follows with prominent hubs like Nairobi Garage and iHub, hosting over 300 businesses collectively.[18]

Some are focusing on the latest technologies such as blockchain. For instance, BitHub Africa, based in Nairobi, Kenya, is a blockchain accelerator for local startups. It was founded in 2015. BitHub Africa provides consulting services for organizations based in Africa and the Middle East to deploy blockchain-based solutions. It also helps blockchain startups to scale up faster. A special focus is on incubating microlending startups. It also engages in lobbying activities in order to bring favorable regulations for initial coin offerings and cryptocurrencies. In Cape Town, South Africa, the

Blockchain Academy provides training on cryptocurrencies and blockchain technology to startups and entrepreneurs. It also advises local businesses how to use blockchain technology.[19]

Others are targeted to the young population. The Kumasi Business Incubator (K.B.I.) at the Kwame Nkrumah University of Science and Technology (K.N.U.S.T.) helps young entrepreneurs turn business ideas into viable businesses. World Bank's eGhana Project provided partial funding for the K.B.I. to support the government's goal to increase employment through I.C.T. and public private partnerships.[20] It focuses especially on software development and applications. The K.B.I. was established in 2011 in partnership with the National Board for Small Scale Industry.[21] In 2021, the K.B.I. played a central role in launching an agriculture-focused initiative alongside the University of Technology, Netherlands (TUDelft), and Kwadaso Agriculture College. The project aimed to enhance youth development and improve employability for vulnerable groups, underscoring K.B.I.'s commitment to fostering innovation and practical skills in the agricultural sector.[22]

Some analysts have, however, argued that the incubation model is not working in Africa, at least in some areas such as software. For instance, as of 2015, none of the nine biggest software startups in Nigeria were built by an incubator.[23] One reason could be that incubators are attracting the "wrong" kind of founders who want to be "taught" about building a startup and attend the incubation center regularly to be "incubated". It is suggested that the incubators should focus on finding the best founders.[24]

7.2.1.2 Entrepreneurial Firms Mobilizing Positive Social and Economic Change

There are also some high-profile examples of African businesses with highly effective entrepreneurial impacts. South Africa is the largest center of entrepreneurial activities in Africa, which has more than half of the top 100 companies in the African continent. An example of a South African company that has been able to build a global brand is South African Breweries Ltd. (S.A.B.). SABMiller, which was created by the merger of S.A.B. and the Miller Brewing Company, holds a prominent place in the global beer market. One of its brands, Castle, has been introduced as a premium beer brand across the world.[25] SABMiller has discovered how to tap the local taste for homemade brews, making them with cheap inputs (instead of barley), while adapting modern technology and promoting local economic development.

In Africa, SABMiller buys local crops such as sorghum instead of importing expensive barley. A SABMiller-commissioned study indicated that for every job in SABMiller's breweries in Uganda, the company supported over 100 other jobs throughout the country. The company has thus contributed

to local economic development by stabilizing the prices of local commodities such as sorghum and increasing farmers' incomes.[26]

To take an example, Ekuphileni Poultry and Agricultural Farming Cooperative, a women-owned farm in Utrecht, a town in the foothills of the Balele Mountains in South Africa, was reported to receive a huge investment in March 2018 from SABMiller, the Department of Small Business Development and the Department of Agriculture and Rural Development.[27] Ekuphileni had received R6.4 million in investment by that time. A total of 11 cooperatives supplied maize to S.A.B.

7.2.1.3 Diversification of Entrepreneurial Activities

While many African economies export oil and a few types of natural resources, some, especially non-resource-rich ones such as Kenya, Tanzania and South Africa, have made a significant progress in diversifying exports. On average, 17 export products of these countries constitute 75% of total exports. African countries' progress has been more impressive in diversifying export markets. While developing countries accounted for only about 25% of African exports in the early 1990s, their share rose to about 50% by 2009.[28]

In some African economies, there is little or no gender gap in entrepreneurship, and men and women are reported to have equal propensity to be entrepreneurs. A Gallup survey, for instance, indicated that in Nigeria, 67% of female respondents and 68% of male respondents liked the idea of starting a business.[29] Women's propensity to engage in entrepreneurial activities in Nigeria compares more favorably with many economies in Arab countries and Asia. In 2006, for instance, proportions of the adult population (aged 18–64) engaged in entrepreneurial activities in India were 18.9% for men and 13% for women.[30]

7.2.1.4 Increase in Opportunity-Based Entrepreneurial Activities

More and more entrepreneurial activities in the country are opportunity-based instead of necessity-based. In Nigeria, people with jobs are found to have a higher propensity to start a business than those without a job. For instance, 77% of Nigerians who had a job expressed an interest in starting a business compared to only 53% of those who were unemployed.[31]

7.2.2 Natural Resources and Their Relations to Entrepreneurship

Africa principally remains a source of natural resources, raw materials and commodities; it is considered to be the most mineral-rich continent in the world. Commodities accounted for over 60% of total merchandise exports

in 45 out of 54 African countries in 2022, highlighting their vulnerability to global commodity price fluctuations.[32] This dependency exposes economies to external shocks, emphasizing the need for diversification to achieve sustainable growth and stability. One estimate suggests that about two-thirds of the world's cobalt is mined in central Africa.[33] Similarly, the Ivory Coast, Ghana, Nigeria and Cameroon are the four major West African cocoa producers. The Ivory Coast alone produces about 43% of the world's cocoa. Likewise, Zimbabwe has the second largest reserves of platinum in the world and large quantities of other precious metals such as gold and copper.[34]

African economies carry enormous potential for entrepreneurship in agricultural development because of the continent's abundance in natural resources and labor.[35] Yet, it is also apparent that many African countries export agricultural products such as cocoa, coffee, tobacco and cotton, mainly in raw forms.[36] There has been limited success in their attempts to add value to agricultural products through processing and their use to develop other industrial sectors. Moreover, because of the 2007 global financial crisis, some African economies are severely affected by declines in global demand and value for these commodities.[37]

The continent holds 8%–9% of the world's crude oil reserves and provides about 10% of the global production.[38] This is considerably less compared to the Middle East's 62%. However, some industry analysts believe the continent could have much more undiscovered reserves. Indeed, during 2000–5, 30% of the world's newly discovered oil reserves were from the Gulf of Guinea region of Africa's west coast.[39] More importantly, West Africa's oil reserves are of high quality. For instance, a low sulfur content of West Africa's oil makes it easier and cheaper to refine.[40] Furthermore, West African reserves are easily accessible to Western Europe and the United States by sea.

Natural resources have also transformed some African countries' economic orientation. For instance, after the discovery of oil in 1957, Nigeria began transformation from an agriculture-based to an oil-dependent economy. Most African countries have made little progress in reforming institutions to promote entrepreneurship. Among the African countries that are Arab League members, the depth of institutional reforms is arguably low in Algeria and the region's primary export economies such as Comoros, Djibouti, Mauritania, Sudan and Yemen. Likewise, although Morocco has encouraged economic liberalization, there has also been a convergence of business and government interests in the country.[41]

7.3 Challenges to Entrepreneurship: Legal, Cultural and Institutional Factors

7.3.1 Regulatory Framework

Laws, regulations and policy in most African economies have been major barriers to entrepreneurship development. Factors such as corruption, the

quality of the rule of law and the effectiveness of the national legal system in enforcing contracts have acted as barriers hindering the development of entrepreneurship. An upshot is that Africans have a relatively low degree of trust in government agencies. Citizens often tend to have more faith in informal institutions such as religious and traditional leaders compared to formal ones such as the state.

The rule of law in many African economies is weak. For instance, in Tunisia, established business elites have attempted to protect their privileges and benefits from the existing regulations. They have done so through close relations with corrupt politicians and bureaucrats. This has come at the expense of new entrepreneurs from marginalized regions.[42]

According to the African Union, Africa faces significant financial challenges, with annual losses of approximately US$60 billion from illicit financial flows and over US$140 billion due to corruption.[43] These issues hinder the continent's economic development and undermine efforts to achieve sustainable growth. The World Bank has estimated the figure to be even higher – US$500 billion to US$1 trillion in the 2000s.[44] Note that these figures are significantly higher than the continent's foreign direct investment (F.D.I.), which was US$59 billion in 2016 (http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=408).

According to Freedom House's *Freedom in the World* 2017 report, only 18% of the S.S.A. countries were in the "free category", 41% were in "partly free" and 41% were in "not free" category.[45] Freedom House referred to Africa as the world's "most politically volatile region" in terms of political rights and civil liberties in 2013. Commenting on elections and superficiality of Africa's donor-driven democracy, an article noted, "While donors make regular electoral contests a condition for aid and debt relief, many African regimes have paid little more than lip-service to reforms, aided by the relative weakness of state institutions which enable the subversion of free elections".[46]

Observers have noted that in many African countries with weak institutions, economic policy is dominated by wealth redistribution instead of wealth creation. One reason most African countries have been unable to attract investments concerns a lack of institutions to protect the long-term security of property rights.

7.3.1.1 Governments' Involvement in Economies

Most African countries have mixed economies with varying degrees of market economy and state ownership. A number of firms were nationalized in these economies and private and public firms function side by side. Compared to other regions in the world, in most S.S.A. countries, governments control a significantly higher proportion of national resources and in most of them, the government is the largest employer.[47]

In some African countries, the nationalization process is still going on and large, economically central firms are particularly attractive for the national takeover. For instance, in 2024, South Africa's former President Jacob Zuma's newly formed political party proposed the nationalization of both land and banks. This initiative aims to redistribute resources and address economic inequality, with a focus on empowering marginalized communities.[48] In 2004, Zimbabwe's ex-president Robert Mugabe announced his government's plan to demand half-ownership of all privately owned mines in the country to stay in control of its natural resources.[49]

In Africa, the commercial class and the national elite have a high degree of complementary characteristics. As noted earlier, the African commercial class lacks financial and managerial ability to run "high markets".[50] State elite, on the other hand, see professional and personal rewards in nationalizing such markets.

7.3.1.2 Capitalism in African Economies

Many African economies are characterized by oligarchic capitalism. Illustrating the existence of oligarchic capitalism and cronyism in Africa, a *Boston Globe* article asserts, "African leaders, their cronies, European traders, foreign heads of state, and American middlemen, among others, have reaped billions from the continent's oil resources over the last four decades".[51] The ruling elites and their family, friends and clients have thus lived a parasitic existence in some African economies. According to creditors and *Publish What You Pay*, in 2004, about US$300 million or about one-third of Congo's oil revenues did not show up in the country's budgets.[52]

In her 2009 book, *It's Our Turn to Eat: The Story of a Kenyan Whistle Blower*, Michela Wrong, a seasoned journalist, illustrates the dysfunctional political economy in Kenya, which mirrors trends across Africa. She portrays a political culture where state power is wielded for personal enrichment, aptly summarized by the euphemism "to eat". The story also highlights the dangers faced by whistleblowers, including Kenya's first anticorruption chief, who fled the country after exposing high-level graft. The rationale behind this "eating" culture is clear: "Having suffered long periods of deprivation, those in power seize their opportunity to benefit, rewarding allies while leaving scraps for the general populace". A dominant political attitude in numerous African nations is to focus on consuming available resources instead of working collaboratively to produce or enhance them. "The pervading mentality and orientation of politics in most African states is one of cutting and eating the national cake as opposed to contributing towards producing or baking it".[53]

7.3.2 Values, Culture and Skills

7.3.2.2 Value and Culture

As noted in Chapter 1, in some societies, family and social obligations act as barriers to productive entrepreneurship. Observers have noted the existence of a culture of "forced mutual help" in Africa.[54] That is, wealthy individuals in many African economies have a social obligation to share their wealth with their relatives and members of the extended family that have less wealth.

7.3.2.3 Entrepreneurial Skills

Among the biggest roadblocks for entrepreneurial performance in the region are the lack of entrepreneurial skills and poor management of human resources. An observation is that African private entrepreneurs lack financial and managerial ability to run large and sophisticated businesses.[55]

Entrepreneurship education in Africa faces significant challenges due to the disconnect between theoretical growth models and the complex realities faced by African entrepreneurs. New ventures struggle to secure funding and attract customers, while many entrepreneurs lack the administrative skills required to effectively manage their businesses.[56]

According to *The Better Africa* report by Weetracker, an African digital media company, startups in Nigeria, Africa's largest economy, experienced an average failure rate of 61% between 2010 and 2018. The report highlights the top ten countries with the highest startup shutdown rates, including Ethiopia (75%), Rwanda (75%), Ghana (73.91%), Zimbabwe (66.7%), the Democratic Republic of the Congo (66.7%), Tanzania (62.5%), Nigeria (61.05%), Senegal (58.3%), Somalia (60.0%) and Kenya (58.7%).[57]

Estimates suggest that about 60% of Africa's population is younger than 25. According to a 2018 World Bank report about 50 million children in Africa were out of school.[58] According to the United Nations Development Programme's Human Development Report 2013, among the 25 and older population, only 23.7% females and 35.1% males had at least secondary education, which compares with the world average of 52.3% and 62.9%, respectively.

Education offered by schools in Africa is reported to be of low quality. Among second-grade students that were assessed on numeracy tests in several Sub-Saharan African countries, three-quarters were unable to count beyond 80, and 40% could not do a one-digit addition problem. A large proportion could not read even a single word.[59] Among the students enrolled in secondary education, only 5% get vocational training. Moreover, business studies are virtually absent and critics point out that most apprenticeships involve child exploitation.[60]

7.4 The Role of Finance, Research and Development and Technology

7.4.1 Access to Finance

7.4.1.1 Household Saving

There are overlapping functions of saving, credit and insurance. Savings can thus partially substitute for credit and insurance, especially when markets for the latter two are imperfect. Analysts have linked economic underperformance of S.S.A. with a low savings rate. S.S.A.'s saving rate is the lowest across all regions and there has been a declining trend.[61] For instance, fewer than 10% of workers in Sub-Saharan Africa save for retirement.

The low savings rate can be attributed to a low-level flow of financing between the informal and formal sectors. Capital flight has worsened the situation. In this regard, household savings are also less prone to capital flight.[62]

7.4.1.2 Remittances

Remittance flows to S.S.A. economies amounted to US$33 billion in 2016,[63] which increased to US$53 billion in 2022.[64] Although most money sent home by migrants is spent on consumption, remittances also contribute to entrepreneurial activities because they allow even the very poor to save. Although remittance transfer costs have declined significantly in Latin America and Asia, they are still high in Africa. According to the World Bank, Nigeria accounts for over 40% of diaspora remittances in Sub-Saharan Africa. This highlights the significant role Nigeria plays in the region's financial flows from overseas.[65]

Remittance transfers to Sub-Saharan Africa incur significant costs. The average cost of sending money in S.S.A. averaged 9.8% in 2014 which made it the highest-cost region in the world.[66] Despite some improvements, sending remittances to Sub-Saharan Africa remains costly, with fees reaching nearly 8% in 2024.[67] This is primarily due to limited competition among service providers and inadequate cross-border interoperability, which restricts efficiency and drives up the cost of transfers.

In some parts of Africa, costs to remit money home can be as high as 25% of the sum to be remitted. Moreover, rural areas account for 30%–40% of remittances to Africa, where the recipients have to travel a long distance to get their cash. Africa has the same number of remittance payout locations as Mexico. Note that Mexico has only one-tenth of Africa's population. Restrictive laws and prohibitively high fees have thus hindered the potential of remittances to contribute to poverty reduction and productive entrepreneurship.

7.4.1.3 Capital Markets

Capital markets are described as the "lifeblood" of entrepreneurial and economic development. Most of Africa's capital markets are small, illiquid and are not properly regulated.[68]

As of 2023, Sub-Saharan Africa has 29 stock exchanges across 38 countries, with a combined market capitalization of approximately US$1.6 trillion. Notably, two regional exchanges, the Bourse Régionale des Valeurs Mobilières SA and the Bourse des Valeurs Mobilières de l'Afrique Centrale, contribute to this market.[69]

In 2021, eight African companies went public on stock exchanges, marking an increase from seven initial public offerings (I.P.O.s) in 2020. This uptick came after a notable decline in previous years, with 30 companies having launched I.P.O.s in 2017.[70]

In 2017, US$2.8 billion was raised by 28 I.P.O.s and US$10.6 billion by equity follow-on public offer or further offers (F.O.s). Note that in a follow-on public offer a public company listed on a stock market exchange issues shares to investors[71] African equity capital markets activity in 2017 was largely driven by the financial sector for F.O.s and consumer services sector for I.P.O.s.[72] In 2021, these I.P.O.s raised approximately US$920 million in capital.[73] They are projected to reach US$12.82 billion in 2024 and decrease slightly to US$12.41 billion by 2025.[74]

Analysts argue that it is important to establish larger regional stock exchanges in Africa to provide the liquidity, security and ease of access that investors want. The continent's leaders need to work together.[75]

7.4.1.4 Availability and Costs of Bank Financing

The World Bank reports a significant rise in the percentage of the African population with a bank or mobile money account, growing from 23.33% in 2011 (below the global average of 50.63%) to 42.63% in 2017 (with the global average at 68.5%) and reaching 55.07% in 2021.[76]

While progress has been made, the low banking penetration in Africa continues to be a significant obstacle to accessing bank financing for entrepreneurial ventures. Banks find it difficult to convert deposits into loans. Many banks were nationalized in the 1970s and have been poorly run. It is observed that politicians tend to treat banks as their "piggy-banks", like coin containers used by children.[77]

Studies have found that low interest rates lead to an increase in new business startups. In this regard, some of the countries with the highest annual lending rates (A.L.R.s) are from Africa: Madagascar, Malawi, Gambia and Mozambique (Figure 7.2). In general, all African countries have high A.L.R.s compared to advanced Organisation for Economic Co-operation and Development countries.

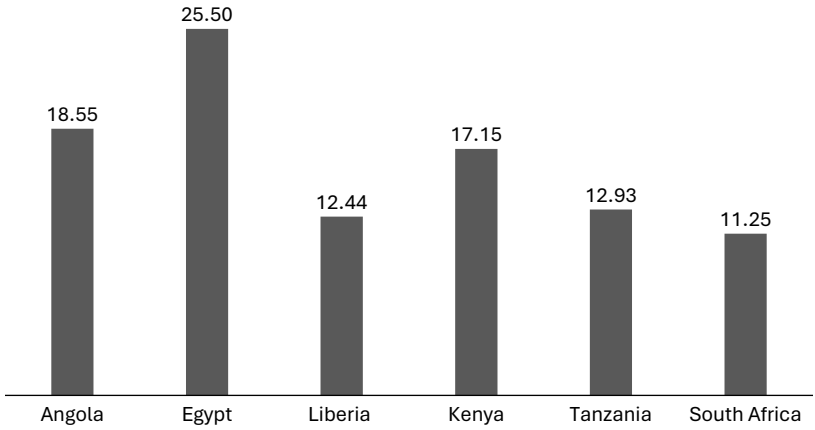

Figure 7.2 Annual Lending Rates in Selected African Economies (2024H2)

7.4.2 Venture Capital

Venture capital is a relatively new phenomenon in Africa. In recent years, venture-capital funding has slowed sharply worldwide. Africa, accounting for less than 5% of the global market by deal value, has proven relatively insulated. Its total deal value peaked later, at US$6.5 billion in 2022, and fell less dramatically to US$4.5 billion in 2023. While the environment remains challenging, with steep currency devaluations and high inflation in some countries discouraging cautious investors, the industry is adapting to these conditions.[78]

In mature startup ecosystems such as San Francisco, New York or London, investors tend to specialize by the stage of investment. Investors are confident that if they financed certain stages of growth, the next stages will be covered by others. In new startup communities, the later-stage investors are often missing.[79]

7.4.3 Research and Development and Technology

The growth of new enterprises depends upon the development of the knowledge base through research and development (R&D). R&D investment, technology diffusion, patent system and standards, technological cooperation between firms, broadband access and university/industry interface affect entrepreneurial performance.

Modern technologies can also help fight against corruption and other social problems. For instance, Ghana's Bitland uses blockchain to store land registrations. As of early 2018, the project had been trialed in 28

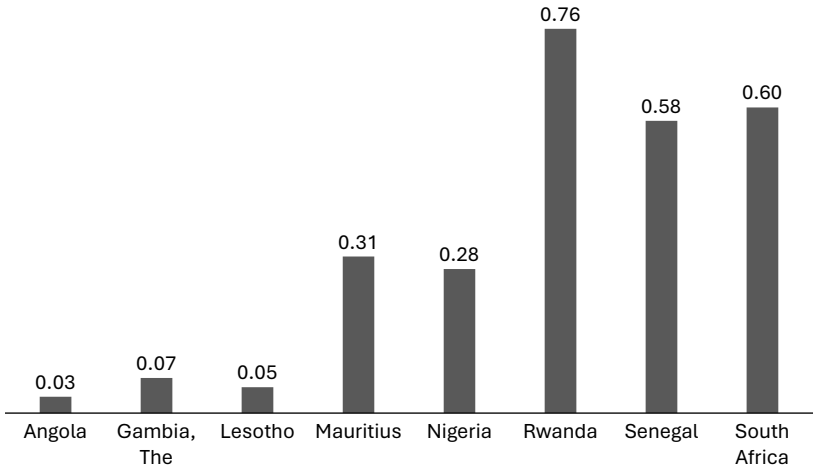

Figure 7.3 Gross Domestic Expenditure on R&D as a Percentage of G.D.P. in Selected African Economies (latest available data as of 2024)

communities in Kumasi. By allowing citizens to record land titles in a way that cannot be deleted or changed by a third party, Bitland hopes to reduce illegal displacement and corruption.[80]

As Figure 7.3 makes clear, expenditure on R&D is very low in African economies. However, there have been some successful R&D efforts in Africa, which are likely to contribute to the continent's entrepreneurial development. *Foreign Policy* magazine conducted a survey with the world's top Internet experts regarding the Internet-related innovations. 7% of the experts viewed Africa as "the most innovative place for Internet-related technology". The corresponding proportions for other regions and economies were: Europe: 4%, China: 4%, India: 7% and Pacific Rim: 5%. The experts viewed Africa's Internet-related innovations as "On-the-ground solutions designed by communities for communities".[81]

One of the key features of Africa's digitization initiative is that innovation in this area is that it is increasingly homegrown. Regarding the importance of homegrown innovations, the founder of the African Institution of Technology and Chairman of Fasmicro Group, Ndubuisi Ekekwe, put the issue this way: "Building the AI [artificial intelligence] models for the African consumer cannot be optimally driven by Silicon Valley vendors; rather, African universities and research institutes who understand the nuances of being an African are better positioned for this task".[82] This is in sharp contrast to other sectors of the African economy, such as mining or agribusiness, in which much of the know-how is imported and the wealth is

extracted.[83] In this section, we discuss some information technology-related innovations created in S.S.A. economies.

7.4.4 M-Pesa

M-Pesa (Swahili for mobile money) is operated by Kenya's largest cell phone service provider, Safaricom. M-Pesa can be used to send and receive money using cell phones. M-Pesa is used to make person-to-person transfers (P2PTs), receive mobile phone credits, pay school fees, pay electricity bills and save money. It can also be used for shopping. Many Kenyans use M-Pesa and other mobile payment systems.[84] As of 2024, M-Pesa served 51 million customers across seven countries – Kenya, Tanzania, Mozambique, the Democratic Republic of the Congo, Lesotho, Ghana and Egypt.[85]

M-Pesa, originally launched in 2007 for 2G phones, has evolved with the rise of 3G and 4G networks. The service has expanded into digital financial services, with over 600,000 agents and processing more than 61 million transactions daily. In 2021, M-Pesa launched the Super App and Business Super App, allowing businesses to create virtual storefronts. It also has 42,000 external developers building on its platform.[86]

7.4.4.1 Lelapa AI

Lelapa AI, a South African venture founded in 2022, focuses on utilizing A.I. to address societal and economic challenges in Africa. Their flagship product, VulaVula, similar to ChatGPT, is an A.I. language model specifically trained on underrepresented Southern African languages (https://afridigest.com/generative-ai-in-africa/). Unlike Western companies that rely solely on online data, Lelapa AI adopts a hybrid approach. They collaborate with linguists and local communities to gather and annotate data both online and offline. This comprehensive strategy allows them to identify potential biases in their A.I. tools.[87]

Through a range of application programming interfaces (APIs), VulaVula empowers businesses to engage with customers in local languages, enhancing communication accessibility (https://afridigest.com/generative-ai-in-africa/). Vulavula empowers users by transforming spoken words into text and pinpointing names of people and locations within written documents. This functionality proves valuable for tasks like summarizing documents or searching online for specific individuals. As of mid-2024, Vulavula recognized four South African languages: isiZulu, Afrikaans, Sesotho and English. The development team is actively expanding its capabilities to encompass additional languages spoken across Africa. Several hurdles hinder investment in A.I. startups developing products for African languages. These include the perceived limited market size, a lack of government support and underdeveloped internet infrastructure across the continent.[88]

7.4.4.2 Lesan

Lesan, co-founded by Asmelash Teka Hadgu, focuses on machine translation and speech technology for Ethiopian languages such as Amharic and Tigrinya (https://www.dw.com/en/bridging-the-ai-language-gap-in-africa-and-beyond/a-66331763). According to reports, when ChatGPT is queried with basic questions in Amharic and Tigrinya, it responds with a nonsensical combination of Amharic, Tigrinya and occasionally other languages.[89]

Due to scarce online resources, the team engages directly with their community, employing creative methods to gather data. They work mostly with inspired students who wish to contribute, providing financial incentives for their efforts. This requires a lot of manual labor, including identifying reliable datasets like books or newspapers, digitizing and translating them, and aligning the original and translated texts sentence by sentence to support the machine learning process (https://www.dw.com/en/bridging-the-ai-language-gap-in-africa-and-beyond/a-66331763).

7.4.5 Market Access

By 2060, the continent's middle class is expected to triple to reach over a billion people.[90] However, domestic markets are small in most African economies. Increased access to foreign markets is thus important for African entrepreneurs. Some have argued that economic aids tied to regionalization are more likely to be effective in stimulating entrepreneurship in Africa. The Sudanese-British entrepreneur Mo Ibrahim noted, "The World Bank should refuse to fund any project which is not regional. African governments must be pressed to regionalize their economies and stop being 53 little countries, each with their flag, jealously watching each other".[91]

7.5 Foreign Companies' Entrepreneurial Activities in Africa

International entrepreneurship involves exploiting capital, labor and other resources across the globe. Africa's abundance of natural resources makes it an attractive destination for resource-seeking investments for foreign businesses. Note that resource-seeking investments are made to establish access to basic materials, input factors and natural resources such as those in energy, metallic minerals, wood, paper and other raw materials. Most foreign companies have mainly concentrated on accessing the natural resources in the continent. For instance, Western oil companies such as ExxonMobil and Chevron of the United States, France's Total and Britain's BP and Shell are planning to invest tens of billions of dollars in S.S.A.[92]

It is suggested that the United States and China are actively competing for access to Africa's oil, gas and other resources. In 2021, U.S. goods imports from Sub-Saharan Africa totaled US$28.3 billion, a 47% increase from 2020 but a 62% decrease from 2011. Key imports included platinum (US$11.2 billion), mineral fuels (US$6.0 billion), cocoa (US$1.3 billion), vehicles (US$868 million) and knit apparel (US$749 million).[93]

China's gravitation toward Africa for the acquisition of energy and other natural resources deserves special attention. This is because oil and natural gas production in Asian countries is insufficient to meet the Chinese demand.[94] A large proportion of Middle Eastern exports of oil and gas production goes to the United States and Europe. An estimate suggested that Africa accounted for 13% of China's crude oil imports in 2021.[95]

Africa is not only a strategic source of raw materials but is also becoming an attractive market. Foreign companies have thus increased market-seeking investments in Africa.[96] Partly because of economic liberalization, there has been a greater availability of imported goods. However, it is worth noting that government purchases account for a significant proportion of imports in some African countries. In Ethiopia, government purchases account for 40% of total imports, with loans by international financial institutions such as the World Bank and the African Development Bank.[97]

7.5.1 Arbitrage Strategies

Arbitrage strategies entail exploiting opportunities associated with differences across countries. Foreign companies' potential to benefit from utilizing the region's raw materials and natural resources can be described in terms of economic arbitrage, which entails exploiting specific economic factors. Foreign companies can also benefit from geographic arbitrage, which involves the exploitation of geographic factors such as the region's strategic location.[98] For instance, there is a potential to expand their operations to utilize the continent's labor force to serve international markets, especially the European ones. Likewise, Chinese firms can use Africa's geographical position with proximity to Europe to establish factories in the continent and sell products to the European market. There is also an opportunity to benefit from the cultural arbitrage (e.g., language skills of the workforce). For instance, Indian offshoring companies can utilize the continents' English-, French- and Portuguese-speaking populations to provide call center services to Europeans.

For some multinationals, combining components from the existing institutional environment and reorganizing them strategically has been an important way to operate in Africa. For instance, the British bank Barclays is strategically utilizing Susu collectors in Ghana, which are among the oldest financial groups in Africa. Susu collectors' main function is to collect savings daily from informal traders. This approach can also be described as

an institutional arbitrage, which entails exploiting opportunities associated with differences in formal and informal institutions across countries.

7.5.2 Allegation Regarding the Exploitation of Africa's Resources by Foreign Multinationals

There are many examples and complaints regarding exploitation of these resources by Asian, European and American multinationals at low costs.[99] For instance, global mining companies are making huge profits by extracting gold, diamonds, copper and other metals from Africa. Likewise, using fruits, flowers and vegetables from the continent and paying "starvation wages" to African workers, European grocery retailers produce their own label products.[100]

In recent years, complaints regarding exploitation of Africa's minerals and natural resources are especially directed at China. A Zimbabwean politician, Arthur Mutambara, noted, "China comes to Africa and extracts raw materials and goes back to China".[101] China's African involvement has also been criticized by some environmentalists. A July 2005 report of the International Rivers Network and Friends of the Earth accused China's Exim Bank of funding environmentally unfriendly projects such as the Merowe Dam in Sudan. Likewise, quoting a primatologist, a huffingtonpost.com article noted, "China's thirst for natural resources, including wood and minerals, is leading to massive deforestation in Africa and the destruction of crucial wildlife habitat".[102]

Global multinationals are using their marketing and branding power to make big profits from Africa's natural and labor resources, raw materials and commodities.[103] With an example of A la Perruche, a brand of cubed sugar sold in New York, a development expert illustrates problems faced by African companies on the branding front:

> The carton of 1.1 pounds of pure cane sugar pressed into cubes is imported from France. The back of the box states, "Product made of Swaziland or Congo sugar packaged in France". The value of the sugar on the international market is about 12 cents, though the carton, which boasts "since 1837", sells for US$5.99. Africans try to earn a living while selling raw sugar on the international market for 11 cents a pound; the French, with their skills in packaging and marketing, pocket the dollars.[104]

7.5.3 Low Degree of Linkages to the Local Economy

A problem facing the continent is the limited impact of foreign firms' entrepreneurial activities to the local economy. For instance, there are reports that the garment manufacturing industry in many parts of Africa is shallow.

That is, this industry has few linkages to the domestic economies. In some African economies such as Namibia and Lesotho, even skilled direct employees for this industry are foreigners.[105]

7.6 Western Response to Low Level of Entrepreneurial Activities in Africa

The member countries of the Group of Eight (G8), which is a forum for the governments of the world's eight wealthiest countries in the West, believed that debt relief and increasing aid to Africa would help promote economic development and entrepreneurship. African economies received US$568 billion in economic aid during 1958–2009.[106] Donor flow accounts for 30%–40% of the budget of some of the poorest African nations such as Guinea-Bissau, Burkina Faso, Togo, Malawi and Swaziland.[107] In Ethiopia, foreign aid constitutes over 90% of the government budget.[108]

A growing number of observers have noted that efforts to relieve debt and increase aid have been largely unsuccessful in fighting poverty and promoting entrepreneurship in Africa. Some argue that the United States has been a supplier of food aid and contraceptives instead of being a provider of development assistance to Africa.[109] Zambian economist Dambisa Moyo believes that foreign aid in Africa has deepened the poverty, led to an economic distortion and fueled corruption and inequality in the continent. Other analysts have also expressed their disappointment with the existing system of aid to stimulate economic development in Africa.

To understand the feelings that accompany these critics' viewpoint against the process of increasing aid, consider one detail: out of US$1 aid given to Africa, about 16 cents was paid to consultants based in donor countries, 26 cents went to emergency aid and relief operations and 14 cents into debt servicing. African economies pay about US$20 billion in debt repayments annually.[110] Analysts suspect that corrupt officials take a large proportion of the remaining, leaving very little to benefit the poor people who really deserve the aid.

An increasing number of observers have advocated the necessity to increase the private sector's involvement in the economy and help develop a market-based system.[111] Analysts have argued that a reorientation of aid to promote private businesses in poor countries would be more effective. Zambian economist Dambisa Moyo has also advocated alternatives such as encouraging trade and foreign direct investment with the continent and developing microfinancing and capital markets. Note that private businesses have been a cornerstone to economic development in the fast-growing developing countries. However, promotion of private business has rarely been the principal focus of development aid.

The emphasis on trade and investment rather than aid is echoed in a journalist's field observation in Liberia:

> It is chock-full of aid groups rushing around in white SUVs doing wonderful work (in Liberia). But it also needs factories to employ people, build skills and pay salaries and taxes. Americans are horrified by sweatshops, but nothing would help Liberia more than if China moved some of its sweatshops there so Liberians could make sandals and T-shirts.[112]

Foreign aid also lacks linkages to the local economy. One example to illustrate this situation would be to consider U.S. aid. The U.S. government's Feed the Future initiative in 2024 introduced a new plan for Sub-Saharan Africa, with a US$577 million commitment to promote food security and economic development, focusing on tackling malnutrition and hunger across the region.[113] However, over the past decade, U.S. agricultural programs have focused more on commercial farmers, often sidelining smallholder farmers in Africa. These programs have encouraged smallholders to produce low-nutrient commodity crops or leave farming entirely, rather than offering substantial support for their development. This approach has drawn criticism for neglecting the needs of small-scale producers.[114]

Similarly, the plan for AIDS also required use of U.S. Food and Drug Administration--approved drugs, which are expensive. Overall, no attention was paid to investing in generic drugs and prevention programs. The poor (the intended beneficiaries), or the nongovernmental organizations and foundations working with them, receive a small percentage of the total aid and have very little say in how it is used. Aid may benefit the givers and aid administrators as much as or even more than the recipients.[115]

7.7 Concluding Comments

Development of a free enterprise economy in Africa with a strong rule of law and property rights is likely to benefit not only the African society but also the global economy. However, Africa's abundant natural and human resources have mainly benefited American, European and Asian multinationals and the continent's dictators and tiny minorities. There has been a failure to bring economic and developmental advantages for the poor people. There has been a vanishingly small stock of F.D.I. outside the oil industry. Optimism about entrepreneurial development in Africa is thus pretty rare.

A common thread runs through corruption and instability in most countries in the continent – connection to natural resources. In some countries such as the Democratic Republic of the Congo and Sierra Leone, mineral resources have been blamed for economic, political and social problems such as excessive corruption, political instability and even state collapse.[116] A commonplace observation is that Africa's oil or mineral wealth is a curse rather than a blessing, which has led some countries in the continent to economic and political instability, social conflict and environmental degradation

(watch the video "Blood Diamonds – The True Story": www.youtube .com/watch?v=C7lmjjDlzp0). Faced with examples such as these in many resource-rich African countries, some authors have used the term "resources curse" to describe their economic failure.[117] A journalist observed, "because of wars, dictatorships and thieves, Angola and other oil-rich African nations have failed so far to turn their natural wealth into better lives for their citizens".[118]

An uncomfortable reality is that the development of productive entrepreneurship has been slow in most African economies. Some argue that Western aid to Africa may have benefited donor countries and aid administrators rather than the intended recipients in Africa.

Some African economies undergoing market and economic reforms have been able to attract foreign investment. Tunisia, which offers a one-stop shop for foreign investors with all services, including courts and customs, in one building, is one example. As of 2000, Tunisia had the third largest F.D.I. stock in the Middle East, which is a phenomenal success considering its small size and a lack of oil.[119] As noted earlier, democracies and liberalization in some African countries have shifted into reverse gear. However, some countries in the continent have made visible progress toward democracy. According to Freedom in the World 2013, three S.S.A. countries moved from partly free to free: Lesotho, Sierra Leone and Senegal. Likewise, Ethiopia recently moved from a one-party system to a multiparty system. Since economic freedom and political freedom are highly correlated, political freedoms may lead to economic liberalization and boost private entrepreneurship. In recent years, Ethiopia has won some of the flower-exporting business away from its neighboring country Kenya.

The above discussion also indicates that African economies need to strengthen linkages of foreign investments to the domestic economies. There is also an urgent need to hasten these efforts to benefit from foreign trades and investments.

The preceding examples also point to the fact that many foreign firms' entrepreneurial activities in Africa may have come at the expense of local entrepreneurs. In recent years, thousands of fishermen on Africa's coast have lost jobs. In this regard, political process in a country has a built-in bias that favors organized groups and industries compared to those that are unorganized.[120] For example, most African countries do not have large and organized local commercial fishing industries to pressure their governments. A lack of domestic entrepreneurs' organized movements can be attributed to such dynamics.

It is also worth mentioning that some African businesses have performed well in the international markets. Some businesses such as S.A.B. and Ecobank have internationalized successfully. Likewise, KEZA helped the Rwandan cooperatives connect to an international market for luxury products. However, cases like these are extreme in the present context.

Third-world multinational corporations are familiar with the business terrains of other developing countries thanks mainly to economic, cultural and political proximity, and thus experience a lower degree of foreignness associated with dissimilarity or lack of fit in the operating contexts of these countries. Environment in Africa may thus enable better arbitrage opportunities for multinationals based in developing economies such as China and India than those in industrialized economies.

Multinational enterprises based in Asia, Europe and North America have allegedly exploited natural and human resources in Africa. Foreign governments and multinational enterprises have employed ecological discourses to establish discursive legitimacy and gain access to the continent's natural resources. For instance, European Union (E.U.) officials and other beneficiaries of fishing-rights agreements in Africa have argued that unregulated domestic fishermen are the real problems behind the decline in the continent's fisheries stocks. It is argued most domestic fishermen in Africa tend to fish close to the shore, which offer suitable habitat for fish spawning. E.U. officials have also made the point that most African countries have performed poorly in managing their fish stocks.[121]

Many economies are facing stiff budget cuts because of low foreign aid and declining remittances from the West. Domestic investment is also severely affected by high interest rates and depreciation of national currencies, thereby affecting the level of entrepreneurship support and resources.

African countries can increase benefits of foreign trade and investments by creating efficient channels for forward and backward linkages, labor mobility and stimulation of knowledge and technology transfer to local firms.[122] Income growth among the wider population is likely to produce forward linkages leading to a growth of demand for small businesses' outputs.

7.8 Discussion Questions

1. Which are some of the best performing economies in Africa? Which ones are the least performing economies in the continent?
2. Why are complaints regarding exploitation of Africa's minerals and natural resources being directed at China in recent years?
3. What are some examples to illustrate that global multinationals are using their marketing and branding power to make big profits out of Africa's natural and labor resources, raw materials and commodities?
4. What are arbitrage strategies? What are some examples of arbitrage strategies pursued by foreign multinationals in their operations in Africa?
5. How effective are the Western approaches of debt relief and economic aid to promote economic development and entrepreneurship in Africa?

6. Do you agree with the observation that Africa's oil or mineral wealth is a curse rather than a blessing? Why?
7. Select an African economy that has among the best entrepreneurial climates in the continent (e.g., Ghana). Select another African economy that has among the worst entrepreneurial climates in the continent (e.g., the Democratic Republic of the Congo). Do some research on some determinants of entrepreneurship in these countries and compare them. What conclusions can you draw?

7.9 End of the Chapter Case: DXwand's Entrepreneurial Journey: Addressing Linguistic Gaps and Driving A.I. Growth

DXwand, an Egypt-based A.I. startup specializing in intelligent conversational A.I., was founded in 2018.[123] Ahmed Mahmoud, C.E.O. and co-founder of DXwand, studied computer engineering at Ain Shams University, and had nearly two decades of experience in tech working with Vodafone and Microsoft.[124] He noted that conversational A.I. in the Middle East was underdeveloped. He especially identified a market gap for conversational A.I. tailored to Arabic dialects while working at Microsoft. Western A.I. solutions struggled with regional language diversity, prompting him to found DXwand. In 2019, after securing the company's first client and a grant from the Lean Startup Program, Mahmoud left Microsoft to focus on DXwand full-time.[125]

DXwand was formed to address a linguistic gap in A.I. solutions, as Silicon Valley technologies lacked adequate support for the linguistic diversity of Arabic and its dialects across the Middle East. In Egypt, there are more than five spoken dialects, highlighting the linguistic complexity of the region. DXwand focuses on tailored A.I. solutions for Arabic and regional dialects to enhance customer service and employee support.[126]

DXwand quickly recognized the need to pivot its business model in order to achieve product-market fit and become profitable. In 2021, DXwand pivoted to target enterprises, focusing on knowledge mining and retrieval-augmented generation. By automating data labeling through a knowledge graph, the startup streamlined onboarding processes and enabled enterprises to adopt sophisticated use cases more efficiently. This shift addressed gaps in A.I. solutions for the Middle East and North Africa (M.E.N.A.) region, emphasizing usability and scalability.[127] Using the "From Speech to Actionable Data" approach, DXwand captures every spoken interaction, transforming conversations into valuable data for shaping business strategies. The A.I.-powered tool also converts written content into natural, engaging speech, making it more accessible to the client's audience, while offering multilingual support.[128]

7.9.1 Securing Key Funding to Drive A.I. Innovation

The firm initially raised US$150,000 in seed funding from angel investors in Qatar and Egypt.[129] In 2022, DXwand raised US$1 million in an initial funding round, led by China's Huashan Capital.[130] In December 2023, DXwand raised an additional US$4 million in Series A funding.[131] This round was led by Shorooq Partners and Algebra Ventures, with participation from the Dubai Future District Fund. The investment aims to support DXwand's expansion in the M.E.N.A. region and advance its research in generative A.I., knowledge mining and omnichannel conversational A.I.[132] As of November 2024, DXwand had raised US$6.88 million in Series A funding, ranking as the fourth highest-funded A.I. startup in Africa.[133]

7.9.2 Global Expansion and Impressive Growth

As of early 2024, DXwand had assisted over 200 clients. DXwand has established a presence in regions including Egypt, Saudi Arabia, the United Arab Emirates, Malaysia, England and the United States, gaining recognition from organizations such as Bupa, Egypt Post, EFG Hermes, Urban Jazz Kitchen and Abu Dhabi Islamic Bank. These businesses leverage the startup's A.I. technologies to enhance their operations and support their global growth strategies.[134]

In 2024, DXwand has been experiencing consistent yearly growth, doubling its performance every year since 2020.[135] The company experienced a significant twofold increase in annual recurring revenue in 2023, reaching US$5 million, highlighting its robust growth trajectory.[136]

7.9.3 Conclusion

DXwand has successfully addressed the gap in conversational A.I. solutions for the Middle East, particularly focusing on Arabic dialects, and has grown rapidly since its inception in 2018. The company has attracted significant funding, including a US$4 million Series A round in 2023, enabling its global expansion and enhancement of A.I.-driven services. With consistent yearly growth, DXwand is well positioned for continued success in the A.I. space across the M.E.N.A. region and beyond.

Notes

1 Takyi-Asiedu, S. (1993). Some socio-cultural factors retarding entrepreneurial activity in Sub-Saharan Africa. *Journal of Business Venturing*, *8*, 91–98.
2 Robson, P. J. A., & Obeng, B. A. (2008). The barriers to growth in Ghana. *Small Business Economics*, *30*(4), 385–403.

3 Xiao, W. (2023, August 31). *Meet five generative AI innovators in Africa and the Middle East*. NVIDIA. https://blogs.nvidia.com/blog/generative-ai-startups-africa-middle-east/
4 Takyi-Asiedu, S. (1993). Some socio-cultural factors retarding entrepreneurial activity in Sub-Saharan Africa. *Journal of Business Venturing*, *8*, 91–98.
5 ILOSTAT. (2023). *African youth face pressing challenges in the transition from school to work*. ILOSTAT.
6 Osakwe, A. (2024, January 23). *Entrepreneurship and structural transformation*. In *Foresight Africa 2024*. Brookings. https://www.brookings.edu/articles/entrepreneurship-and-structural-transformation-foresight-africa-2024/
7 Finnan, D. (2018). PodcastTunisia must increase investment and push through reforms, says OECD. http://en.rfi.fr/africa/20180403-tunisia-must-increase-investment-and-push-through-reforms-says-oecd
8 Statistics South Africa. (2024, May 14). *Unemployment in South Africa: A youth perspective*. https://www.statssa.gov.za/?p=17266
9 worldbank.org. (2016). While poverty in Africa has declined, number of poor has increased. www.worldbank.org/en/region/afr/publication/poverty-rising-africa-poverty-report
10 Beegle, K., Christiaensen, L., Dabalen, A., & Gaddis, I. (2016). *Poverty in a rising Africa*. World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/22575 License: CC BY 3.0 IGO.
11 worldbank.org. (2016). While poverty in Africa has declined, number of poor has increased. www.worldbank.org/en/region/afr/publication/poverty-rising-africa-poverty-report
12 Aderonmu, F. (2023, September 11). Formalizing Africa's informal sector through the AfCFTA: An opportunity for economic transformation. *Princeton University*, Annotations Blog. https://jpia.princeton.edu/news/formalizing-africas-informal-sector-through-afcfta-opportunity-economic-transformation
13 Elkan, W. (1988). Entrepreneurs and entrepreneurship in Africa. *World Bank Research Observer*, *3*(2), 171–188.
14 Osakwe, A. (2024, January 23). Entrepreneurship and structural transformation. *Foresight Africa 2024*. Brookings. https://www.brookings.edu/articles/entrepreneurship-and-structural-transformation-foresight-africa-2024/
15 Ichikowitz Foundation. (2022). *The African Youth Survey 2022*. https://ichikowitzfoundation.com/storage/ays/ays2022.pdf
16 Kazeem, Y. (2017). Africa's most valuable startup ecosystem is also the least lucrative for software engineers. https://qz.com/943613/lagos-is-africas-most-valuable-startup-ecosystem/
17 Aransiola, D. (2017). The rise of coworking spaces in Africa. www.deskmag.com/en/the-rise-of-coworking-spaces-in-africa-958
18 Clyde & Co. (2024, September 20). *Co-working spaces in African urban centres*. Clyde & Co. https://www.clydeco.com/en/insights/2024/09/co-working-spaces-in-african-urban-centres
19 Charania, N., & Naupari, C. (2018). Blockchain's big potential in Africa. https://venturebeat.com/2018/04/01/blockchains-big-potential-in-africa/
20 The World Bank. (2016). Ghana's Young entrepreneurs get a boost to their businesses. www.worldbank.org/en/news/feature/2016/05/11/ghanas-young-entrepreneurs-get-a-boost-to-their-businesses
21 GNA. (2011). KNUST sets up Kumasi Business Incubator. www.modernghana.com/news/319994/1/knust-sets-up-kumasi-business-incubator.html

22 Kenu, D. (2021, March 29). *3 institutions collaborate to promote youth in agriculture*. Graphic Online. https://www.graphic.com.gh/news/general-news/3-institutions-collaborate-to-promote-youth-in-agriculture.html
23 Essien, M. (2015). Why startup incubators in Africa just don't work. http://ventureburn.com/2015/11/startup-incubators-africa-just-dont-work/
24 Essien, M. (2015). Why startup incubators in Africa just don't work. http://ventureburn.com/2015/11/startup-incubators-africa-just-dont-work/
25 Haigh, D. (2009). Why Africa must nurture home-grown brands. *Managing Intellectual Property*, *193*, 82–84.
26 Kapstein, E. B. (2009). Africa's capitalist revolution. *Foreign Affairs*, *88*(4), 119–129.
27 Douglas, B. (2018). A cooperative in Utrecht received a multi-million Rand investment recently. https://newcastleadvertiser.co.za/147415/huge-investment-for-utrecht-maize-farm/
28 Chuhan-Pole, P. Korman, V., Angwafo, M., & Buitano, M. (2011). Africa's Pulse. http://siteresources.worldbank.org/INTAFRICA/Resources/Africas-Pulse-brochure_Vol3.pdf
29 Rheault, M and B Tortora (2008). *Nigeria: Drivers and Challenges of Entrepreneurship*.[www.gallup.com/poll/106345/nigeria-drivers-challenges-entrepreneurship.aspx]. 8).
30 Allen, E., Langowitz, N., & Minnitti, M. (2006). *Global Entrepreneurship Monitor: 2006 Report on Women and Entrepreneurship*. Babson College.
31 Rheault & Tortora. (2008).
32 United Nations Conference on Trade and Development (UNCTAD). (2022). *Economic Development in Africa Report 2022*. https://unctad.org/edar2022
33 Future causes of conflict. www.ppu.org.uk/war/future_wars.html
34 Mutasa, H. (2009). Zimbabwe's "special" relationship. *aljazeera.net*. english .aljazeera.net/focus/ chinabuystheworld/2009/08/200981083259504514. html
35 Stryker, J. D., & Baird, K. E. (1992). Trends in African agricultural trade: Causes and prognosis. *Policy Studies Journal*, *20*(3), 414–430.
36 Sáez, L., & Gallagher, J. (2009). Authoritarianism and development in the Third World. *Brown Journal of World Affairs*, *15*(2), 87–101.
37 Green, P. L. (2009). Africa in a squeeze. *Global Finance*, *23*(5), 18–22.
38 Bell, G. (2006). US, China to spur massive Africa oil growth. *Reuters*.
39 Donnelly, J. (2005). China scooping up deals in Africa as US firms hesitate. *Boston Globe*, Burdens of oil weigh on Nigerians: Ecological harm, corruption hit hard. *Boston Globe*. www.boston.com/news/world/africa/articles/2005/10/03/burdens_of_oil_weigh_on_ nigerians/
40 Bajpaee, C. (2005). *The eagle, the dragon and African oil*. www.atimes.com/atimes/ China_Business/GJ12Cb01.html
41 Schlumberger, O. (2000). Arab political economy and the European Union's Mediterranean policy: What prospects for development? *New Political Economy*, *5*(2), 247–268.
42 Aldouri, S., & Meddeb, H. (2018). In face of protests, Tunisia needs bold economic reforms. www.chathamhouse.org/expert/comment/face-protests-tunisia-needs-bold-economic-reforms
43 DefenceWeb. (2023, October 18). *Corruption costs Africa $140 billion a year*. DefenceWeb. https://www.defenceweb.co.za/security/national-security/corruption-costs-africa-140-billion-a-year/
44 Global Witness. (2006). Breaking the links between the exploitation of natural resources, conflict and corruption. UNCTAD Expert Meeting on F.D.I. in

natural resources, www.unctad.org/ sections/wcmu/docs/com2em20p0019_en.pdf
45 Freedom House. (2017). Populist and autocrats: The dual threat to global democracy. https://freedomhouse.org/report/freedom-world/freedom-world-2017
46 Sáez, L., & Gallagher, J. (2009). Authoritarianism and development in the Third World. *Brown Journal of World Affairs*, *15*(2), 87–101.
47 Mvunganyi, J. (2010). *African Youth Bear Brunt of Global Economic Crisis*. www1.voanews.com/english/news/africa/African-Youth-Bear-Brunt-of-Global-Economic-Crisis-82601422.html
48 Bloomberg News. (2024, April 23). Zuma's party wants to nationalize land, mines in South Africa. *Mining.com*. https://www.mining.com/web/zumas-party-wants-to-nationalize-land-mines-in-south-africa/
49 Mail & Guardian. (2004, September 14). Now Mugabe wants Zimbabwe's mines. *Mail & Guardian*. https://mg.co.za/article/2004-09-14-now-mugabe-wants-zimbabwes-mines/).
50 Wilson, E. J. (1990). Strategies of state control of the economy: Nationalization and indigenization in Black Africa. *Comparative Politics*, *22*(4), 401–419.
51 Donnelly, J. (2005). *In oil-rich nation, charges of skimming: Congolese officials said to reap profits*. Boston Globe.
52 Donnelly, J. (2005). *In oil-rich nation, charges of skimming: Congolese officials said to reap profits*. Boston Globe.
53 Omeje, K. (2024, April 10). Dysfunctional capitalism in Africa and the theory of squanderation. *Kujenga Amani*. https://kujenga-amani.ssrc.org/2024/04/10/dysfunctional-capitalism-in-africa-and-the-theory-of-squanderation/
54 Raymond, F. (1951). *Elements of social organization*. Beacon Press.
55 Wilson, E. J. (1990). Strategies of state control of the economy: Nationalization and indigenization in Black Africa. *Comparative Politics*, *22*(4), 401–419.
56 Dairo, O. (2023, October 26). The entrepreneur's dilemma: Knowledge vs. funding in Africa. *IE Insights*. https://www.ie.edu/insights/articles/the-entrepreneurs-dilemma-knowledge-vs-funding-in-africa/
57 Bailey, B. (2020, March 18). Nigeria records 61% start-ups' failure rate in 9 years. *BusinessDay*. https://businessday.ng/uncategorized/article/nigeria-records-61-start-ups-failure-rate-in-9-years/
58 Oyeniran, A. (2018). Africa's learning crisis may fail to eliminate extreme poverty – World Bank. https://independent.ng/africas-learning-crisis-may-fail-eliminate-extreme-poverty-world-bank/
59 Oyeniran, A. (2018). Africa's learning crisis may fail to eliminate extreme poverty – World Bank. https://independent.ng/africas-learning-crisis-may-fail-eliminate-extreme-poverty-world-bank/
60 Smith, A.D. (2009). Trade, not aid, is latest hope: Donors are now focusing less on charity and more on the continent's entrepreneurs. *The Guardian (London) - Final Edition*, 27.
61 Mtomba, V. (2015). Sub_Saharan Africa has lowest savings rate. www.newsday.co.zw/2015/12/sub-saharan-africa-has-lowest-savings-rate/
62 Nyang'oro, O. (2023, May). *91% of sub-Saharan African workers don't save for old age: Why that's a problem and how to fix it*. UNU-WIDER. https://www.wider.unu.edu/publication/91-sub-saharan-african-workers-dont-save-old-age
63 worldbank.org. (2017). Remittances to developing countries decline for second consecutive year. www.worldbank.org/en/news/press-release/2017/04/21/remittances-to-developing-countries-decline-for-second-consecutive-year

64 de Best, R. (2024, August 29). *Annual incoming remittance flow to LMI countries in Sub-Saharan Africa 2016–2023*. Statista. https://www.statista.com/statistics/962822/remittance-flows-to-sub-saharan-african-countries/
65 Olatunji, H. (2021, May 12). World Bank: Nigeria responsible for over 40% diaspora remittances in Sub-Saharan Africa. *The Cable*. https://www.thecable.ng/world-bank-nigeria-responsible-for-over-40-diaspora-remittances-in-sub-saharan-africa
66 worldbank.org. (2017). Remittances to developing countries decline for second consecutive year. www.worldbank.org/en/news/press-release/2017/04/21/remittances-to-developing-countries-decline-for-second-consecutive-year
67 Ratha, D. (2024, June 26). *Remittances slowed in 2023 – we need to take note*. World Bank. https://blogs.worldbank.org/en/peoplemove/remittances-slowed-in-2023---we-need-to-take-note
68 The Economist. (2015). Unblocking the pipes. www.economist.com/news/leaders/21640349-africa-needs-lot-capital-private-equity-offers-lessons-how-get-it-there-unblocking
69 Daba Finance. (2023, October 1). *Investing in African stock markets - Daba: Your gateway to Africa's potential*. Daba Finance. https://dabafinance.com/en/learn/blogs/how-to-invest-in-african-stock-markets
70 Galal, S. (2024, January 31). *Number of IPOs in Africa 2011-2021*. Statista. https://www.statista.com/statistics/1221494/number-of-ipos-in-africa/
71 PWC. (2017). 2017 Africa Capital markets to watch. www.pwc.com/ng/en/publications/africa-capital-markets-watch.html
72 PWC. (2017). 2017 Africa Capital markets to watch. www.pwc.com/ng/en/publications/africa-capital-markets-watch.html
73 Galal, S. (2024, January 31). *Number of IPOs in Africa 2011-2021*. Statista. https://www.statista.com/statistics/1221494/number-of-ipos-in-africa/
74 Statista. (n.d.). *Initial public offerings - Africa*. Statista. https://www.statista.com/outlook/fmo/corporate-finance/initial-public-offerings/africa
75 The Economist. (2015). Unblocking the pipes. www.economist.com/news/leaders/21640349-africa-needs-lot-capital-private-equity-offers-lessons-how-get-it-there-unblocking
76 African Business. (2024, June). *Africa vs the world*. https://african.business/2024/06/african-banker/africa-vs-the-world#:~:text=According%20to%20the%20World%20Bank,recent%20year%20for%20which%20full
77 African Business. (2024, June). *Africa vs the world*. https://african.business/2024/06/african-banker/africa-vs-the-world#:~:text=According%20to%20the%20World%20Bank,recent%20year%20for%20which%20full
78 The Economist. (2024, August 22). *A shift towards green investment is under way in Africa*. The Economist. https://www.economist.com/middle-east-and-africa/2024/08/22/a-shift-towards-green-investment-is-under-way-in-africa
79 Virani, S. (2016). Here's why it's so tough for African startups to raise funding internationally. https://qz.com/780118/heres-why-its-so-tough-for-african-startups-to-raise-funding-internationally/
80 Charania, N., & Naupari, C. (2018). Blockchain's big potential in Africa. https://venturebeat.com/2018/04/01/blockchains-big-potential-in-africa/
81 Foreign Policy. (2011). The FP Survey: The Internet, *188*, 1–9.
82 Ekekwe, N. (2015). The challenges facing e-commerce start-ups in Africa. Retrieved February 5, 2018, from https://hbr.org/2015/03/the-challenges-facing-e-commerce-start-ups-in-africa

83 Kelly, T. (2014). Tech hubs across Africa: Which will be the legacy makers? http://blogs.worldbank.org/ic4d/tech-hubs-across-africa-which-will-be-legacy-makers
84 Talbot, D. (2011). Chasing the African cloud. Retrieved July 9, 2016, from www.technologyreview.com/news/425922/chasing-the-african-cloud/
85 Vodafone. (2022, March 7). M-Pesa – Africa's leading fintech platform – marks 15 years of transforming lives. *Vodafone*. https://www.vodafone.com/news/empowering-people/mpesa-marks-15-years
86 Vodafone. (2022, March 7). M-Pesa – Africa's leading fintech platform – marks 15 years of transforming lives. *Vodafone*. https://www.vodafone.com/news/empowering-people/mpesa-marks-15-years
87 Tsanni, A. (2023). *This company is building AI for African languages*. MIT Technology Review. Retrieved June 4, 2024, from https://www.technologyreview.com/2023/11/17/1083637/lelapa-ai-african-languages-vulavula/
88 Tsanni, A. (2023). *This company is building AI for African languages*. MIT Technology Review. Retrieved June 4, 2024, from https://www.technologyreview.com/2023/11/17/1083637/lelapa-ai-african-languages-vulavula/
89 Chason, R. (2024, April 13). With French under fire, Mali uses AI to bring local language to students. *The Washington Post*. https://www.washingtonpost.com/world/2024/04/13/mali-books-artificial-intelligence-ai/
90 The Economist. (2015). Unblocking the pipes. www.economist.com/news/leaders/21640349-africa-needs-lot-capital-private-equity-offers-lessons-how-get-it-there-unblocking
91 Smith, A. D. (2009). Trade, not aid, is latest hope: Donors are now focusing less on charity and more on the continent's entrepreneurs. *The Guardian (London) - Final Edition*, 27.
92 Thompson, C. (2007). The scramble for Africa's Oil, new statesman. www.globalpolicy.org/component/content/article/154/25931.html
93 U.S. Trade Representative. (2022, December). *U.S. – Sub-Saharan Africa Bilateral Trade and Investment*. U.S. Trade Representative. https://ustr.gov/sites/default/files/2022-12/SubSaharan2021.pdf
94 Brookes, P., & Shin, J. H. (2006). *China's Influence in Africa: Implications for the United States*. The Heritage Foundation: www.heritage.org/Research/AsiaandthePacific/bg1916.cfm
95 Galal, S. (2024, March 27). *Share of crude oil imports to China from African countries 2021*. Statista. https://www.statista.com/statistics/1259225/share-of-crude-oil-imports-from-african-countries-to-china-as-share-of-total/
96 Pritchard, C. (1997). Into Africa. *Marketing Magazine*, *102*(38), 12.
97 See: Ethiopia Chapter 1. General Overview. http://ieo.ae/ethiopia_go.htm
98 Ghemawat, P. (2003). The forgotten strategy. *Harvard Business Review*, *81*(11), 76–84.
99 Haigh, D. (2009). Why Africa must nurture home-grown brands. *Managing Intellectual Property*, *193*, 82–84.
100 Haigh, D. (2009). Why Africa must nurture home-grown brands. *Managing Intellectual Property*, *193*, 82–84.
101 Chien, K. (2009, September 11). Zimbabwe looks to China for economic rebuild. *Reuters*. https://www.reuters.com/
102 huffingtonpost.com.
103 Haigh, D. (2009). Why Africa must nurture home-grown brands. *Managing Intellectual Property*, *193*, 82–84.
104 Colburn, F. D. (2006). Good-bye to the 'Third World'. *Dissent*, *53*(2), 38–41.

105 Rasiah, R., & Ofreneo, R. E. (2009). Introduction: The dynamics of textile and garment manufacturing in Asia. *Journal of Contemporary Asia*, *39*(4), 501–511.
106 Vassiliou, P. (2010). *A Hand Up, Not a Hand Out*. www.forbes.com/2010/01/12/africa-india-poverty-legatum-tech-opinions-contributors-philip-vassiliou.html
107 Green, P. L. (2009). Africa in a squeeze. *Global Finance*, *23*(5), 18–22.AAA
108 Moyo, D. (2009). Why foreign aid is hurting Africa. *Wall Street Journal*, (Eastern edition), 21 March, W.1.
109 Awori, A. (2009). An African perspective on environment and development. *Voices from Africa*, Number 5, Sustainable Development Part 1. www.un-ngls.org/orf/documents/publications.en/voices.africa/number5/vfa5.04.htm.
110 Moyo, D. (2009). Why foreign aid is hurting Africa. *Wall Street Journal*, (Eastern edition), 21 March, W.1.
111 Prahalad, C. K. (2005). Aid is not the answer. *Wall Street Journal* (Eastern edition), A.8.
112 Kristof, N. D. (2009). How can we help? *New York Times Book Review*, p. 27.
113 Feed the Future. (2024, September 24). *FACT SHEET: U.S. Government Launches New Regional Approach to Double Down on Food Security in Sub-Saharan Africa*. https://www.feedthefuture.gov/article/fact-sheet-u-s-government-launches-new-regional-approach-to-double-down-on-food-security-in-sub-saharan-africa/
114 Park, A., & Vercillo, S. (2021, December 10). The new US nutrition aid strategy undermines Africa's hungriest. *Al Jazeera*. https://www.aljazeera.com/opinions/2021/12/10/how-the-us-is-failing-smallholder-farmers-in-africa
115 Prahalad, C. K. (2005). Aid is not the answer. *Wall Street Journal* (Eastern edition), A.8.
116 Sáez, L., & Gallagher, J. (2009). Authoritarianism and development in the Third World. *Brown Journal of World Affairs*, *15*(2), 87–101.
117 Auty, R. (1998). *Resource abundance and economic development*. World Institute for Development Economics Research.
118 Donnelly, J. (2005). Oil wealth helping few of Angola's poor: Vast reserves cannot undo legacy of war, corruption. *Boston Globe*, www.boston.com/news/world/africa/articles/2005/12/11/oil_wealth_helping_few_of_angolas_poor/
119 Foroohar, R. (2003). A country that works; smart policies and soft dictatorship make Tunisia something unique: A successful Arab economy. *Newsweek*, p. 32.
120 Mitra, D. (1999). Endogenous lobby formation and endogenous protection: A long-run model of trade policy determination. *American Economic Review*, *89*(5), 1116–1134.
121 illegal-fishing.info. (2007).
122 Markusen, J. R., & Venables, A. J. (1999). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, *43*(2), 335–356.
123 Startuplist Africa. (2024). *Artificial intelligence startups in Africa*. https://startuplist.africa/industry/artificial-intelligence
124 Lin, C.-P. (2024, March 21). AI-driven solutions platform DXwand secures $4M funding to propel Conversational AI to companies in MENA. *Orbit Startups*. https://orbitstartups.com/ai-driven-solutions-platform-dxwand-secures-4m-funding-to-propel-conversational-ai-to-companies-in-mena/
125 Mahmoud, A. (2022, August 9). *Meet our founder of the week: Ahmed Mahmoud, co-founder and CEO of DXwand*. Enterprise Press. https://enterprise.press/stories/2022/08/09/meet-our-founder-of-the-week-ahmed-mahmoud-co-founder-and-ceo-of-dxwand-77514/

126 Lin, C.-P. (2024, March 21). AI-driven solutions platform DXwand secures $4M funding to propel Conversational AI to companies in MENA. *Orbit Startups*. https://orbitstartups.com/ai-driven-solutions-platform-dxwand-secures-4m-funding-to-propel-conversational-ai-to-companies-in-mena/
127 Kene-Okafor, T. (2024, January 25). DXwand raises $4M to scale its conversational AI platform serving enterprises in MENA. *TechCrunch*. https://techcrunch.com/2024/01/25/dxwand-raises-4m-to-scale-its-conversational-ai-platform-for-enterprises-in-mena/
128 International Finance. (2024, January 31). *Start-up of the week: DXWand transforms MENA AI with multi-dialect chatbot*. https://internationalfinance.com/technology/start-up-week-dxwand-transforms-mena-ai-with-multi-dialect-chatbot/
129 Kene-Okafor, T. (2024, January 25). DXwand raises $4M to scale its conversational AI platform serving enterprises in MENA. *TechCrunch*. https://techcrunch.com/2024/01/25/dxwand-raises-4m-to-scale-its-conversational-ai-platform-for-enterprises-in-mena/
130 International Finance. (2024, January 31). *Start-up of the week: DXWand transforms MENA AI with multi-dialect chatbot*. https://internationalfinance.com/technology/start-up-week-dxwand-transforms-mena-ai-with-multi-dialect-chatbot/
131 El-Shaeri, N. (2024, July 20). AI startup DXwand to set up local office in Riyadh. *Arab News*. https://www.arabnews.com/node/2553161/business-economy
132 Kene-Okafor, T. (2024, January 25). DXwand raises $4M to scale its conversational AI platform serving enterprises in MENA. *TechCrunch*. https://techcrunch.com/2024/01/25/dxwand-raises-4m-to-scale-its-conversational-ai-platform-for-enterprises-in-mena/
133 Startuplist Africa. (2024). *Artificial intelligence startups in Africa*. https://startuplist.africa/industry/artificial-intelligence
134 International Finance. (2024, January 31). *Start-up of the week: DXWand transforms MENA AI with multi-dialect chatbot*. https://internationalfinance.com/technology/start-up-week-dxwand-transforms-mena-ai-with-multi-dialect-chatbot/
135 El-Shaeri, N. (2024, July 20). AI startup DXwand to set up local office in Riyadh. *Arab News*. https://www.arabnews.com/node/2553161/business-economy
136 Lin, C.-P. (2024, March 21). AI-driven solutions platform DXwand secures $4M funding to propel Conversational AI to companies in MENA. *Orbit Startups*. https://orbitstartups.com/ai-driven-solutions-platform-dxwand-secures-4m-funding-to-propel-conversational-ai-to-companies-in-mena/

Chapter 8

Entrepreneurship in China

This chapter's objectives are:

1. To demonstrate an understanding of the nature of transformation taking place in entrepreneurship in China.
2. To analyze the drivers of entrepreneurship in China.
3. To assess the nature of institutional changes related to entrepreneurship in China.
4. To evaluate some of the barriers to institutional changes related to entrepreneurship in China.
5. To demonstrate an understanding of the impacts of entrepreneurship in China.

8.1 Introduction

Entrepreneurship is undergoing a significant transformation in China. In 2015 alone, 4.4 million new businesses were registered in the country with an investment of US$5 trillion.[1]

During the Mao era, for instance, private entrepreneurship was virtually eradicated and was a political taboo. Entrepreneurs were shunned and disgraced in the country as late as the 1980s and the entrepreneur as an occupation was often considered for individuals who were not able to find other jobs such as those with criminal records.[2] Entrepreneurship in China thus was an oxymoron and paradox before the country started political and economic reforms in 1978.

In recent years, China has earned a reputation as one of the world's most entrepreneur-friendly countries. According to the 2009 Global Entrepreneurship Monitor (G.E.M.) report, China has a higher rate of nascent entrepreneurship than the United States. China also outperforms the United States in the rate of ownership of new businesses as well as the rate of ownership of established businesses.[3] Moreover, China also performs better than many countries including the United States in the rates of new business growth. According to the 2009 G.E.M. Report, China has the

DOI: 10.4324/9781003565154-8

world's highest rate of high-expectation entrepreneurship. Over 4% of the Chinese working-age population was engaged in high-growth-expectation entrepreneurship during 2004–9 compared to less than 1.5% in the United States.[4]

The Chinese Communist Party (C.C.P.) leaders have publicly acknowledged the benefit that entrepreneurs and capitalists can bring to the economy. At the Davos conference in the summer of 2014, Chinese Premier Li Keqiang launched a "mass entrepreneurship and innovation" campaign, emphasizing that a new wave of grassroots entrepreneurship would modernize the engine of China's economic development.[5] They have especially encouraged the growth of high-technology entrepreneurship. The C.C.P. has welcomed entrepreneurs in the inner circle and upper echelons of the party. There has been a transformation of state owned enterprises and inward foreign direct investment has provided learning opportunities for Chinese firms. Whereas China's so-called "red hat entrepreneurs" were a form of political entrepreneurs, new entrepreneurs increasingly resemble market entrepreneurs and are moving away from depending on political connection.[6]

Entrepreneurs are increasing their dominance in the Chinese political arena and are gaining more respect in the society. A recent survey conducted among Chinese found that 70% of the respondents thought entrepreneurship was a good career choice.[7] The Chinese society has rapidly embraced the idea of entrepreneurship. Entrepreneurial role models in China encourage people to start their own businesses, and networks of family members and relatives support entrepreneurs.

To fully understand China's recent entrepreneurial transformations, it is essential to examine the roles digital technologies play in shaping economic and social dynamics. In *The Labor of Reinvention: Entrepreneurship in the New Chinese Digital Economy*, Lin Zhang examines three entrepreneurial groups in China: Silicon Valley-inspired startup founders in Beijing, rural e-commerce sellers leveraging Taobao and *daigou* luxury resellers operating through gray markets on social media. Entrepreneurship, however, disproportionately benefits those with specific advantages: rural youth with urban internet skills, Beijing founders with elite education or state firm experience and resellers with cross-border mobility and fashion expertise.[8]

8.2 The Evolution of Entrepreneurship in China: Political, Economic and Social Influences

Chinese political leaders have set economic growth as a top priority. There has been a shift in the base of regime legitimacy from MarxLeninism to economic growth. Following the 1978 reforms China moved away from many of the Marxist approaches such as price controls and state ownership.[9]

Analysts disagree as to the effects of the Chinese environment in shaping the entrepreneurship landscape. Some argue that China has "inbuilt" and "government-fostered" mechanisms[10] that have helped unleash the entrepreneurial spirit of the Chinese. In a poll conducted among Americans by Zogby International and 463 Communications, 49% of the respondents said that China or Japan provide the "creative and entrepreneurial milieu required to form the world's next technological innovator".[11] Only 21% said that the next Bill Gates will be from the United States. China began a new campaign to support entrepreneurship in 2014. By March 2016, it had opened 1,600 high-tech incubators for startups.[12]

The opposite view is that close state control has led to the failure of apparently abundant Chinese entrepreneurship. Others maintain that Chinese politics was arguably the most liberal in the 1980s. The 1989 Tiananmen events, which ended with a bloody military crackdown, impeded China's entrepreneurial progress. It is also noted that, in the 1990s, China reversed the gradualist political reforms started since 1978.

There are still communal principles such as the existence of communal property. Likewise, despite the substantial decline in state ownership, the state still accounts for a significant proportion of national gross domestic production (G.D.P.).[13] The rule of law and other market-supporting institutions, such as private property protection, are weak, as there is no independent judiciary.[14]

The development and growth of the private sector is often mentioned as an afterthought and a result instead of a cause of the country's economic success.[15] For instance, in September 2017, the C.C.P. defined its role in business. Also the government's official definition of "entrepreneurship" was offered. According to the new definition, patriotism and professionalism are the most important responsibilities of entrepreneurs. Other responsibilities included observing discipline, complying with laws, innovation and serving society. The statement did not mention profits. However, the statement assured that entrepreneurs' property would be protected.[16]

8.2.1 Some Macroeconomic Indicators

Entrepreneurialism in China began to flourish after the country opened up to the global economy in the 1970s. The evolution of entrepreneur-friendly institutions and China's quantum leap on the entrepreneurship front are reflected in the macrolevel economic data and Chinese companies' global performance, outreach and expansion.

Entrepreneurialism in China has been experiencing a slowdown in recent years, due to factors such as economic challenges, political decisions and global tensions. In 2018, during the peak of venture capital (V.C.) investment, 51,302 startups were established in China, according to IT Juzi. By

2023, this number had plummeted to 1,202, with projections indicating an even steeper decline in 2024. The crisis in China's private sector is driven by the economic slowdown, worsened by COVID-19 lockdowns, the property bubble collapse and stagnant equity markets. Additionally, political decisions by President Xi Jinping, including a crackdown on monopolistic tech companies and an ongoing anticorruption campaign, have significantly altered the business landscape.[17]

Observers have noted that entrepreneurial optimism in China, once fueled by figures like Jack Ma of Alibaba and Pony Ma of Tencent, has sharply declined since November 2020. That month, Beijing halted the initial public offering (I.P.O.) of Ant Group, Alibaba's fintech arm, triggering a crackdown on the technology sector. This move, coupled with growing uncertainty and political intervention, has led many entrepreneurs to question the value of starting businesses. A serial founder in Shanghai reflected this sentiment, stating that there is no longer any compelling reason to take on the risks of entrepreneurship, given the five years of stalled startups.[18]

In 2014, only 14% of unicorns were China-based, which increased to 35% in April 2018. The number of U.S.-based unicorns fell from 61% to 41% of the global total during the same period.[19] China was once a major source of unicorns, creating as many as the United States and three times more than the rest of the world between 2016 and 2018. However, during January–July 2024, the country produced only half the number of new billion-dollar startups as the United States. The total for 2024 was expected to be less than a third of the 109 unicorns China generated in 2021, with the global slowdown in startup activity only partially explaining the decline.[20]

The exit of U.S. investors due to rising bilateral tensions also contributed.[21] The initial boom of Chinese unicorns was largely fueled by American investment funds, often led by executives of Chinese descent. Seven out of ten Chinese unicorns received foreign backing, primarily from the United States. One notable example is HongShan, which played a role in the development of 96 out of 369 Chinese unicorns, according to accountancy firm KPMG. HongShan was originally part of Sequoia Capital, a well-known Silicon Valley venture capital firm, but it split off in 2023 amid growing tensions between China and the United States. Attracting Silicon Valley investment is increasingly difficult for Chinese startups due to heightened scrutiny and policy uncertainty. For example, new U.S. Treasury rules ban some investments in Chinese artificial intelligence (A.I.), extending security measures to outbound capital. As a result, foreign investment in Chinese startups is on track to hit a decade low, with foreign funds accounting for just one-fifth of venture capital in 2024, down from two-thirds between 2014 and 2021.[22]

China's annual G.D.P. per capita growth rate during 1978–2017 was around 9%.[23] The phenomenal economic progress of China during the past four decades is a success story for the developing world. This phenomenon

is often referred to as the "China paradox", because the country has grown well despite not having a well-developed set of institutions.[24]

Despite economic challenges, Chinese consumption shows positive signs as of early 2024. After a moderate recovery in 2023, with G.D.P. growth of 5.2%, consumption is growing, although expectations were tempered by pandemic effects. Key macroeconomic indicators are stable, and while competition is intensifying, the overall outlook for Chinese consumption remains encouraging.[25] In 2023, China maintained a stable urban unemployment rate of 5.1%, slightly lower than 2019's 5.2%.[26]

According to China Macro Finance, during 2000–9, the number of registered private businesses in China grew by over 30% annually. One estimate suggested that there were 43 million companies in China in 2010, of which 93% were private companies, which employed 92% of the country's workers.[27] Small and medium-sized entreprises (S.M.E.s) account for 99.8% of the total number of enterprises, 60% of total industrial output value and 57% of the total sales revenue.[28] Firms in the private sector are playing increasingly important roles in the Chinese economy. China's private sector, encapsulated by the "60/70/80/90" formula – contributing 60% of G.D.P., 70% of innovative capacity, 80% of urban employment and 90% of new jobs – has been central to the nation's growth and stability. However, the government's increasing intervention signals a recalibration of the state-private dynamic, driven by priorities like national security, economic equality and control over strategic sectors. This evolving relationship suggests a hybrid model where private firms remain vital but operate under stricter state oversight and alignment with national goals. While this approach aims to balance growth with control, its long-term impact on innovation and entrepreneurial vitality remains uncertain.[29]

8.2.2 *Emergence of World-Class Entrepreneurial Firms and Global Brands*

While Chinese firms and industries lag behind global leaders in Western nations – defined as developed, democratic countries – in terms of innovation, they are rapidly narrowing the gap, often at an extraordinary pace, with efforts on an immense scale.[30] China continues to assert its dominance on the global economic stage, even amid a recent slowdown, as evidenced by its strong performance in the 2024 Fortune Global 500 rankings.[31] While the United States has reclaimed the top spot with 139 companies compared to China's 128, the narrow margin underscores China's sustained strength and influence. Notably, China's ascent began in 2020 when its firms first surpassed their American counterparts in numbers, reflecting the country's ability to compete at the highest levels of corporate revenue generation. Despite challenges, China's economic resilience and the global footprint of its enterprises remain formidable.[32]

8.2.3 Inequalities in Income and Wealth

Inequalities in income and wealth in China have accelerated at a phenomenally unprecedented pace. According to an Asian Development Bank study of 22 Asian developing countries, China was the region's second most unequal country, only behind Nepal. During the early 1990s to the early 2000s, China's increase in inequality was also the second highest, only behind Nepal.[33] It is also worth noting that over 90% of China's richest 20,000 people are related to senior government officials or senior members of the C.C.P.[34]

From 1978 to 2015, the top 10% of China's population saw their share of national income rise from 27% to 41%, while the bottom 50% saw theirs fall from 27% to 15%. The income share of the middle 40% remained stable. The largest increase in inequality occurred between the mid-1980s and mid-2000s. In terms of wealth, the top 10% holds 67%, while the top 0.0001% owns 5.8%, roughly equal to the wealth of the bottom 50%.[35]

8.2.4 Informal Economy

As noted in Chapter 1, one way to measure the impacts of entrepreneurship would be to look at the informal economy. There is no systematic data on the size of the Chinese informal economy. The number of workers employed outside the formal sector was estimated to increase from 15,000 in 1978 to 168 million (59.4% of the total number of workers) in 2006.[36]

One estimate suggested that formal salary and wage employment as a proportion of total compensation is 15% in China compared to 40% in Indonesia, the Philippines and Thailand and 90% in G-7 nations.[37] Other estimates suggest that the size of the shadow economy as a proportion of official G.D.P. increased from 10.2% in 1994/95 to 13.4% in 2000/01.[38]

8.2.5 Motivation of Chinese Entrepreneurs

According to the 2009 G.E.M. report, proportionately more Chinese entrepreneurs than those in the United States are motivated by the desire to make money. The G.E.M. study found that fewer than 40% of Chinese entrepreneurs started businesses to have more independence, and more than 60% of them did so to increase their income. On the contrary, in the United States, only about 40% of entrepreneurs start businesses to increase income, while almost 60% do so to gain more independence.[39] Keming Yang, author of the book *Entrepreneurship in China*, noted:

> The Chinese people have a very strong desire, perhaps the strongest among all nations in the world, to lead an enviable material life. It is a

life-long struggle as they constantly compare their standard of material life with that of others around them.[40]

8.3 Institutional Changes and Entrepreneurship

From the perspective of entrepreneurship, formal institutions such as legal frameworks and rules, macroeconomic policies and political regimes as well as informal institutions such as cultures, social norms, customs, practices, conventions and traditions have changed dramatically in the past 50 years. These changes, which have facilitated entrepreneurship in China, deserve a closer look. Table 8.1 presents some examples of such changes.

Table 8.1 Understanding Institutional Changes Influencing Entrepreneurship in China

Institutional component	*Institutions in the past*	*Institutions today*
Formal	Entrepreneurial ventures perceived as potential threats to the C.C.P. regime.	Marriage between entrepreneurship and party membership.
	Weak laws related to private property and entrepreneurship and poor enforcement mechanisms.	China has enacted many new laws and enforcement mechanisms are strengthened.
Informal	Chinese societies had a highly negative perception of entrepreneurs. Entrepreneurs were sensitive to the communist regime and the society, which resist ownership of private property.	Entrepreneurs are gaining more respect in the society. Society's attitude toward business is increasingly favoring entrepreneurship, especially related to high technologies.
	Entrepreneurs had to fulfill social obligations.	Social obligations are not expected.
	Culture of complacency, conformity and risk aversion. V.C. funds were related to the Chinese government, which cannot accept the Western level of risk-taking.	Overseas Chinese with educations and entrepreneurship experience in the industrialized world are more similar to managers from the Western world. Inflow of foreign V.C. thanks to dense networks of overseas Chinese.
	Entrepreneurship as an occupation was often considered for individuals not able to find other jobs (e.g., those with criminal records).	Attitude toward entrepreneurship is rapidly shifting.

Three institutional change mechanisms include: institution formation, deinstitutionalization and reinstitutionalization.[41] Institution formation entails the birth of a new logic or governance structure. In the Chinese entrepreneurship terrain, for instance, Deng Xiaoping's famous statement provides a new logic for entrepreneurship: "To be rich is to be glorious". Similarly, entrepreneurs' entry into the C.C.P.'s inner circle and upper echelons and new laws to protect private property and intellectual property rights (I.P.R.) are changing institutions related to entrepreneurship by providing a new governance structure.

In deinstitutionalization, an existing logic or governance structure is dissolved. Deinstitutionalization is related to delegitimation. For instance, the widespread view that only people with criminal records become entrepreneurs has been dissolved in recent years.

Finally, reinstitutionalization involves an existing logic or governance structure replaced by a new logic or governance structure. The old logic among C.C.P. leaders was that private entrepreneurship was associated with rising income gap and social unrest, which would lead to a negative image of the party. In recent years, there is growing recognition among C.C.P. leaders that a richer economy increases respect for the party.

8.3.1 Changes in Formal Institutions

China's poor performance in transparency, official accountability and the rule of law is widely recognized. Corruption in the courts has been an issue of big concern. The C.C.P.'s Political-Legal Committee, local party committees and local governments control personnel and funding in the courts.[42]

Formal institutions, which obstructed the growth of entrepreneurship in China, are undergoing fundamental and extraordinary shifts. This has been true for attitudes of rule-making bodies such as the C.C.P. as well as laws and rules influencing entrepreneurship. Richard L. King, a venture partner at GRP Venture Partners observed: "Despite the flaws of the Chinese system, the Chinese people are not unhappy with it. They may be unhappy with corrupted officials, and corruption remains a major problem".[43] He further explained how prospective leaders in China are "groomed" and have many years to prove their capability and competence. Thomas Friedman echoes King: "One-party autocracy certainly has its drawbacks. But when it is led by a reasonably enlightened group of people, as China is today, it can also have great advantages".[44]

8.3.1.1 The C.C.P.'s Orientation toward Entrepreneurship

The conservative faction in the C.C.P. considers entrepreneurial ventures as potential threats to the party's dominance, ideology, administrative authority

and moral standards. Leaders of this faction perceive improved legal institutions as potential challenges for the C.C.P.'s legitimacy and have employed rising income gap and social unrest to justify measures against entrepreneurship.[45] Some analysts argued that the delay in granting full rights to entrepreneurs was due to an institutional inertia.

Chinese legal institutions related to entrepreneurship had been victims of political ideology. Following the 1989 Tiananmen events, the conservative faction's actions severely impacted entrepreneurship. Estimates suggest that the number of private enterprises reduced by 50% that year.[46]

While Russia and Eastern Europe followed Western prescriptions, China has successfully blended nationalism with Marxism. The C.C.P. expects that a richer economy might help burnish China's image worldwide and increase respect for it. For that reason, Chinese government encourages entrepreneurship. In general, China has failed to reform its political institutions but has been successful in constructing economic and market institutions needed to encourage innovation and entrepreneurship.[47]

Institutional actors bringing regressive changes in Chinese entrepreneurship are likely to weaken over time. Why might this be the case? First, as noted above, although some Chinese policy makers consider China's integration with the global market associated with significant socioeconomic costs, they cannot openly reject global integration.[48] To gain legitimacy from international institutions such as the World Trade Organization (W.T.O.), China is required to respect private entrepreneurship and ownership of private property.

Second, entrepreneurs are being openly accepted into the C.C.P.'s inner circle. The C.C.P.'s policies and formal legal institutions encourage entrepreneurship. The C.C.P. in 2002 changed its bylaws to allow entrepreneurs to become members. In a 2001 speech during celebrations of the party's 80th anniversary, then president Jiang Zemin acknowledged the benefit that capitalists bring to the economy. He also handed party membership to a capitalist and founder of one of China's most respected private companies and the first private company to list on a foreign stock exchange. In another instance, in 2003, the C.C.P. appointed one of China's wealthiest private entrepreneurs as deputy chairman of an advisory body to the government of Chongqing municipality. He was the first private businessman to be awarded such a high position. By 2017, 79 of the 2,158 members of the Chinese People's Political Consultative Conference (C.P.P.C.C.), which is the most powerful political advisory body, were on the "Hurun China Rich List" of the Hurun Research Institute.[49] Especially more tech entrepreneurs have been selected as members of the C.P.P.C.C. in recent years.

Although some analysts argue that the seemingly impressive position carried "no real power", optimists argue that these entrepreneurs will give the private sector a more powerful voice in policymaking. These activities have undoubtedly bolstered legitimacy to entrepreneurs.

The C.C.P.'s legitimacy-seeking process (logic) and governance structure are thus changing from the standpoint of entrepreneurship. First, the old logic that entrepreneurial ventures threaten the C.C.P.'s dominance, ideology, administrative authority and moral standards is losing ground in relation to competing institutions. The new logic is that a richer economy helps burnish the C.C.P.'s image worldwide. There has thus been reinstitutionalization. Second, as entrepreneurs exert a strong grip on the C.C.P., one can expect the formation of new institutions through a new governance structure. The legitimacy-seeking process requires appeasing multiple institutions that are conflicting and inconsistent. The Chinese government, for instance, has to take measures to satisfy both the conservative faction in the C.C.P. and entrepreneurs. As entrepreneurs strengthen their positions in the C.C.P., Chinese policy makers are expected to take substantive measures to appease them.

8.3.1.2 Strong Rules of Laws and Enforcement Mechanisms

There has been a rapid shift in formal institutions related to entrepreneurship. Following the 1978 economic and political reforms, China enacted thousands of new laws to protect private property and intellectual property (I.P.) and abolished or amended many laws in these areas to comply with the W.T.O. obligations. The formation of new institutions and governance structure is thus likely to promote entrepreneurship.

Under new laws, buyers of pirated goods can be fined five to ten times the value of the goods, and manufacturers face jail time and equipment confiscation.[50] The government has provided a significant empowerment to regulatory agencies involved in I.P.R. issues such as the State Administration of Industry and Commerce, the State Administration of Press and Publications, the intellectual property right office and the State Pharmaceutical Administration.[51] Similarly, China announced its plans to open special centers in 50 cities by 2006 to handle I.P.R. infringement complaints as well as to provide consulting services.[52]

8.3.1.3 Entrepreneurs as Institutional Change Agents

In China's context, researchers have identified four approaches institutional entrepreneurs employ to create market-oriented institutions by breaking regulative barriers: open advocacy, private persuasion, making a case for exceptions and ex ante investment with ex post justification.[53] First, open advocacy works only if the government is "tolerant enough for opinions that may criticize existing policies, regulations or laws" and the advocated changes are perceived to be beneficial to the general public. Second, entrepreneurs may persuade policy makers privately. Third, an entrepreneur may argue for a special case that is an exception to the existing laws and

regulations. Finally, if a business formed or expanded by breaking existing laws generates jobs, tax revenues and other forms of social benefits, the entrepreneur reports to the government and persuades policy makers to bring changes in existing laws and regulations.

In addition to entrepreneurs' roles in bringing changes in existing rules and laws, entrepreneurs may also engage in strengthening enforcement mechanisms. Consider China's I.P.R. laws. With increase in local firms' I.P. creation, these firms are forcing the government to take substantive measures to strengthen the country's I.P. regime.

Chinese courts have ramped up efforts to combat counterfeiting, imposing stricter penalties for I.P. violations to foster innovation through legal enforcement. In 2023, over 540,000 I.P. cases were handled nationwide, with punitive damages applied in 319 cases – a 117% rise compared to 2022, according to data from the Supreme People's Court.[54] It is also important to note that 95% of China's I.P.R. cases in 2005 were brought by Chinese companies.[55]

The Chinese nanotechnology industry provides another visible example to illustrate how local entrepreneurs are taking more aggressive actions in trying to alter the trajectories of institutions related to entrepreneurship. The Nanometer Technology Center established in Beijing is actively involved in protecting I.P.R.

8.3.1.4 Shift from Double Entrepreneurship to Legal Entrepreneurship

Institutional boundaries for economic activities are not well defined in China. Exploitation of the regulative uncertainty and the weak rules of laws has arguably become an important form of entrepreneurship in China. This phenomenon is also known as double entrepreneurship which entails maximizing economic rewards and minimizing sociopolitical risks. Entrepreneurs find attractive economic niches from outside the current institutional boundaries. For instance, entrepreneurs depend on relations with government bureaucrats to obtain a business license. At the same time, because of ineffective enforcement of property rights, they have to acquire political and administrative protection or depend on informal norms.

In many developing countries, starting a business entails overcoming a significant amount of red tape. In China, one way to overcome bureaucratic red tape has been to be close to the C.C.P. in order to gain advantages and preferential treatments. A membership in C.C.P. would give an entrepreneur easier access to loans and official protection and discourages the entry of new players. Entrepreneurs also spend time and energy in forming *guanxi* and cultivating ties with officials. In sum, whereas entrepreneurship in the West is about identifying profitable opportunities, in China, an alliance with those who control financial, physical or human resources is critical to succeed.[56]

Improvement in market-supporting institutions or transformation of a socialist economy into a market economy can thus be an important force in converting double entrepreneurship into legal entrepreneurship.[57] In recent years, Chinese regulative landscape has undergone significant improvement in rule setting and monitoring activities. Consequently, the institutional actors' values are entrepreneurship friendly and progressive.

8.3.2 Changes in Informal Institutions

8.3.2.1 Societal Perception of Entrepreneurs

The perception of entrepreneurship in China was drastically different from that in market economies. Mao arguably developed a fierce critique of capitalism, private property, income and wealth inequality and material interest. During the Mao era, private entrepreneurship was virtually nonexistent and was a political and social taboo.[58] Entrepreneurship was shunned even in the 1980s. Thanks to mindsets that were reminiscent of the Chinese Communist Public Goods Regime, as late as the 1990s, Chinese societies had highly negative perception of those trying to build their own company.

Faced with such societal perceptions, some Chinese entrepreneurs are still sensitive to the society and the Communist Party that resist ideas related to the ownership of private property. Accumulating a huge amount of wealth is thus a delicate subject. Some people in China still consider entrepreneurs as selfish people who think and act only in regard to their own interests.[59]

That is not to say that the institutional environment has not changed. Indeed, attitude toward businesses and private entrepreneurship is becoming more positive. Chinese leaders have also provided societal validity to entrepreneurship. With the new institutional logic associated with Deng Xiaoping's statement "To be rich is to be glorious", entrepreneurs are gaining more respect in the society.

8.3.2.2 Societies' Expectation from Entrepreneurs

Some still consider entrepreneurs as members of the working class striving for China's development. Some entrepreneurs are understood as "cadres" and were judged by their ability to provide socialist benefits. From the social standpoint, the road to entrepreneurship is beginning to look a little smoother. Especially, educated entrepreneurs running high-tech businesses are seen as highly respected good businesspeople. There is thus the deinstitutionalization of the logic that entrepreneurs need to fulfill social obligations.

8.3.2.3 Chinese Culture and Entrepreneurship

Overseas Chinese with education and entrepreneurship experience in the industrialized world are likely to possess knowledge and the ability to adapt in the Chinese context. "Social remittances" associated with immigrants (e.g., ideas, behaviors and identities) play critical roles in promoting entrepreneurship.[60]

Overseas Chinese returnees are influencing institutions related to the Chinese entrepreneurship landscape through a number of mechanisms. Overseas Chinese, for instance, control assets worth trillions of dollars and have developed complex and dense social organizations and institutions. In recent years, Chinese returnees have developed such institutions in China, which have promoted innovation and risk-taking and stimulated interaction among various ingredients of entrepreneurship. This trend is especially evident in industrial and high-tech parks of the country. Overseas Chinese have also contributed in producing synergies and in thickening existing institutions.[61] Successful entrepreneurial spin-offs from Chinese returnees have promoted risk-taking behavior among Chinese.

8.3.2.4 Cognitive Assessment of Entrepreneurship as an Occupation

While lifelong working for big enterprises is viewed as an ideal job in Japan, employment in big state-owned enterprises used to be the most desired career for Chinese. One observation is that people who spent most of their life in such careers dislike entrepreneurship.

Traditionally entrepreneurship was not the most desired occupation for China's best and brightest and was considered for people with criminal records who found it difficult to find other jobs. The situation is changing. A recent survey conducted among Chinese found that 70% of the respondents thought entrepreneurship was a good career choice and 32% expected to start a business in the next three years.[62]

8.4 Institutional Shifts and Entrepreneurial Dynamics

8.4.1 Regulative and Policy Framework

We noted a moment ago that there has been a rapid shift in formal institutions related to entrepreneurship. Traditionally regulative institutional issues such as insecurity of property rights and close state control hindered entrepreneurship. Private entrepreneurs lacked legal protection. The situation is, however, changing. China is making a shift from top-down, state-directed policies to flexible and market-oriented approaches.

There are many examples to illustrate this trend. The story related to state-run China Telecom's complaint against two entrepreneurs offering

callback services in Fujian deserves mention.[63] Their offerings challenged China Telecom's monopoly and high charges. The courts weren't convinced the brothers had violated any laws and ruled against China Telecom. To take another example, Pfizer successfully went against a major Chinese ministry-level government agency to defend its Viagra patent. Across these two examples we see evidence of deinstitutionalization or diluting control and power of state-owned monopolies and government agencies.

Supported by proactive Chinese government policy, China's dominance in the Global South is reinforced by its trillion-dollar Belt and Road Initiative (B.R.I.), an ambitious infrastructure project that has gained support from over 150 countries and 30 international organizations. This initiative, which aligns with China's broader goals of economic expansion and strengthening trade and investment ties with emerging markets, provides a significant advantage for Chinese companies. The demand generated by the B.R.I. offers a significant advantage for Chinese companies, creating substantial opportunities for Western multinationals that are open to forming partnerships with these firms. China's growing strength in emerging markets is reshaping global business dynamics. While Western multinationals have traditionally concentrated on mature markets with premium products, China has successfully captured growth markets by offering affordable, innovative solutions tailored to local needs. For example, Chinese smartphone companies, including Transsion Holdings, Xiaomi and Huawei, commanded 76% of the smartphone market in India and over 60% of the African market by 2021. In the electric vehicle sector, Chinese manufacturers dominate Latin America with an impressive 86% market share. Additionally, Huawei plays a crucial role in supplying around 70% of Africa's 4G network infrastructure.[64]

8.4.2 Values, Culture and Skills

8.4.2.1 Entrepreneurial Culture

While some argue that Chinese culture is entrepreneurship friendly, others suggest that Chinese, in general, tend to lack characteristics needed to be a successful entrepreneur such as independent thinking, risk-taking, innovations and self-determination. It is also suggested that entrepreneurship as discovery and exploitation of market opportunities is incompatible with China's culture of complacency, conformity and adherence to standard rules and procedures.[65] That said, it would be erroneous, however, to claim the existence of a generic Chinese culture. As discussed earlier, there is a major difference between the social organization and risk-taking behavior of Chinese staying in China and Overseas Chinese.

Finally, fatalistic orientation of Chinese people works against entrepreneurship. Compared to people in the West, Chinese arguably believe more

in fate and thus tend to rely on opportunism over long-term entrepreneurial strategy.[66]

8.4.2.2 Entrepreneurial Skills and Capabilities

Intel ex-C.E.O. Craig Barrett argued that the Chinese are "capable of doing any engineering, any software job, any managerial job that people in the United States are capable of".[67] Indeed, more scientists and engineers are staying in or returning to China with graduate degrees from foreign countries to perform research and development (R&D) work for foreign affiliates or local firms or to start their own businesses. By 2005, 170,000 Chinese with graduate degrees overseas had returned to China. According to the Chinese Ministry of Education, in 2009 and 2010, 108,300 and 134,800 Chinese, respectively, returned to the country after completing their studies in foreign countries. The number increased to 432,500 in 2016 (http://monitor.icef.com/2018/02/increasing-numbers-chinese-graduates-returning-home-overseas/). Multinational corporations are capitalizing on the huge and growing Chinese research pool to launch products that would help them compete globally.

Following the post-1978 reforms, Chinese firms gradually started importing Western management techniques. Traditionally, the import was concentrated on the tangible and quantitative approach. Soft concepts of management, such as marketing and consumer behavior, are relatively less integrated into the Chinese way of thinking. Such concepts were perceived by the C.C.P. as a threat to the communist ideology. Chinese entrepreneurial firms are taking measures to overcome these weaknesses. Some Chinese firms are seeking to overcome weaknesses in the areas of branding, sales, marketing and technology through mergers and acquisitions (M&A).

In a process known as "brain circulation", Chinese engineers and entrepreneurs with work experience in the Silicon Valley are contributing to entrepreneurial development in their home countries.[68] They initially enjoyed home-country advantage by tapping the low-cost skill base and subsequently moved into a higher gear and engaged in the localized processes.

8.5 Enhancing Access to Finance, Markets and Innovation

8.5.1 R&D and Innovations

China has transitioned from a "world's workshop" to a global R&D leader in A.I., biotechnology, I.T. and electromobility, ranking 11th on the Global Innovation Index, ahead of France.[69] According to Euromonitor International, China's gross domestic expenditure on R&D as a proportion

of G.D.P. was 2% in 2017. This increased to 2.43% in 2021. Between 1995 and 2021, China's R&D spending skyrocketed from US$18.2 billion to US$620.1 billion, a remarkable 3,299% increase, far outpacing the United States' 277% growth, as reported by the Rathenau Institute of the Netherlands.[70]

Overall China lags behind the West in terms of the state of technology, organizational and managerial ability. That being said, it is also the case that Chinese companies, thanks to their accelerated pace of technological and scientific advances, have developed strong prowess to compete globally in some technology sectors. Some visible examples of such technologies include blockchain, nanotechnology, open source software, cloning technology and cellular telecommunications.

China's increasing R&D and innovations profile is reflected in the emergence of globally competitive Chinese technology firms. Patents are an important proxy for innovations. As of the end of 2023, China became the first country to possess over 4 million valid domestic invention patents, with 1.665 million, or 41.5%, classified as high-value patents. The country's patenting progress was described as steady, with a significant improvement in quality. Notably, it took China just 1.5 years to register its fourth million patent, highlighting the rapid pace of innovation. This milestone reflects China's growing dominance in global I.P. development.[71]

In 2022, Chinese inventors filed 68,600 international patents, surpassing U.S. filings for the first time, with the United States at 58,200, according to the National Science Foundation. This marks a significant shift in global patenting, reflecting China's rapid rise in science and technology innovation. Robert Atkinson of the Information Technology and Innovation Foundation emphasized the growing importance of China's patenting activity as a key indicator of its economic and technological power.[72]

China leads the global generative A.I. patent race, contributing 38,210 inventions, significantly outpacing other nations like the United States (6,276), South Korea (4,155), Japan (3,409) and India (1,350). Chinese companies dominate the top ten patent applicants, with Tencent (2,074), Ping An Insurance (1,564), Baidu (1,234) and Alibaba Group (571) among the leaders, alongside the Chinese Academy of Sciences (607) and ByteDance (418). This strong patent activity highlights China's focus on advancing A.I. technologies and the competitive edge of its enterprises and research institutions in shaping the global A.I. landscape.[73]

The high number of patents only reveals part of the picture, as China faces challenges in converting its innovations into practical applications.[74] A Chinese patent expert candidly remarked that only about 10% of China's patents have market value, with the remaining 90% deemed "trash". This statement highlights concerns about the quality and utility of many patents in China's rapidly expanding intellectual property landscape.[75] Despite China's lead in generative A.I. patents, it lags behind the United States in

terms of impact. These obstacles include U.S. export controls and internal struggles with its innovation culture.[76]

8.5.2 Market Conditions

The huge domestic market has helped Chinese entrepreneurial firms to compete successfully in foreign markets. A *China Daily* article emphasized that Chinese entrepreneurs face tough domestic competition, which equips them with the skills and efficiency needed for global markets. For instance, Chinese companies often introduce new car models every six months to remain competitive domestically, while many international car manufacturers operate on a three-year cycle. This intense competition fosters higher efficiency, even in traditional industries. Supported by the country's manufacturing scale, firms that thrive locally often outperform international rivals, especially in industries demanding high efficiency and fast innovation cycles.[77]

8.5.3 Access to Finance

8.5.3.1 Capital Market

On April 12, 2024, China's State Council released a circular emphasizing the need for tighter regulation in the capital market to ensure its high-quality development. The plan outlines measures to strengthen supervision, prevent risks and improve investor protection over the next five years. By 2035, China aims to build a competitive and inclusive capital market, safeguarding investors' rights more effectively. The circular stresses enhancing the issuance and listing systems, improving corporate governance and reinforcing oversight in various areas, such as information disclosure, shareholding reduction and dividend practices. Additionally, it calls for reforming the delisting process, fostering a sound industry culture and increasing long-term investments to stabilize the market.[78]

The value of onshore I.P.O.s dropped by 84% in the first half of 2024 compared to the same period in 2023. One contributing factor is that regulators limited I.P.O.s in an attempt to stabilize China's struggling stock markets.[79]

8.5.3.1.1 DOMESTIC SAVINGS

Domestic savings have been an important source of investment. In 2023, China's gross national savings made up around 43% of its G.D.P.[80] Gross savings are calculated by subtracting total consumption from the gross national income, which includes the total value of goods and services produced by the country. Additionally, net transfers are factored in, which refer to the

balance of money flowing into and out of the country, such as remittances and foreign aid.

The country's net savings rate reached 31.7% in 2023, leading to a significant increase in total savings. From 2020 to 2023, Chinese consumers accumulated 56 trillion renminbi in new savings, surpassing the 47 trillion renminbi in retail sales for 2023. This trend reflects both a high savings rate and a strong economic buffer.[81]

One argument is that, as is the case of other Asian economies, the high savings rates in China can be attributed to income insecurity associated with mostly informal jobs. The high saving rates thus may not automatically translate to higher investment rates. The size of the informal capital market in China, however, indicates that the high domestic saving rate is playing an important role to promote entrepreneurial activities in the country. According to the 2009 G.E.M. report, about 6% of the Chinese in the 18–64 age group made an informal investment in the past three years, compared with less than 4% in the United States. Informal investment was 11.3% of China's G.D.P. in 2009, compared with only 1.5% in the United States.[82]

To finance their ventures, many entrepreneurs depend on the informal banking systems, which are formed by pooling household saving and charge annual interest rates of as high as 70%. Estimates suggest that China's informal banking system was a US$630 billion industry in 2011.[83]

8.5.3.1.2 VENTURE CAPITAL

The Chinese venture capital landscape is also changing rapidly. China represents one of the fastest growing markets for venture capital investing in the world.In 2001, the United States received 88% of global venture capital investments, while other developed nations accounted for 7%, leaving China and all other developing countries with the remaining 5%. By 2019, China had rapidly ascended to account for 38% of the global total, while the U.S. share declined to 42%, despite an overall increase in investment levels in the United States during the period.[84]

With US$68.68 billion in total capital raised expected by 2024, China's V.C. market reflects rapid expansion from US$67.25 billion in 2023. Government-backed innovation and the tech sector's momentum underpin this growth, with the Later Stage segment contributing US$48.61 billion.[85]

In the past, a significant proportion of V.C. funds was linked to the government, which could be considered as a loan.[86] An incubator that lost the government-owned V.C. also became a target of official criticism. Chinese government V.C. funds could not accept the Western level of risk-taking. This situation is likely to change with the maturity of the V.C. market. Chinese returnees may also change other components of Chinese institutions such as the Chinese V.C. landscape.

8.5.3.1.3 BANK LOANS

Chinese banks are mostly state-owned, with the government holding the majority stake in the five largest commercial banks. This ownership structure means that loans are granted with the understanding that the government will intervene if borrowers face repayment issues, unlike Western banks, which tend to operate more independently.[87] These banks have dominated the Chinese financial market with huge networks of branches across the country. Lending, however, is disproportionately oriented toward powerful economic and political interests such as state-controlled companies. These banks often find S.M.E.s as unattractive borrowers. It was reported that 89% of S.M.E.s in China face difficulty in satisfying banks' requirements in order to get loans.[88] Small borrowers often tend to lack sufficient collateral, which is required by most traditional Chinese banks.[89]

8.6 Concluding Comments

A constellation of factors linked to China's global integration is pushing through a fundamental change in institutions related to Chinese entrepreneurship. China's successful blend of capitalism, nationalism and Marxism has provided impetus to entrepreneurship and investment. Most C.C.P. leaders have realized that entrepreneurs' contribution to the ambitious economic agenda outweighs the costs related to the challenges to the C.C.P.'s legitimacy. For this reason, they are wholeheartedly promoting and facilitating entrepreneurial thinking and practices. The preceding examples also point to an emerging trend in thickened entrepreneurial institutions.

8.6.1 Changing Profiles of Entrepreneurs

Institutional changes discussed above are likely to lead to an alteration in the profiles of successful entrepreneurs. In the Chinese entrepreneurship landscape, there are a few commonly accepted rules and norms to govern relationships. This results in greater institutional and social uncertainties where personal relationships are important resources. The institutional entrepreneurs, which depend on government officials for their success, face risks in a market economy. Strengthened rule of law and a higher level of regulative certainty are likely to encourage legal entrepreneurship instead of double entrepreneurship.

8.6.2 Western Influence on Chinese Entrepreneurship Patterns

We discussed a number of mechanisms associated with Western influence on Chinese entrepreneurship culture. For instance, the arrival of an

increasing number of overseas Chinese, some with significant entrepreneurial experience, is set to transform the Chinese entrepreneurship landscape. These returnees are likely to be more similar to Western entrepreneurs in terms of habits of thought and behaviors related to entrepreneurship. Successful entrepreneurial spin-offs from Chinese returnees may further promote risk-taking behavior among Chinese. Likewise, inflow of V.C. from the Western world is rapidly growing in China. Recall that Western V.C. differs drastically from most domestic V.C. funds that are linked to the government. With China's growing global integration, further influence of Western entrepreneurship culture can be observed.

8.6.3 *The Weakest Link in the Chinese Entrepreneurial Landscape*

The adoption rate of values promoting entrepreneurship has been very slow among some critical institutional actors such as incubators, state-owned banks, local cadres, tax officers and government officials. After decades of socialism, the idea of respecting constitutional rights of entrepreneurs has been slow to diffuse among some institutional actors. Chinese incubators, for instance, lack proper cognitive mindsets in assisting entrepreneurs. Private enterprises often complain about difficulties in dealing with state-owned banks and other agencies as well as harassment and extortion by local cadres, tax officers and government officials.[90] These actors have thus been the weakest link in China's entrepreneurship landscape. Measures are needed to accelerate the diffusion of entrepreneurship-related progressive changes among these actors.

8.7 Discussion Questions

1. Compare China and the United States in terms of various indicators related to entrepreneurship. What are some of the indicators that would indicate that China's entrepreneurial progress may be faster than in the United States?
2. Give some examples of China-originated world-class entrepreneurial firms and global brands.
3. Has entrepreneurship helped to narrow down inequalities in income and wealth in China?
4. Have the institutional changes taking place in China promoted entrepreneurship?
5. Thomas Friedman noted: "One-party autocracy certainly has its drawbacks. But when it is led by a reasonably enlightened group of people, as China is today, it can also have great advantages". Do you agree with Friedman? Elaborate your response.

6. How should industrialized countries such as the United States respond to China's entrepreneurial progress?
7. Intel ex-C.E.O. Craig Barrett argued that the Chinese are "capable of doing any engineering, any software job, any managerial job that people in the United States are capable of". Do you agree or disagree? Why?

8.8 End of the Chapter Case: China's A.I. Advantage: Moonshot AI's Rise amid Strong Market Demand

Moonshot AI, known as YueZhiAnMian in China, was founded in 2023 and is based in Haidian, China. The company focuses on grid computing and multimodal large models.[91] Moonshot was founded by Yang Zhilin, a former affiliate of Zhipu, which was the largest A.I. startup as of mid-2024. Yang has past experience at Google Brain and Meta AI and founded Recurrent AI.[92]

The company has quickly become a key player in the tech industry, raising US$1.5 billion across three funding rounds as of August 2024.[93] In August 2024, Moonshot AI had raised US$300 million in its latest funding round, with Tencent Holdings participating. This investment boosted the startup's valuation to US$3.3 billion, reinforcing its focus on advancing large language models.[94] In February 2024, Moonshot AI had raised more than US$1 billion in a funding round led by Alibaba and HongShan, bringing its valuation to US$2.5 billion. The company's innovative A.I. focus has attracted major investor interest, positioning it as a key player in China's growing A.I. industry.[95] This round of investment for Moonshot AI was considered the biggest in a Chinese A.I. company since the ChatGPT launch.[96]

8.8.1 Refocus on Kimi Chatbot amid Rising Competition

As of May 2024, four Chinese generative A.I. startups including Moonshot AI had achieved valuations between US$1.2 billion and US$2.5 billion over the previous three months, highlighting their competitive position among over 260 companies striving to replicate the achievements of U.S. leaders like OpenAI and Anthropic.[97] In the race to dominate China's generative A.I. market, no clear leader has emerged yet. Despite U.S. competitors leading in technology and funding, local startups are striving to create local alternatives to A.I. applications like ChatGPT, which are unavailable in China. These companies are vying for dominance in a highly competitive space.[98]

As of October 2024, Moonshot's monthly active users exceeded 10 million, making it one of the top A.I. platforms, trailing only ByteDance's

Doubao and Baidu's Ernie Bot.[99] Moonshot AI stopped updating its experimental consumer products Ohai and Noisee in September 2024, refocusing on its flagship chatbot, Kimi Chat. Both Ohai and Noisee, launched earlier that year, were not officially released.[100]

8.8.2 Breakthrough in Long-Form Chatbot Technology

Moonshot AI's large language models focus on processing long-form context and responses, a challenging area in A.I. The startup aims to differentiate itself by overcoming limitations other companies face in handling extensive conversational data. Moonshot introduced its chatbot, Kimi, in October 2023, claiming it can process up to 200,000 Chinese characters in one conversation, which is reportedly eight times the capacity of OpenAI's GPT-4-32K. This launch positions Kimi as a significant advancement in the chatbot landscape, particularly in processing long-form dialogues in Chinese.[101]

8.8.3 China's Technological Edge Driving A.I. Growth

China's technological capabilities such as R&D and human capital provide a favorable environment for startups such as Moonshot AI. A report from the United Nations' World Intellectual Property Organization revealed that China significantly outpaced the United States in generative A.I. patents, filing over 38,000 patents between 2014 and 2023, compared to 6,276 filed by the United States. China's regulatory framework has played a crucial role in this lead.[102] Low salaries for A.I. engineers in China compared to the United States and Europe are contributing to lower costs. A recent computer science PhD graduate in China typically earns between US$80,000 and US$240,000 annually at a large startup, which is significantly lower than the salaries in Silicon Valley, where the range can be four times higher. This salary disparity is one of the factors driving China's A.I. sector growth.[103]

China's A.I. advantage stems from its vast market of 1.4 billion people, enabling practical applications and fostering rapid transitions from development to deployment. This scale allows for efficient iteration and adaptation of A.I. technologies to meet diverse needs.[104] Chinese businesses and consumers also display a higher readiness to adopt generative A.I. A study by SAS and Coleman Parkes Research reveals that China was ahead of the United States in generative A.I. adoption. In China, 83% of respondents across industries used generative A.I., compared to 65% in the United States and a global average of 54%. This highlights China's strong presence in A.I. technology adoption.[105]

Notes

1 Alois, J. D. (2016). China is So Huge: 4.4 Million New Businesses Registered in 2015. https://www.crowdfundinsider.com/2016/05/85036-china-is-so-huge-4-4-million-new-businesses-registered-in-2015/
2 Nair, S. R. (1996). Doing business in China: It's far from easy. *USA Today*, *124*(2608), 27–29.
3 Bosma, N., & Levie, J. (2009). 2009 Global Report, Global Entrepreneurship monitor. http://www.gemconsortium.org/about.aspx?page=pub_gem_global_reports
4 Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25*(1), 217–226.
5 Yang, Z. (2023, February 1). Who gets to be a tech entrepreneur in China? *MIT Technology Review*. https://www.technologyreview.com/2023/02/01/1067505/china-tech-entrepreneur-book-zhang/
6 Richter, F. (2000). China's entry into the WTO and the impact on Western firms. *China Economic Review*, *11*(4), 423–427.
7 Gangemi, J. (2007, January 11). Study: U.S. startup activity down slightly in '06. *Business Week* (Online).
8 Zhang, L. (2023). *The labor of reinvention: Entrepreneurship in the new Chinese digital economy*. Columbia University Press. https://doi.org/10.7312/zhan19530
9 Hornby, L. (2017). Communist party asserts control over China Inc. https://www.ft.com/content/29ee1750-a42a-11e7-9e4f-7f5e6a7c98a2
10 Monro, A. (2007). Mysteries of the east. *New Statesman*, *136*(4826), 58–59.
11 America. (2007). The Next Bill Gates, January 15, *196*(2), 4.
12 Oster, S., & Chen, L. Y. (2016). Inside China's Historic $338 Billion Tech Startup Experiment. https://www.bloomberg.com/news/articles/2016-03-08/china-state-backed-venture-funds-tripled-to-338-billion-in-2015
13 Yueh, L. (2018). Will China ever get rich? Only if it tackles state ownership and strengthens its legal system. http://www.scmp.com/comment/insight-opinion/article/2137279/will-china-ever-get-rich-only-if-it-tackles-state-ownership
14 Xiangwei, W. (2017). Entrepreneurship In China: Strong Or Dispirited? http://www.scmp.com/week-asia/opinion/article/2113446/entrepreneurship-china-strong-or-dispirited
15 Xiangwei, W. (2017). Entrepreneurship In China: Strong Or Dispirited? http://www.scmp.com/week-asia/opinion/article/2113446/entrepreneurship-china-strong-or-dispirited
16 Hornby, L. (2017). Communist party asserts control over China Inc. https://www.ft.com/content/29ee1750-a42a-11e7-9e4f-7f5e6a7c98a2
17 Olcott, E., & Wang, X. (2024, September 12). How China has 'throttled' its private sector. *Financial Times*. https://www.ft.com/content/1e9e7544-974c-4662-a901-d30c4ab56eb7
18 Olcott, E., & Wang, X. (2024, September 12). How China has 'throttled' its private sector. *Financial Times*. https://www.ft.com/content/1e9e7544-974c-4662-a901-d30c4ab56eb7
19 Loizos, C. (2018). Startup ecosystem report: China is rising while the US is waning. https://techcrunch.com/2018/04/20/startup-ecosystem-report-china-is-rising-while-the-u-s-is-waning/
20 The Economist. (2024, July 16). Xi Jinping is trying to love-bomb China's entrepreneurs. *The Economist*. https://www.economist.com/china/2024/07/16/xi-jinping-is-trying-to-love-bomb-chinas-entrepreneurs

21 Olcott, E., & Wang, X. (2024, September 12). How China has 'throttled' its private sector. *Financial Times*. https://www.ft.com/content/1e9e7544-974c-4662-a901-d30c4ab56eb7
22 The Economist. (2024, July 16). Xi Jinping is trying to love-bomb China's entrepreneurs. *The Economist*. https://www.economist.com/china/2024/07/16/xi-jinping-is-trying-to-love-bomb-chinas-entrepreneurs
23 Pham, P. (2018). Is there a secret growth hormone added to China's economy? https://www.forbes.com/sites/peterpham/2018/03/06/is-there-a-secret-growth-hormone-added-to-chinas-economy/#27e1d2503f13
24 Yueh, L. (2018). Will China ever get rich? Only if it tackles state ownership and strengthens its legal system. http://www.scmp.com/comment/insight-opinion/article/2137279/will-china-ever-get-rich-only-if-it-tackles-state-ownership
25 Zipser, D. (2024, April 8). *Consumers are spending again (outside of China)*. McKinsey & Company. https://www.mckinsey.com/cn/our-insights/our-insights/consumers-are-spending-again
26 Zipser, D. (2024, April 8). *Consumers are spending again (outside of China)*. McKinsey & Company. https://www.mckinsey.com/cn/our-insights/our-insights/consumers-are-spending-again
27 economist.com Let a million flowers bloom, Mar 10, 2011. http://www.economist.com/node/18330120
28 China Knowledge. (2010, Feburary 19). China's S.M.E.s need efficient financing channels. http://www.chinaknowledge.com/Newswires/News_Detail.aspx?type=1&NewsID=31452
29 Cunningham, E. (2022, Summer). *What is the future of China's private sector?* Harvard Kennedy School. https://www.hks.harvard.edu/faculty-research/policy-topics/international-relations-security/what-future-chinas-private-sector
30 Atkinson, R. D. (2024, September 16). *China is rapidly becoming a leading innovator in advanced industries*. Information Technology and Innovation Foundation. https://itif.org/publications/2024/09/16/china-is-rapidly-becoming-a-leading-innovator-in-advanced-industries/
31 Fortune. (2024). Fortune Global 500. https://fortune.com/ranking/global500/
32 Rogers, N., & Wang, R. (2024, October 10). *A change in fortune: U.S. firms overtake China's in Fortune Global 500*. Center for Strategic and International Studies. https://www.csis.org/blogs/trustee-china-hand/change-fortune-us-firms-overtake-chinas-fortune-global-500
33 ADB (Asian Development Bank). (2007). *Key Indicators of Developing Asian and Pacific Countries 2007*. Manila. http://www.adb.org/Documents/Periodicals/ADR/ADR-Vol25-1-2.pdf
34 Kwong, K. K., Yau, O. H. M., Lee, J. S. Y., Sin, L. Y. M., & Tse, A. C. B. (2003). The effects of attitudinal and demographic factors on intention to buy pirated CDs: The case of Chinese consumers. *Journal of Business Ethics*, *47*(3), 223–235.
35 Stanford Center for China's Economy and Institutions. (2023, August 1). *The rise of wealth, private property, and income inequality in China*. Stanford University. https://sccei.fsi.stanford.edu/china-briefs/rise-wealth-private-property-and-income-inequality-china#:~:text=Wealth%2C%20however%2C%20is%20significantly%20more,that%20of%20the%20bottom%2050%25
36 Huang, P. C. C. (2009). China's neglected informal economy. *Modern China*, *35*(4), 405–438.

37 Klein, B. P., & Cukier, K. N. (2009). Tamed Tigers. *Distressed Dragon Foreign Affairs*, *88*(4), 8–16.
38 Bajada, C., & Schneider, F. (2005). The shadow economies of The Asia-Pacific. *Pacific Economic Review*, *10*(3), 379–401.
39 Bosma, N., Jones, K., Autio, E., & Levie, J. (2007). 2007 Executive Report, Global Entrepreneurship monitor.
40 Shane, S. (2010). If you want to see entrepreneurs, go to China. http://www.businessweek.com/smallbiz/content/mar2010/sb20100311_996919_page_2.htm
41 Scott, B. R. (2001). The great divide in the global village. *Foreign Affairs*, *80*(1), 160–177.
42 Liu, D. (2006). The transplant effect of the Chinese patent law. *Chinese Journal of International Law*, *5*(3), 733–775.
43 King, R. (2010). A Journey Home. *Chinese American Forum*, *25*(3), 22–25.
44 Mufson, S. (2009, July 16). Asian Nations could outpace U.S. in developing clean energy; American markets' slump feeds worry. *The Washington Post*, Suburban Edition, A14.
45 Kahn, J. (2006, March 12). A sharp debate erupts in China over ideologies. *New York Times*, p. 1.
46 Ling, Z. (1998). *Chenfu: 1989–1997 Zhongguo Jingji Gaige Beiwanglu (Ups and downs: Memorandum of China's economic reform during 1989–1997)*. Tongfang Chuban Zhongxin.
47 Nee, V. (1992). Organizational dynamics of market transition: Hybrid forms, property rights, and mixed economy in China. *Administrative Science Quarterly*, *37*, 1–27.
48 Heer, P. (2000). A house divided. *Foreign Affairs*, *79*, 18–24.
49 Wu, Y. (2018). Tech entrepreneurs a growing force at China's Communist party meeting. https://www.chinamoneynetwork.com/2018/03/05/tech-entrepreneurs-growing-force-chinas-communist-party-meeting
50 Kanellos, M. (2002). *Software comes of age: Piracy crackdown pays off*. CNET News.com. Retrieved July 11, 2009, http://news.com.com/2009-1001-940335.html
51 Yang, D. M. (2002). Can the Chinese state meet its WTO obligations? Government reforms, regulatory capacity, and WTO membership. *American Asian Review*, *20*(2), 191–121.
52 MacLeod, C. (2006, April 21). China grows more aggressive in thwarting counterfeiters. *USA Today*, 4B.
53 Daokui Li, D., Feng, J., & Jiang, H. (2006). Institutional entrepreneurs. *American Economic Review*, *96*(2), 358–362.
54 China Daily. (2024, April 25). Crackdown on IPR infringement bears fruit. http://chinaipr.mofcom.gov.cn/article/centralgovernment/202404/1985468.html
55 Culpan, T. (2006). Industry awaits IP court in China. *Billboard*, *118*(16), 14.
56 Krug, B. (2004). *China's rational entrepreneurs: The development of the new private business sector*. RoutledgeCurzon.
57 Yang, K. (2002). Double entrepreneurship in China's economic reform: An analytical framework. *Journal of Political & Military Sociology*, *30*(1), 134–147.
58 Peng, Y. (2004). Kinship networks and entrepreneurs in China's transitional economy. *American Journal of Sociology*, *109*(5), 1045–1074.
59 Hsu, C. (2006). Cadres, Getihu, and good businesspeople: Making sense of entrepreneurs in early post-socialist China. *Urban Anthropology & Studies of Cultural Systems & World Economic Development (Spring)*, *35*(1), 1–38.

60 Levitt, P. (1998). Social remittances: Migration driven local-level forms of cultural diffusion. *The International Migration Review*, *32*(4), 926–948.
61 Amin, A., & Thrift, N. (1995). Globalisation, institutional thickness and the local economy. In P. Healey, S. Cameron, & I. S. Davoui (Eds.), *Managing cities: The new urban context*. John Wiley and Sons.
62 Gangemi, J. (2007, January 11). Study: U.S. startup activity down slightly in '06. *Business Week* (Online).
63 Sender, H. (2000). China's future: Entrepreneurs. *Far Eastern Economic Review*, 73.
64 Presnick, M., & Estes, J. B. (2024, August 26). The 4 key strengths of China's economy—and what they mean for multinational companies. *Harvard Business Review*. https://hbr.org/2024/08/the-4-key-strengths-of-chinas-economy-and-what-they-mean-for-multinational-companies
65 Mourdoukoutas, P. (2004). China's Challenge. *Barron's*, *84*(7), 37.
66 Liao, D., & Sohmen, P. (2001). The development of modern entrepreneurship in China. *Stanford Journal of East Asian Affairs*, *1*, 27–33.
67 Segal, A. (2004). Is America losing its edge? *Foreign Affairs*, *83*(6), 2.
68 Saxenian A. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development*, *40*(2), 35.
69 Von Hein, M. (2024, June 5). How China is causing global shifts. *D+C: Development and Cooperation*. https://www.dandc.eu/en/article/chinas-development-over-last-40-years-has-been-unparalleled-hundreds-millions-people-have
70 Rathenau Institute. (2024, August 13). *China: A scientific superpower in the making* [Fact sheet]. Science in Figures. https://www.rathenau.nl/en/science-figures/process/collaboration/china-scientific-superpower-making
71 State Council Information Office. (2024, January 24). Chinese invention patents leap over 4 million. *China National Intellectual Property Administration*. https://english.cnipa.gov.cn/art/2024/1/24/art_3090_190001.html
72 Snyder, A. (2024, March 1). *Patent applications from Chinese inventors pass U.S. for first time*. Axios. https://www.axios.com/2024/03/01/china-us-patents-science-tech
73 United Nations. (2024, July 3). China-based inventors lead on global GenAI patents: UN report. *UN News*. https://news.un.org/en/story/2024/07/1151761
74 Hale, E. (2024, August 9). China wrestles with 'quantity over quality' in generative AI patents. *Al Jazeera*. https://www.aljazeera.com/economy/2024/8/9/china-wrestles-with-quantity-over-quality-in-generative-ai-patents
75 He, A. (2021, April 20). *What do China's high patent numbers really mean?* Centre for International Governance Innovation. https://www.cigionline.org/articles/what-do-chinas-high-patent-numbers-really-mean/
76 Hale, E. (2024, August 9). China wrestles with 'quantity over quality' in generative AI patents. *Al Jazeera*. https://www.aljazeera.com/economy/2024/8/9/china-wrestles-with-quantity-over-quality-in-generative-ai-patents
77 China Daily. (2024, January 15). Huge home market hones competitiveness. *China Daily*. https://www.chinadaily.com.cn/a/202401/15/WS65a4791ea3105f21a507c31d.html
78 State Council. (2024, April 12). *China urges tighter regulation on capital market*. https://english.www.gov.cn/policies/latestreleases/202404/12/content_WS6618ec65c6d0868f4e8e5f9f.html

79 The Economist. (2024, July 16). Xi Jinping is trying to love-bomb China's entrepreneurs. *The Economist*. https://www.economist.com/china/2024/07/16/xi-jinping-is-trying-to-love-bomb-chinas-entrepreneurs
80 Textor, C. (2024, October 23). *Gross savings as share of GDP China 1980-2029*. Statista. https://www.statista.com/statistics/1453759/gross-savings-share-of-gdp-china/
81 Zipser, D. (2024, April 8). *Consumers are spending again (outside of China)*. McKinsey & Company. https://www.mckinsey.com/cn/our-insights/our-insights/consumers-are-spending-again
82 Shane, S. (2010). If you want to see entrepreneurs, go to China. http://www.businessweek.com/smallbiz/content/mar2010/sb20100311_996919_page_2.htm
83 Barboza, D. (2011). *China rattled as business owners flee*. International Herald Tribune.
84 Lerner, J., Liu, J., Moscona, J., & Yang, D. Y. (2024). *Appropriate entrepreneurship? The rise of China and the developing world* (Working Paper No. 24-061). Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/24-061_20f5ee6c-0965-4270-9aec-7771e2197c57.pdf
85 Statista. (n.d.). *Venture capital - China*. Retrieved December 15, 2024, from https://www.statista.com/outlook/fmo/capital-raising/traditional-capital-raising/venture-capital/china#capital-raised
86 Harwit, E. (2002). High-technology incubators: Fuel for China's new entrepreneurship? *The China Business Review*, *29*(4), 26–29.
87 Bris, A. (2024, February 26). Crisis looms: The challenges facing China's banks and their global implications. *China Daily*. https://www.chinadaily.com.cn/a/202410/15/WS670dd21ea310f1265a1c7a8e.html
88 Jing, M. (2014). Amazon brings its cloud computing to China. Retrieved February 5, 2018, from http://www.chinadaily.com.cn/business/2014-01/02/content_17209279.htm
89 Wildau, G. (2015). Alibaba's finance arm launches credit scoring service. http://www.ft.com/intl/cms/s/0/34e77fe8-a6a3-11e4-9bd3-00144feab7de.html
90 Economist. (2002). Not in the club; China's private sector; Yang, D. M. (2002). Can the Chinese state meet its WTO obligations?
91 Linqto. (2024). *Moonshot AI IPO*. https://www.linqto.com/ipo/moonshot-ai/
92 Olcott, E. (2024, May 2). Four start-ups lead China's race to match OpenAI's ChatGPT. *Financial Times*. https://www.ft.com/content/4e6676c8-eaf9-4d4a-a3dc-71a09b220bf8
93 Linqto. (2024). *Moonshot AI IPO*. https://www.linqto.com/ipo/moonshot-ai/
94 Lunden, I., & Liao, R. (2024, August 5). Tencent joins $300 million financing for China's AI unicorn. *Bloomberg News*. https://www.bloomberg.com/news/articles/2024-08-05/tencent-joins-300-million-financing-for-china-s-ai-unicorn?srnd=homepage-americas
95 Jiang, B. (2024, February 20). Chinese start-up Moonshot AI raises US$1 billion in funding round led by Alibaba and VC HongShan amid strong interest for OpenAI-type firms. *South China Morning Post*. https://www.scmp.com/tech/big-tech/article/3252574/chinese-start-moonshot-ai-raises-us1-billion-funding-round-led-alibaba-and-vc-hongshan-amid-strong
96 Choudhary, L. (2024, February 21). Alibaba co-leads $1B round in Chinese GenAI startup. *Tech in Asia*. https://www.techinasia.com/alibaba-coleads-1b-round-chinese-genai-startup

97 Olcott, E. (2024, May 2). Four start-ups lead China's race to match OpenAI's ChatGPT. *Financial Times*. https://www.ft.com/content/4e6676c8-eaf9-4d4a-a3dc-71a09b220bf8
98 Olcott, E. (2024, May 2). Four start-ups lead China's race to match OpenAI's ChatGPT. *Financial Times*. https://www.ft.com/content/4e6676c8-eaf9-4d4a-a3dc-71a09b220bf8
99 Yushuo, Z. (2024, November 13). China's Moonshot AI scales back overseas operations, report says. *Yicai Global*. https://www.yicaiglobal.com/news/ai-startup-moonshot-ai-is-scaling-back-its-international-expansion-efforts-report-says
100 Yushuo, Z. (2024, November 13). China's Moonshot AI scales back overseas operations, report says. *Yicai Global*. https://www.yicaiglobal.com/news/ai-startup-moonshot-ai-is-scaling-back-its-international-expansion-efforts-report-says
101 Lunden, I., & Liao, R. (2024, February 21). *China's Moonshot AI zooms to $2.5B valuation, raising $1B for an LLM focused on long context*. TechCrunch. https://techcrunch.com/2024/02/21/moonshot-ai-funding-china
102 World Intellectual Property Organization. (2024). *Generative Artificial Intelligence*. https://www.wipo.int/web-publications/patent-landscape-report-generative-artificial-intelligence-genai/assets/62504/Generative%20AI%20-%20PLR%20EN_WEB2.pdf
103 Olcott, E. (2024, May 2). Four start-ups lead China's race to match OpenAI's ChatGPT. *Financial Times*. https://www.ft.com/content/4e6676c8-eaf9-4d4a-a3dc-71a09b220bf8
104 GT staff reporters. (2024, May 24). Multiple Chinese tech companies ramp up investment on AI amid US 'decoupling' attempts. *Global Times*. https://www.globaltimes.cn/page/202405/1312976.shtml
105 SAS. (2024, July 9). *Global Market Research: China leads world in GenAI usage while US leads in full implementation*. SAS. https://www.sas.com/en_in/news/press-releases/2024/july/genai-research-study-global.html

Chapter 9

Entrepreneurship in India

This chapter's objectives are:

1. To demonstrate an understanding of the changes taking place in the Indian entrepreneurship landscape.
2. To analyze the facilitators and inhibitors of entrepreneurship in India.
3. To assess the nature of entrepreneurial activities in the Indian information technology (I.T.) and offshoring sector and their impacts on the Indian economy.
4. To evaluate the impacts of entrepreneurial activities in India on poverty reduction.
5. To demonstrate an understanding of the nature and availability of various forms of entrepreneurial finance in India.

9.1 Introduction

Because of India's improving entrepreneurial performance, some analysts consider the country as the next Asian miracle.[1] The state's domination over the economy is gradually declining and there are some signs that the country is moving toward a market-oriented system. India has also set explicit policy objectives to become a leading business-friendly economy.[2] In a number of important areas, institutional reform has gained a higher momentum in India than in China. India also outperforms China in many of the World Bank's governance indicators such as rule of law and voice and accountability. India was also among the top ten improvers in 2016/17 in areas that are tracked by the World Bank in its *Doing Business* report.[3] Some observers have noted that India is shedding its legacy of entrepreneurship-unfriendly rules and regulations and Indian politics is becoming open and accountable.

The Indian government has introduced a range of initiatives to strengthen the startup ecosystem, including the "Start-up India" and "Make in India" (M.I.I.) programs (In Focus 9.1). The Start-up India initiative launched in 2016 seeks to provide a number of policy measures, initiatives and incentives in order to foster startups in the country. Tax exemption for startups

DOI: 10.4324/9781003565154-9

for three years, a US$1.5 billion corpus fund to support startups, exemption of capital gains tax for venture capital (V.C.) investments, 80% reduction in patent registration fees and ensuring a 90-day window for startups to close businesses are among the top incentives the Indian government plans to offer to stimulate startups in the country.[4]

IN FOCUS 9.1 PROGRESS AND CHALLENGES OF INDIA'S "MAKE IN INDIA" INITIATIVE: ACHIEVEMENTS, CRITICISMS AND OBSTACLES

Launched in September 2014, India's "Make in India" initiative aims to position the country as a global manufacturing hub by encouraging both domestic and international investments across 25 sectors, including automobiles, pharmaceuticals and I.T.[5] M.I.I. aimed to boost poverty eradication, job creation, domestic demand and manufacturing's gross domestic product (G.D.P.) share from 14% to 25% in a decade. The government sought domestic and foreign investment in three key areas: new processes, infrastructure and sectors.[6]

The initiative focuses on improving the ease of doing business, streamlining regulations and enhancing infrastructure to attract investments, with a key goal of creating jobs, reducing unemployment and promoting skill development. It also seeks to boost exports, reduce import dependency and strengthen India's global market position. Strategic collaborations and partnerships are integral to knowledge transfer, technology sharing and overcoming challenges. Ultimately, "Make in India" aims to build a sustainable and vibrant manufacturing ecosystem, driving economic growth and prosperity.[7]

Some achievements have been made on the manufacturing front. The M.I.I. initiative has significantly boosted import substitution and manufacturing, with manufacturing value added reaching 13% of G.D.P. in 2022.[8]

Production-Linked Incentives

The production-linked incentive (P.L.I.) program, launched in 2020, spans 14 industries, with electronics and semiconductors receiving half of the US$40 billion subsidies over five years.[9] P.L.I. schemes provide turnover-linked incentives to approved investors who meet specified investment, capacity and turnover criteria.[10] P.L.I.-related investments surged from US$1.1 billion in financial year (F.Y.) 2022 to US$5.5 billion in F.Y. 2023, and Investment Information and Credit Rating Agency (ICRA)

projects could peak at US$20 billion by F.Y. 2026, comprising 40% of total investment.[11]

Although the government committed US$28 billion in P.L.I.s, a limited portion has been utilized.[12] As of December 2024, under 10% of the P.L.I. allocation has been utilized.[13]

The government's misplaced priorities have been widely criticized. For instance, the government highlights the US$2.75 billion investment by Micron in Gujarat and investments from Apple contract manufacturers like Foxconn as signs of investment momentum under the "Make in India" initiative. While Apple's iPhone production in India is valued at US$15 billion, the US$1.9 billion subsidy for Micron under the P.L.I. scheme has sparked criticism, with former central bank governor Raghuram Rajan arguing that it exceeds India's higher education budget, suggesting misplaced government priorities.[14]

Challenges

The "Make in India" initiative, while ambitious, has faced several challenges that have hindered its progress. The "Make in India" initiative faces several obstacles, including a complex business environment, policy unpredictability and an uneven playing field. Key challenges involve inadequate infrastructure, regulatory hurdles, a lack of skilled labor, limited technological access and financial constraints, particularly for small and medium-sized enterprises (S.M.E.s). Overcoming these challenges is essential for the initiative's success and the sustainable growth of India's manufacturing sector.[15]

Despite the above-noted positive trends, entrepreneurial activities are hindered by business-unfriendly labor laws, adverse corporate bankruptcy regulations and the lack of clear property rights.[16] Red tape, bureaucracy and corruptions in the country, both at the national and state levels, lead to longer time, higher costs and reduced speed and flexibility for entrepreneurs.[17] According to the IBM Institute for Business Value and Oxford Economics, 90% of startups in India fail to survive beyond their fifth year.[18]

Moreover, many Indian entrepreneurs still struggle with a culture that looks down on capitalism and is indifferent to hard work, improvement and innovations.[19] Other challenges include a big entrepreneurial financing gap[20] and the country's poor research and development (R&D) and innovation performance.[21]

While some influential entrepreneurs are in a position to take advantage of institutional holes, S.M.E.s tend to be more adversely affected by the dysfunctional institutions. Some observe that reform inertia has been an

obstacle for India to outperform China. Observers also often note the most Indian multinational companies are in a primitive or an embryonic stage.[22]

India also suffers from a lack of basic infrastructures and services required for carrying out entrepreneurial activities. According to the Country's Planning Commission, inefficient power supply has hindered entrepreneurial activities, employment creation and poverty reduction.[23]

9.2 India's Economic Reforms, Entrepreneurship and the Challenges of Inequality and Oligarchic Capitalism

We begin this section by considering India's economic reform initiatives. India started relaxing industrial regulation in the early 1970s. Trade liberalization began in the late 1970s and the pace of reform picked up significantly in the mid-1980s. Indian entrepreneurship, however, got a big boost following the 1991 economic liberalization, which transformed India's entrepreneurial landscape. Many large and inefficient firms could not survive the competition created by the 1991 liberalization. For instance, of the largest 20 private firms listed on the Indian stock market in 1990, only five were in the top 20 list in 2011.[24]

Startups and S.M.E.s have played a key role in the Indian economy. India had nearly 75 million S.M.E.s in 2022, with projections indicating this number could rise to 95 million or more by 2027.[25] Between July 2020 and December 2023, a total of 31,605,581 micro, small and medium-sized enterprises (M.S.M.E.s) were registered in India. This reflects the growing importance of M.S.M.E.s in driving economic activity and job creation across the country.[26]

9.2.1 Entrepreneurship in the Indian I.T. and Offshoring Sector

The story of India's entrepreneurial performance is incomplete without a reference to its offshoring sector. India has been a global capital of the offshore I.T. and business process offshore outsourcing. According to a study, six of the world's ten leading cities for offshoring are in India.[27]

India's offshoring industry started from back office works, which moved to business process and is gradually shifting toward high-end functions such as R&D. To illustrate this point, one may think of the drug industry. Many U.S.-based drug companies are outsourcing drug development processes to India. India's pharmaceutical sector is witnessing a surge in drug discovery outsourcing as companies increase R&D efforts, backed by government initiatives promoting innovative research. Traditionally focused on generics, India's pharma industry is now shifting toward high-risk drug discovery, with more players exploring new drug development. The success of Indian

vaccine makers during the pandemic has further fueled this shift. The government is also crafting a policy to support pharmaceutical research and innovation, encouraging domestic companies to enhance R&D capabilities and establish India as a global leader in drug development.[28]

India remains the top destination for outsourcing globally. India's revenue from the I.T. and business process management (BPM) sector increased from US$4 billion in 1998 to US$167 billion in 2017 (https://economictimes.indiatimes.com/tech/ites/indian-software-services-sector-to-grow-7-9-in-fy19-nasscom/articleshow/62995685.cms). In 2023, the revenue was approximately US$194 billion, and it is projected to reach US$225 billion by 2024, according to Statista.[29]

In addition to economic impacts, entrepreneurial activities in the offshoring sector have brought some positive societal changes. For instance, women have entered into new status hierarchies. In the offshoring industry, women account for 65% of the workforce and 85% of them work on night shifts. Call centers are breaking the societal taboos as men and women work together at night to meet daylight needs of Westerners. In the Rajsthan state, the law forbidding women to work after sunset was changed at the request of the outsourcing company, Genpact.[30]

9.2.2 Low Overall Entrepreneurial Performance

Despite all the hype surrounding entrepreneurship in India's I.T. and offshoring sector, a closer look at the overall economy paints a different picture. The informal economy is substantial. According to ILO India Labor Market Update (2016) over 90% of the workers in the agricultural sector and 70% in the nonagricultural sector were employed in the informal category.[31] In 2022–23, India's 65 million informal or unincorporated sector enterprises employed 110 million workers, as reported by the government. The informal sector, excluding agriculture, contributed 6% to the gross value added (G.V.A.) and 19% to employment. In comparison, agriculture accounted for 45% of employment and 18% of income in overall G.V.A. These figures underscore significant economic inequality, with two-thirds of the workforce contributing to only a quarter of India's G.V.A.[32]

Consider another indicator related to impacts of entrepreneurship – poverty reduction. According to the United Nations Development Programme's 2024 Global Multidimensional Poverty Index**,** India had 234 million people living in poverty, contributing to the global issue where 1.1 billion people, more than half of whom are minors, live in acute multidimensional poverty worldwide.[33] Common deprivations in multidimensional poverty include inadequate housing, sanitation, electricity, cooking fuel, nutrition and school attendance.

The traditional economic sectors are disadvantaged and there is thus very little progress in poverty reduction. While India's modern sectors, such as

offshoring and outsourcing, have flourished with a rapidly rising income driven by highly skilled human resources, fostering high productivity and innovation, the rest of the economy remains characterized by poverty, high unemployment and widespread deprivation.

9.2.3 *Lack of Trickledown Effect and Signs of Oligarchic Capitalism*

The benefits of the economic growth are highly concentrated and disproportionately distributed to the wealthiest individuals, a handful of large companies and have failed to trickle down to the poor.[34] About ten families are estimated to control more than 80% of the stock in the country's largest corporations.[35] According to the Asian Development Bank (A.D.B), large Indian companies have won most of lucrative government contracts, hold power over the country's natural resources and have "privileged access to land".

A report by the World Inequality Lab at the Paris School of Economics, authored by Thomas Piketty and others, reveals that the top 1% of India's population holds 40.1% of the country's wealth. As a result, the number of billionaires has increased from 1 in 1991 to 162 in 2022. According to the Forbes Global List of Billionaires, the number of Indian billionaires reached 200 in 2024.[36]

The geographic concentration of entrepreneurial activities also deserves mention. The 2007 government survey noted above also found that companies in two states – Maharashtra and Karnataka – accounted for about 50% of output.[37] The situation has somewhat improved recently, but geographic concentration remains a significant issue. In 2022, nearly 60% of startups in India were concentrated in five states – Maharashtra, Karnataka, Delhi, Gujarat and Uttar Pradesh – and certain select cities within these states.[38]

India obviously has some elements of a market economy and political democracy. The country, however, lacks a true democratic market system. A report from the A.D.B suggested that Indian economy has many characteristics of oligarchic capitalism and there is a possibility that this form of capitalism would further consolidate in the country, which can slow long-term development of the country.[39] As it happens in oligarchic capitalism, India has shown signs of adverse impact on incentives required for structural changes as well as the state's reduced autonomy.[40]

Most Indian billionaires have built their wealth by using their economic power to secure policies favoring them. One commentator noted: "While many Indian publicists and economists hail the 'Indian miracle' and classify India as an 'emerging world power' because of the high growth rates …, what really has transpired is the conversion of India into a billionaire's paradise".[41]

9.3 Regulatory Framework, Cultural Influences and Entrepreneurial Development

9.3.1 Regulatory Framework

Entrepreneurial firms are likely to thrive and act in socially responsible ways if there are strong and well-enforced legislation and regulations in place to ensure such behavior. In this regard, notwithstanding the existence of some essential elements of a democracy, the Indian political system has become inherently "unaccountable, corrupt, and unhinged from the normal bench marks voters use to assess their leaders". One scholar noted: "Corrupted as they are by the party system, India's institutions are incapable of enforcing accountability. India's elites tolerate a level of poor governance and abuse of power that has led to the collapse of democracy elsewhere".

Beyond all that, in India, there are groups with disposition to support traditional values, norms and institutions, which hamper entrepreneurial practices. Notwithstanding their supports to modern values, the Indian government and court system are forced to settle for compromise, which means a slower progress than they would like to see.

Indian court systems are overburdened and are characterized by procedural delays and red tape. The Bureau of Democracy, Human Rights and Labor's report, "Supporting Human Rights and Democracy: The U.S. Record 2004–2005" noted: "poor enforcement of laws, especially at the local level, and the severely overburdened court system weaken the delivery of justice".

A 2024 report on district court infrastructure highlights overcrowding in courtrooms, with limited space for people due to an excess of case files and documents. It also reveals dissatisfaction among advocates regarding the accessibility and layout of courtrooms and bar rooms. Additionally, the study found significant I.T. infrastructure deficiencies, with only 45% of judicial officers having access to electronic display facilities and 20% reporting ongoing installations. These issues impact the efficiency of the judicial process across multiple districts in India.[42]

India's Supreme Court, with 34 judges, handles nearly 70,000 appeals and petitions annually, issuing around 1,000 judgments each year. As of November 2018, 40% of cases had been pending for over five years, up from 7% in 2004, and 8% had been delayed for more than ten years. On average, cases took approximately 13 years and 6 months to move from trial courts to final disposal by the Supreme Court, with the Court's proceedings accounting for about one-third of the total time, similar to the delays at each tier of the judiciary.[43]

Moving to the specific context of entrepreneurship, weak laws and inappropriate regulatory processes hinder efficient entrepreneurial behaviors. For instance, it is argued that corruption is likely to make state subsidies to

entrepreneurship, such as the Israeli government's incentive to provide 80% of the first US$500,000 for every idea identified, highly ineffective in India. It is speculated that such a model "will lead to favoritism, cronyism and corruption" in the country.[44]

According to the World Bank, it takes seven years to close a business in India compared to the Organisation for Economic Co-operation and Development (O.E.C.D.) average of 1.7 years. Likewise, the average time to register property in South Asia is 106 days compared to the O.E.C.D. average of 25 days.

Entrepreneurial and marketing activities are hindered by complex regulations. In the retail sector, for instance, there are barriers such as anti-hoarding laws and signboard licenses. Competition laws have not yet been introduced in some sectors of the Indian economy. For instance, in the Indian retail sector, the existing laws work against retailers and favor small mom and pop stores.[45]

9.3.1.1 Labor Regulations

Indian labor market is governed by about 250 labor rules at the central and state levels, which make the country's labor laws less flexible and less business friendly than those of China. These laws arguably are restrictive in nature, hinder investments in the manufacturing sector and discourage firms from introducing new technology that might require reducing the workforce (economywatch.com, 2014).[46] These labor regulations thus limit businesses' capacity to grow and compete in the global economy. Moreover, companies with over 100 employees require government permission to dismiss workers.[47]

9.3.1.2 Property Rights

Clear property rights would allow entrepreneurs to use the assets as collateral and thus increase their access to capital. Problems related to property rights are key challenges facing entrepreneurial development in India. Some argue that the lack of land ownership remains among the most important barriers to entrepreneurship and economic development in India. One estimate suggested that over 20 million rural families in India did not own land and millions more lacked legal ownership to the land where they built their houses, lived on and worked.[48]

Indeed landlessness is arguably a more powerful predictor of poverty in India than caste or illiteracy.[49] This issue is important because poverty reduction is considered to be one of the key impacts of entrepreneurship, especially in the context of developing countries such as India.

Especially for entrepreneurial firms that rely heavily on intellectual property (I.P.), they face a unique challenge in economies with weak I.P.

protection laws and enforcement mechanisms. According to the Global Intellectual Property Center's International IP Index 2016, India ranked 37 out of the 38 countries. Only Venezuela's I.P. index was worse than that of India.[50] India is characterized by ineffective intellectual property rights laws and enforcement mechanisms. A complaint among multinational drug companies is that Indian generics drug makers manufacture counterfeits of patented drugs and sell them for a long time. Due to the Indian court system's slow and often ineffective response, multinational drug companies' legal attempts to stop the counterfeiters often take many years.[51]

9.3.2 Values, Culture and Skills

9.3.2.1 Entrepreneurial Culture

Societal norms that "permit variability in the choice of paths of life" are likely to promote entrepreneurial behavior.[52] A society's religions strongly dictate such a possibility. According to the 2001 census, Hinduism accounted for 80.5% of the Indian population. Islam is the second largest religion, practiced by 13.4% of the population. Hinduism and Islam have many similarities from the standpoint of entrepreneurship**.** Both promote fatalism and orientation toward the present or the past than the future.

The distinguishing mark of Hinduism, the most popular religion in India, is that it is centered around dharma (duty) and karma (a Sanskrit word that means "actions" or "deeds"). Furthermore, each individual's dharma and moral codes are specific to his/her caste of birth, which often lead to conflicting, confusing, misleading and often contradictory social and ethical values.[53] More importantly, many beliefs and values run counter to capitalism and entrepreneurship.[54]

Accepting one's destiny rather than trying to control life can be viewed as a central core of traditional cultural values in India. Reincarnation is an essential tenet of Hinduism, which maintains that if nothing wrong is done in this life, there would be a prospect for a better life next time.[55]

A distinguishing feature of Hinduism is its social structure based on the caste system, which has acted as a major barrier to entrepreneurship.[56]The studies of many researchers over the past few decades have indicated that various obligations associated with the Indian caste system make it more compelling and convenient to follow the family occupation instead of launching a new venture. The caste system has thus hindered class mobility. Unsurprisingly the Vaishya (the caste of merchants) and non-Hindu communities (e.g., Jains and Parsis) historically dominated the Indian business community.

Entrepreneurship thrives in a society that places a high value on work and innovation. It is argued that work is not valued in itself in India. Observers also suggest that people in the country work primarily because

of emotional attachment to the workplace or as a favor to the supervisor or to the employer.

Indian culture also places relatively less value on innovation and gradual improvements. For example, a belief among many people in India is that for the inner soul and mind, being passive and satisfied with the status quo is healthier than trying to improve the situation.[57] Moreover, Hinduism considers work as the performance of duty instead of an ambition to innovate or improve.[58]

Women entrepreneurs in India face additional obstacles. For instance, young female entrepreneurs face higher obstacles compared to their male counterparts in accessing financial resources from their families. While parents of affluent families are comfortable providing capital to their sons to start business ventures, young women reported that their parents would prefer to fund their wedding than their business ventures.[59]

According to a study of Grant Thornton and Assocham, 9% of the founders of Indian startups were women in 2018.[60] In 2016, women were estimated to run 14% of Indian businesses.[61]

Access to finance has been a key challenge for women entrepreneurs; 79% of women-run enterprises are self-financed and only 4.4% had borrowed money from a formal financial institution or received financial assistance from the government.[62]

India ranked 52nd out of 57 nations on the 2018 Mastercard Index for Women Entrepreneurs. The report considered factors such as female entrepreneurs' ability to take advantage of the opportunities related to various supporting conditions.[63] Only five countries – Iran, Saudi Arabia, Algeria, Egypt and Bangladesh – performed worse than India.

Some communities in the country think that a respectable girl should not expose herself to outside influences. In traditional sectors, it is a taboo and probably hard to imagine for young women to work during nights. Traditionally, women were not allowed to work after sunset.

It is also argued that Hinduism has contributed to the promotion of corruption and hindered the country's anticorruption efforts. First, it is suggested that Hinduism has a forgiving tendency and Hindus are too lenient toward offenders. Second, fatalistic orientation of Hindus is associated with the belief that the status quo cannot be changed, which hinders the fight against corruption.

Some argue that India has a negative attitude toward entrepreneurship. Not long ago, an entrepreneur was viewed as someone who was unemployed and unemployable. Such a social stigma about an entrepreneur led to a preference for jobs in multinationals or the government sector. An observation is that the stigma of being an entrepreneur is gradually disappearing.[64]

Stigma, however, is especially salient in entrepreneurial failure. An executive of Google India noted:

> And don't even think about what will happen if you fail as an entrepreneur. Socially, you will have lost your eligibility for marriage until you get a job. Financially, you'll be saddled with loads of debt, and politically, good luck on somebody acknowledging your entrepreneurial endeavor as real work experience. With all these challenges, one wonders why anyone bothers trying to become an entrepreneur in India?

9.3.2.2 Entrepreneurial Capabilities

While India has some professionally run global companies, these are exceptions rather than the norm. Overall, the country's management style is highly traditional. Characteristics such as willingness to follow logical processes and orientation to details are virtually absent in the Indian work culture.[65] In the same vein, whereas Western countries have the time-is-money culture, Indians have a more flexible approach to deadlines.[66] Experts argue that the country needs to go far before a culture of modern and professional management emerges. Similarly, most businesses in the country perform poorly in terms of product quality, reliability and on-time delivery. Addressing this challenge may be no small feat.

That said, some Indian firms have made significant progress in adopting the culture of modern management. This is especially noticeable in the offshoring sector. In an attempt to address their clients' fear that customer data will be stolen and even sold to criminals, firms have enhanced security mechanisms. For instance, call center employees have to undergo security checks, although such checks are considered to be "undignified".[67] Firms have established biometric authentication controls for workers and banned cell phones, pens, paper and Internet/e-mail access for employees. Similarly, computer terminals at most offshoring firms lack hard drives, e-mail, CD-ROM drives or other ways to store, copy or forward data. In general, Indian outsourcing firms extensively monitor and analyze employee logs.[68]

The lack of entrepreneurial education and training has been a matter of concern for the development of a startup ecosystem in India. About a third of the Indian population was estimated to be illiterate in 2016.[69] As of 2023, most Indians over the age of 25 were either illiterate or had received education only up to the primary level. Only about one in ten individuals had completed a higher education program.[70]

An upshot of this is that Indian startups lack the skills and experience to build scale and do sales, marketing and product management.[71] Large Indian companies with ambitious expansion plans face a severe shortage of skilled talent, potentially delaying projects and hindering growth. India is projected to experience a skill deficit of 30–32 million by 2025 and 47–49 million by 2027, with sectors like automobile, health, real estate, pharma, textile and construction being most affected.[72]

Due to the lack of entrepreneurial education in India, the country's successful companies invest heavily in employees through extensive training and development in firm-specific skills. One study found that firms in the country's I.T. industry provide 60 days of formal training to newly hired employees and they are paid during the period. Some firms go even further. For instance, Tata Consultancy Services is reported to have a seven-month training program for science graduates in order to convert them into business consultants, and every employee in the company gets 14 days of formal training annually.[73] Infosys has its own internal college to educate new employees, which trained 80,000 employees in "design thinking" as of mid-2016. The goal is to make sure that its employees can advise on the design of I.T. systems rather than just taking instructions.[74]

9.3.2.3 Entrepreneurship Support Mechanisms

New organizational mechanisms such as incubators have helped startups to grow and bring innovative products and services into the market. In 2010, it was reported that India had around 40 incubators, which mentored between 4 and 20 startups each.[75] As of October 2024, India was home to 846 accelerators and incubators, playing a crucial role in fostering innovation, entrepreneurship and the growth of startups across various sectors.[76]

According to the National Association of Software and Services Companies and Zinnov Consulting, India in 2017 had the third-highest number of startup incubators and accelerators in the world after China and the United States. By that year, India had 140 incubators and accelerators. India surpassed Israel, which had 130 incubators and accelerators. China and the United States had over 2,400 and 1,500 incubators and accelerators respectively (Sharma, 2017).[77]

However, a high degree of urban bias has been found in the concentration of incubators and accelerators. In 2017, Bangalore, Mumbai and Delhi accounted for 40% of all incubators and accelerators.[78]

9.4 Barriers to Market Access, Financing and R&D Challenges for S.M.E.s: Overcoming Obstacles to Growth and Innovation

9.4.1 Market Conditions

As noted earlier, the Indian economy has many characteristics of oligarchic capitalism, which have hindered S.M.E.s' market access. Research has indicated that the 1991 reforms have had little or no effect in promoting S.M.E.s and their development. A small number of well-connected industrialists have dominated the Indian economy and protected themselves from outside competition.[79]

It is also the case that various regulations hinder the access to the domestic market in India. For instance, there are taxes for bringing goods into a state, for taking them out of a state as well as for moving them within a state.[80]

Perhaps the greatest advantage offered by India's big domestic market is that it has helped some Indian entrepreneurial firms to compete successfully in other developing markets. Indian companies are in a position to reconfigure their resources and adapt the business models used in the domestic market to successfully operate in other developing economies.[81] It is argued that Indian firms' capability to deliver value for money in the domestic market has been an important source of competitive advantage to operate in Africa and other developing countries. Nonetheless there a number of market access barriers faced by S.M.E.s and startups.

9.4.1.1 Physical Infrastructures

A lack of well-developed physical infrastructures has been a barrier to market access. Most roads are narrow. In 2021, *Fortune* reported that poor road infrastructure in India leads to a third of produce rotting in transit, highlighting significant challenges in the country's transportation system.[82]

On the plus side, among other measures, a key component of the "Start-up India" program was US$32 billion infrastructure spending in fiscal year 2016/17 to build 10,000 km of national highways and upgrade an additional 50,000 km. The goal is to help S.M.E.s' access to the huge India market. Likewise, India's infrastructure development plan includes a ₹100 trillion investment by 2029 to modernize ports, airports, roads and utilities. Key components include a ₹20 trillion plan for 50,000 km of expressways, ₹2 trillion for port upgrades and ₹10–12 trillion for rail network improvements. The goal is to enhance connectivity, economic growth and living standards, with a focus on high-speed expressways covering 50,000 km, ensuring no location is more than 100 km from an expressway.[83]

9.4.2 Access to Finance

Access to finance has been a major barrier facing many potential entrepreneurs in India. An executive of Google India notes:

> A bank loan or angel investment is not impossible to get but extremely unlikely. Getting funding is even harder if, like most aspiring entrepreneurs, you are not from a top-tier university and don't have a family with deep-pockets. There are countless 'micro-entrepreneurs' in Indian society who finance their own small businesses as a means to survival but don't have access to the capital necessary to grow them.[84]

Below we describe the situation regarding the common forms of entrepreneurial financing.

9.4.2.1 Bank Loans

Indian banks traditionally served rich people. Many Indians that are poor and less educated feel too intimidated to go formal banks. Major banks in the country haven't yet focused on poor and rural populations, which are seen as unprofitable segments.[85]

Observers have noted that potential entrepreneurs in India who have graduated from a less well known university, or those who belong to a poor family, face difficulties in getting funding.[86] The state banks have done little to promote productive entrepreneurship in India. A complaint often heard is that business merits play little role in loan disbursements. Lending is disproportionately oriented toward powerful economic and political interests such as influential family-owned groups.

According to a study conducted by research firm KPMG and Snapdeal, about 41% of S.M.E.s in India lacked access to bank loans or other financial products offered by banks and other formal financial institutions. The study found that a financing gap of over US$43.5 billion existed in the Indian entrepreneurial landscape.[87]

9.4.2.2 The Capital Market

According to Ernst & Young's *Global IPO Trends 2012* report, there were 40 initial public offering (I.P.O.) deals in the country in 2011, which raised US$1.2 billion and accounted for 3.3% of the global I.P.O.[88]

In 2023, India's I.P.O. market raised US$7.89 billion, almost identical to the previous year's US$7.99 billion. However, the number of I.P.O.s surged to 234, marking a 56% increase from 2022. This increase in I.P.O. activity reflects growing investor interest in the Indian market.[89]

In 2012, the Bombay Stock Exchange and the National Stock Exchange launched S.M.E. platforms, which has increased S.M.E.s' access to capital market. By 2023, 179 companies were listed on the S.M.E. platform, showing strong market growth and delivering substantial returns. This trend highlights the increasing popularity of smaller companies raising capital and contributing to India's capital market development.[90]

In recent years, poor returns have made I.P.O.s relatively unattractive for many Indian companies. One study indicated that stocks of 70% of companies that launched I.P.O.s in 2010 were trading below their price in June 2011.[91]

Institutional investors such as pension funds and life insurance companies which pool huge large sums of money and invest those in securities, property and other assets account for about one-eighth of Indian stock market

profits compared to over half in Western economies. State-backed firms are estimated to account for 40% of stock market profits in the country.[92]

India was added to JP Morgan's global government bond index on June 28, 2024, marking a significant milestone for the country's domestic debt market. India's initial weight in the index is 1%, and it will increase by 1 percentage point each month, reaching 10% by March 2025. This move is expected to drive increased foreign investment in India's bond market.[93]

9.4.2.3 V.C. Investments

Indian V.C. industry is at a nascent stage of development. In 2017, V.C. investment in India amounted to US$1.3 billion,[94] which reached US$14 billion in 2022,[95] reflecting significant growth. Early-stage investments, such as Seed and Series A deals, have surged, indicating a strong pipeline for future unicorns in the country's thriving startup ecosystem.[96]

In the 2010s, a large proportion of V.C. funding had been in companies operating in online marketplaces.[97] In the early 2020s, sectors like fintech, edtech, e-commerce and healthtech have drawn significant venture capital investments in India. Fintech, in particular, has seen a surge due to the large underbanked population and government initiatives promoting digital transactions. Additionally, industries such as Software as a Service and artificial intelligence (A.I.) are gaining momentum as investment focuses on the country's growing tech ecosystem.[98]

There are a number of difficulties that stand in the way of V.C. financing in India.[99] Indian bureaucracy and regulations act as barriers to V.C. investments. Prior researchers have emphasized the importance of improving the environments related to tax, currency exchange and other policies in order to attract V.C. firms.

Observers have noted that Indian entrepreneurs often fail to understand the reality that not all V.C.-funded companies are likely to achieve an I.P.O. While there is a greater likelihood of a V.C.-funded company exiting through an mergers and acquisitions (M&A) than an I.P.O. in the United States, Indian entrepreneurs are less prepared for the M&A option.[100]

9.4.2.4 The Microfinance Industry

From 2012 to 2022, India's microfinance sector experienced substantial growth, with its gross loan portfolio increasing from INR 17,000 crore (INR 170 billion) to INR 2.85 lakh crore (INR 2,850 billion).[101]

At the same time, some negative experiences related to microcredit have been reported. As of early 2010, over 15 million borrowers in India owed microfinance debts of US$2.3 billion.[102] The average Indian household's debt to microfinance banks increased fivefold during 2005–10. It was also

reported that some borrowers used loans intended for business purposes to buy luxury items such as TVs and refrigerators.

In Chapter 3, we discussed abusive behaviors of microlenders and their engagement in activities that violated borrowers' human rights. In 2010, the government of the Andhra Pradesh state accused the microfinance industry's aggressive collection tactics of forcing many borrowers to commit suicide. The government issued new rules for the functioning of the microfinance industry and almost all issued loans in the state were written off. This led to a strong decline of the microfinance industry. In recent years, the industry is reported to be gradually reviving. It is estimated that the microfinance industry's outstanding loans in early 2013 were US$2–3 billion, which was significantly lower than the peak value of around US$5 billion a few years before.[103]

9.4.2.5 Remittances Inflow

India receives more remittances than any other country. India received US$120 billion in remittances in 2023, nearly double the US$66 billion received by Mexico during the same period, according to the World Bank.[104] This positions India as a global leader in remittance inflows. Remittances have led to the establishment of new businesses and social service organizations such as nursing homes and educational institutions.

9.4.2.6 Domestic Savings and Informal Investments

Entrepreneurs who save, whether formally or informally, are significantly more likely to reinvest in their businesses compared to those who do not save. Formal savers have a 9 percentage point higher likelihood of reinvestment, while informal savers have a 6 percentage point higher likelihood.[105] Domestic savings can be an important source of investment. India's saving rate as a proportion of disposable income was 37.5% in 2017, which reduced to 5.2% in F.Y. 2022/23.[106] As is the case of China and other Asian economies, the high savings rates in India can be attributed to income insecurity associated with mostly informal jobs. The high saving rates thus may not automatically translate to a higher investment rates.

As mentioned, the formal financial market remains largely inaccessible to startups and S.M.E.s. According to McKinsey, 43% of S.M.E.s in India borrow from informal sources. They do so partly because of the lack of collateral and working-capital lines (Mukherjee, 2016).[107]

9.4.2.7 Crowdfunding

While crowdfunding is in its infancy in India, it is becoming an increasingly important source of external finance for some Indian startups. One estimate

suggested that there were 30 crowdfunding platforms in India as early as 2016. As of June 2016, the Indian seed capital and angel investment platform, LetsVenture helped 70 companies raise US$27 million. The average deal size was about US$370,000 and the highest amount raised was US$1.33 million.[108]

In 2023, the Indian crowdfunding market reached a transaction volume of US$5.04 million,[109] with expectations for it to increase to US$5.77 million in 2024.[110] This reflects a growing interest and potential in crowdfunding in India, despite challenges like regulatory uncertainty.

Equity-based crowdfunding in India faces significant regulatory barriers due to restrictions under the Companies Act, 2013. Private placements are limited to 200 investors per fiscal year, cannot be advertised and require preidentified investors, which conflicts with the nature of crowdfunding platforms. Although not explicitly banned, these regulations make equity crowdfunding practically impossible. The lack of clear regulatory guidelines slows the development of alternative investments, and while The Securities and Exchange Board of India (SEBI) acknowledges the need for a framework, progress has been slow.[111]

9.4.2.8 Supply Chain Financing

In recent years, large players in the e-commerce sector are taking initiatives to improve the access of this form of financing to S.M.E.s. In 2015, India's largest e-commerce website, Snapdeal announced plans to disburse loans of around US$150 million to S.M.E.s by March 2016 under its seller financing platform, Capital Assist. It was reported that the firm has teamed up with banks and nonbanking finance companies for this purpose (economictimes .indiatimes.com, 2015).[112] Flipkart has similar lending schemes. In early 2016, Amazon India announced its plans to offer loans to key vendors selling on its portal. The sellers can apply for short-term working capital loans in order to buy more inventory and increase sales on Amazon.in.[113]

In 2024, Tata Motors Passenger Vehicles and Tata Passenger Electric Mobility partnered with HSBC India to provide supply chain financing for their dealers. This collaboration aims to offer competitive funding options, leveraging HSBC's expertise to support the dealer network for passenger and electric vehicles.[114]

9.4.3 R&D and Technology-Related Factors

India's I.C.T. adoption and usage rates have been relatively low compared to most countries. According to a study released by Google India in mid-2011, only 2 million out of the country's 35 million S.M.E.s were online.[115]

However, significant progress has been reported in recent years. In 2023, approximately 70% of India's 85 million M.S.M.E. sellers were connected

to the Internet, a figure expected to rise to 80% by 2027. This highlights the growing digital adoption among small businesses, improving their market reach and operational efficiency.[116]

India's overall innovation and R&D profile is weak. According to the World Bank, India's gross domestic expenditure on R&D as a proportion of G.D.P. in 2020 was 0.65% compared to 2.4% in China. Little of the business in India consists of core R&D needed for cutting-edge products. India lags behind industrialized countries and its neighbor China in terms of various indicators related to R&D and innovations. Due to India's poor R&D and innovation performance, some liken entrepreneurial activities in the Indian I.T. and offshoring industry to a "hollow ring". An *Economist* article notes: "India makes drugs, but copies almost all of the compounds; it writes software, but rarely owns the result. … [it has] flourished, but mostly on the back of other countries' technology".[117]

9.5 Concluding Comments

The 1991 economic reform facilitated and stimulated entrepreneurship in India. The impact on the broad economy is, however, barely noticeable. While billionaires, oligarchs and state-owned companies are benefiting from privileges, the playing field is not level for S.M.E.s and new venture startups, which face a host of barriers. Inappropriate regulatory elements and legal bottlenecks have severely hampered productive entrepreneurial activities. Severe and widespread poverty persists in the country while there is great and rising affluence among people working in the outsourcing sector. In sum we cannot really take the existence of a few entrepreneurial firms in the Indian I.T. sector as proof positive that India provides a conducive environment for entrepreneurship. In fact, it is possible to draw the opposite conclusion on the basis of the fact that very little entrepreneurial impact is felt by the mass of the population. Moreover, many Indian entrepreneurs still struggle with a culture that looks down on capitalism and is indifferent to hard work, improvement and innovations.

To some extent, the structural inertia of the Indian economy has acted as a barrier to foster modern entrepreneurship. India's heavy reliance on agriculture, for instance, has resulted in constraints in resources for entrepreneurial development. For instance, industry and agriculture compete in the allocation of water between states, which has created inter-state rivalries and tensions.

9.6 Discussion Questions

1. What is the current state of the Indian microfinance industry? What are some of the negative effects of this industry?

2. Comment on the A.D.B observation that the Indian economy has many characteristics of oligarchic capitalism.
3. Why do some observers argue that the Israel model of government funding for startups (note that 80% of the first US$500,000 for every idea identified is funded by the government in Israel) would be ineffective in India?
4. How would you rate India's R&D and innovations profile?
5. Compare China and India in terms of various indicators related to entrepreneurship. Which country is better prepared to embrace the global movement toward entrepreneurship? Why?
6. Compare and contrast Hinduism and Islam (see Chapter 6) from the standpoint of entrepreneurship development.

9.7 End of the Chapter Case: India's Thriving Startup Ecosystem: Innovation, Challenges and Growth Opportunities

Startups in India are defined as entities less than ten years old with annual revenues not exceeding ₹1 billion, reflecting The Department for Promotion of Industry and Internal Trade's (DPIIT).'s 2019 revision. They must focus on innovation, improvement of products or services, or operate scalable models that drive job creation or wealth generation. The definition applies to private limited companies, Limited Liability Partnership (LLP)s and partnerships recognized under Indian regulations.[118]

India's startup ecosystem has seen remarkable growth, expanding from 452 recognized startups in 2016[119] to about 150,000 in 2024.[120] Most of these ventures operate in emerging technologies, driving innovation in areas like A.I., Internet of Things (IoT) and blockchain. A 2024 study by SAP India and Dun & Bradstreet reveals that over 77% of Indian startups are investing in advanced technologies like A.I, machine learning, IoT and blockchain to drive growth and innovation. These technologies are helping startups improve efficiency, develop new products and scale their operations.[121]

A key feature of India's startup landscape is the increasing prominence of smaller cities. Tier II and III cities are emerging as key innovation hubs, contributing to 40% of tech startups. These cities capitalize on local talent and cost advantages, helping position India as a global startup leader, backed by strong governance and a favorable regulatory environment.[122]

9.7.1 Strong Venture Capital Interest

India's startup ecosystem raised over US$100 billion in funding between 2019 and 2023. Despite this remarkable achievement, the low contribution of domestic capital highlights a critical vulnerability.[123] India's startup ecosystem attracted US$9.2 billion in venture capital during the first ten

months of 2024, a 44.4% increase from US$6.4 billion in the same period of 2023, signaling strong investor confidence, according to GlobalData.[124]

9.7.2 Government Initiatives

The Indian government is taking initiatives to strengthen its startup ecosystem. India has amended the Foreign Exchange Management Regulations in 2024 to simplify the process for D.P.I.I.T.-recognized startups opening foreign currency bank accounts. The revisions also update the startup eligibility criteria, increasing the time frame from five to ten years and raising the turnover limit from ₹250 million to ₹1 billion.[125]

India's federal government has abolished the angel tax for all investors, a significant move to strengthen the startup ecosystem. Introduced in 2012 to curb money laundering, the tax often clashed with startups' valuations, creating fundraising challenges.[126] The angel tax taxed the excess over fair market value on shares issued by unlisted companies at 30.9%. While aimed at preventing unaccounted funds from entering private firms, it posed significant challenges for legitimate startups reliant on high-value investments.[127] Despite revisions in 2019, the measure hindered innovation. Its removal is seen as pivotal for fostering investments and reducing taxation uncertainties, encouraging startups to grow domestically. Finance Minister Nirmala Sitharaman also announced a US$120 million venture fund to bolster India's space economy, further supporting entrepreneurial growth and innovation.[128]

9.7.3 Challenges

Startups, particularly in emerging economies like India, face a multitude of challenges and hurdles as they strive to establish themselves and scale. These challenges can be broadly categorized into funding-related, market-related, operational and regulatory issues. For instance, a major hurdle for startups is understanding their target markets and customer needs, often due to limited market knowledge and rapid changes in consumer behavior. This lack of insight makes it difficult for startups to fine-tune their product-market fit and develop effective marketing strategies.[129]

Another key challenge is the intense competition from both local and global players, which places pressure on startups to scale quickly and secure resources such as skilled labor. In India, startups often struggle to recruit and retain talent due to the shortage of specific skill sets in the workforce, compounded by the allure of established firms and high-paying jobs abroad.[130]

On the operational side, managing rapid growth with limited resources can overwhelm startup founders. The challenge of maintaining a strong company culture while expanding quickly is a common concern. Founders

often face difficulties in delegating responsibilities and creating productive teams to handle the growing demands of their business.[131]

Additionally, regulatory obstacles in India, including high taxes, complex labor laws and bureaucratic delays in securing necessary licenses and permits, create significant barriers to growth. These regulatory challenges, while part of the broader business environment, can particularly stymie startups attempting to scale their operations quickly.[132]

India's startup ecosystem struggles with a lack of domestic funding, with less than 15% of investments in 2023 coming from local sources. Unlike Europe, the United States' and China's startup ecosystems thrive on strong domestic capital, fostering resilience and reducing risks from external dependency.[133]

Collectively, these challenges highlight the complex landscape that Indian startups must navigate. To succeed, startups must overcome these hurdles by innovating within constrained resources, adapting to market demands and effectively managing both internal and external pressures.

9.7.4 Conclusion

India's startup ecosystem has seen significant growth, fueled by innovation and government support, establishing it as a global leader in emerging technologies. However, challenges such as funding shortages, regulatory hurdles and competition remain significant obstacles for startups to navigate. Overcoming these issues, along with leveraging new policies and funding mechanisms, will be key to ensuring the continued success and resilience of Indian startups.

Notes

1 Huang, Y. (2008). The next Asian miracle. *Foreign Policy*, *167*, 32–40.
2 World Bank. (2008). Doing business 2008: India, Bhutan, and Sri Lanka Lead South Asia's jump in reform.
3 Doing Business. (2017). Doing Business 2018 Reforming to Create Jobs. http://www.doingbusiness.org/reports/global-reports/doing-business-2018
4 hehindu.com. (2016). Top 10 takeaways from Modi's speech at Start-up India launch. http://www.thehindu.com/business/top-10-takeaways-from-modis-speech-at-startup-india-launch/article8114318.ece
5 Diversitech Global. (2024, June 25). Overcoming challenges: How 'Make in India' is addressing industry hurdles. *Diversitech Global*. https://www.diversitech-global.com/post/overcoming-challenges-how-make-in-india-is-addressing-industry-hurdles
6 Shastry, V. (2024, September 3). Trade distortion and protectionism: Roadblocks to India's manufacturing renaissance. Hinrich Foundation. https://www.hinrichfoundation.com/res
7 Diversitech Global. (2024, June 25). Overcoming challenges: How 'Make in India' is addressing industry hurdles. *Diversitech Global*. https://www.diversitech

-global.com/post/overcoming-challenges-how-make-in-india-is-addressing-industry-hurdles
8 Franklin Templeton. (n.d.). *India: Production Linked Incentives (PLI)*. Retrieved December 12, 2024, from https://www.franklintempleton.co.uk/campaigns/india-new-developments-to-drive-growth-and-earnings/india-production-linked-incentives
9 Franklin Templeton. (n.d.). *India: Production Linked Incentives (PLI)*. Retrieved December 12, 2024, from https://www.franklintempleton.co.uk/campaigns/india-new-developments-to-drive-growth-and-earnings/india-production-linked-incentives
10 Thakkar, B. (2021, September 17). *Production-linked incentive schemes in India: The journey so far*. EY India Tax and Regulatory Services Partner. https://publish-ey-prod-cdn.adobecqms.net/en_in/tax/india-tax-insights/production-linked-incentive-schemes-in-india-the-journey-so-far
11 Franklin Templeton. (n.d.). *India: Production Linked Incentives (PLI)*. Retrieved December 12, 2024, from https://www.franklintempleton.co.uk/campaigns/india-new-developments-to-drive-growth-and-earnings/india-production-linked-incentives
12 Shastry, V. (2024, September 24). 'Make In India' ten years later: Speed bumps and roadblocks. *Forbes Asia*. https://www.forbes.com/sites/vasukishastry/2024/09/24/make-in-india-ten-years-later-speed-bumps-and-roadblocks/
13 India Shipping News. (2024, December 12). *Make in India: Centre shifts focus to sector-tailored schemes amid low PLI fund utilisation*. https://indiashippingnews.com/make-in-india-centre-shifts-focus-to-sector-tailored-schemes-amid-low-pli-fund-utilisation/
14 Shastry, V. (2024, September 24). 'Make In India' ten years later: Speed bumps and roadblocks. *Forbes Asia*. https://www.forbes.com/sites/vasukishastry/2024/09/24/make-in-india-ten-years-later-speed-bumps-and-roadblocks/
15 Diversitech Global. (2024, June 25). Overcoming challenges: How 'Make in India' is addressing industry hurdles. *Diversitech Global*. https://www.diversitech-global.com/post/overcoming-challenges-how-make-in-india-is-addressing-industry-hurdles
16 Global Intellectual Property Center. (2016). U.S. Chamber International IP Index U.S. Chamber of Commerce. http://www.theglobalipcenter.com/gipcindex/
17 Majumdar, S. K. (2004). The hidden hand and the license raj to an evaluation of the relationship between age and the growth of firms in India. *Journal of Business Venturing*, *19*, 107–125.
18 Policy Circle Bureau. (2024, November 19). Back on track: India's start-ups are shaping a $10bn comeback. *Policy Circle*. https://www.policycircle.org/industry/funding-revival-for-start-ups/
19 Kshetri, N. (2011). The Indian environment for entrepreneurship and small business development. *Studia Negotia*, *56*(4), 35–52.
20 economictimes.indiatimes.com. (2015). Etailers like Snapdeal seek RBI approval to offer loans to SMEs. http://economictimes.indiatimes.com/news/economy/policy/etailers-like-snapdeal-seek-rbi-approval-to-offer-loans-to-smes/articleshow/49395754.cms
21 Economist. (2007). Imitate or die; Technology in China and India. *385*(8554), 9.
22 Kumar, N., Mohapatra, P. K., & Chandrasekhar, S. (2009). Challenges for Indian multinationals–The Global Future, HBS Press Chapter. http://harvardbusinessonline.hbsp.harvard.edu/b02/en/common/item_detail.jhtml

;jsessionid=D5WRHOBIDCOVMAKRGWDR5VQBKE0YIISW?id=6745BC&_requestid=50809
23 UNDP. (2008). Human Development Report 2007/2008: Fighting climate change: Human solidarity in a divided world, United Nations Development Programme (UNDP). Retrieved March 15, 2010, http://hdr.undp.org/en/media/HDR_20072008_EN_Complete.pdf
24 Foulis, P. (2011). Adventures in capitalism: Indian businesses are rewriting the rules of capitalism in a distinctive and unexpected way. http://www.economist.com/node/21532448
25 Das, G. (2022, December 14). India's SME segment is going to be a driving force for India's output, but tech penetration remains low to help it, says GoTo Inc's CEO. *The Economic Times*. https://economictimes.indiatimes.com/news/company/corporate-trends/indias-sme-segment-is-going-to-be-a-driving-force-for-indias-output-but-tech-penetration-remains-low-to-help-it-says-goto-incs-ceo/articleshow/96224541.cms?from=mdr
26 ANI. (2023, December 11). *31.6 million MSMEs registered between July 2020 and Dec 2023: Govt*. Business Standard. Retrieved December 16, 2024, from https://www.business-standard.com/industry/sme/31-6-million-msmes-registered-between-july-2020-and-dec-2023-govt-123121100641_1.html
27 economist.com. On the turn, January 19, 2013. http://www.economist.com/news/special-report/21569571-india-no-longer-automatic-choice-it-services-and-back-office-work-turn
28 Harachand, S. (2022, January 20). Indian drug makers ramp up discovery research. *Contract Pharma*. https://www.contractpharma.com/contents/view_online-exclusives/2022-01-20/indian-drug-makers-ramp-up-discovery-research/
29 Patel, M. (2024, December 2). *Outsourcing to India: Why it is the right choice*. Kody Technolab. https://kodytechnolab.com/blog/outsourcing-to-india/#:~:text=India%20is%20the%20foremost%20outsourcing,around%20%24225%20billion%20by%202024
30 Wadhwa, V. (2009). Lessons from a new industry cluster in India. *BusinessWeek* Online 7-7.
31 Kumar, G. R. (2017). An analysis on the role of India's informal economy. http://www.thehansindia.com/posts/index/Young-Hans/2017-07-14/An-analysis-on-the-role-of-Indias-informal-economy/312388
32 The Wire Staff. (2024, June 15). India has 110 million informal sector workers, govt releases data for the first time in a decade. *The Wire*. https://thewire.in/economy/india-has-110-million-informal-sector-workers-govt-releases-data-for-the-first-time-in-a-decade
33 United Nations Development Programme. (2024, October 17). *2024 Global Multidimensional Poverty Index (MPI): Poverty amid conflict*. Human Development Reports. https://hdr.undp.org/content/2024-global-multidimensional-poverty-index-mpi#/indicies/MPI
34 UNDP. (2008). *Human Development Report 2007/2008: Fighting climate change: Human solidarity in a divided world*. United Nations Development Programme (UNDP). Retrieved March 15, 2010, http://hdr.undp.org/en/media/HDR_20072008_EN_Complete.pdf
35 Malhotra, H. B. (2009). Oligarchic capitalism may take hold in India. Retrieved September 22, 2009, http://www.theepochtimes.com/n2/content/view/22829/

36 Gill, S. S. (2024, August 30). Corporate dominance widening rich-poor gap. *The Tribune*. https://www.tribuneindia.com/news/comment/corporate-dominance-widening-rich-poor-gap/
37 Foulis, P. (2011). Adventures in capitalism: Indian businesses are rewriting the rules of capitalism in a distinctive and unexpected way. http://www.economist.com/node/21532448
38 Economic Times. (2024, June 15). Nearly 58% of govt-recognised startups in 5 states; Maharashtra tops list. *The Economic Times*. https://economictimes.indiatimes.com/tech/startups/nearly-58-of-govt-recognised-startups-in-5-states-maharashtra-tops-list/articleshow/96323252.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
39 Malhotra, H. B. (2009). Oligarchic Capitalism May Take Hold in India. Retrieved September 22, 2009. http://www.theepochtimes.com/n2/content/view/22829/
40 EMF (Emerging Markets Forum). (2009). India 2039: An affluent society in one generation. http://www.emergingmarketsforum.org/papers/pdf/2009-EMF-India-Report_Overview.pdf
41 Petras, J. (2008). Global ruling class: Billionaires and how they "make it". *Journal of Contemporary Asia*, *38*(2), 319–329.
42 Singh, S. R. (2024, August 5). Law Ministry report highlights poor infrastructure, overburdened courtrooms. *The Hindu*. https://www.thehindu.com/news/national/law-ministry-report-highlights-poor-infrastructure-overburdened-courtrooms/article68485042.ece
43 Biswas, S. (2023, July 30). Supreme Court: Why India's powerful top court is in a 'crisis'. *BBC News*. https://www.bbc.com/news/world-asia-india-66292895
44 Shah, H. J. (2010). Valuate the India Opportunity through Incubators, Demographics and PEG. http://blogs.wsj.com/india-chief-mentor/2010/03/09/valuate-the-india-opportunity-through-incubators-demographics-and-peg/
45 Economist. (2008). Business: Unshackling the chain stores. *387*(8582), 80.
46 economywatch.com. (2014). India's Restrictive Labor Laws Challenge Investors. http://www.economywatch.com/features/Indias-Restrictive-Labor-Laws-Challenge-Investors.11-12-14.html
47 Deloitte. (2006). China and India: The Reality Beyond the Hype, Deloitte Development LLC.
48 Hanstad, T. (2013). The Case for Land Reform in India. https://www.foreignaffairs.com/articles/india/2013-02-19/untitled?cid=soc-twitter-in-snapshots-untitled-022013
49 Hanstad, T. (2013). The Case for Land Reform in India. https://www.foreignaffairs.com/articles/india/2013-02-19/untitled?cid=soc-twitter-in-snapshots-untitled-022013
50 Global Intellectual Property Center. (2016). U.S. Chamber International IP Index U.S. Chamber of Commerce. http://www.theglobalipcenter.com/gipcindex/
51 Bhattacharya, S. (2015). India Plans to Streamline Intellectual Property Rights Process. http://www.wsj.com/articles/india-plans-to-streamline-intellectual-property-rights-process-1449834245
52 Hoselitz, B. F. (I960). *Sociological aspects of economic growth*. The Free Press.
53 Elliot, J. (1998). Held back by Hindu gods? *New Statesman*, *127*(414), 28.
54 Dana, L. P. (2000). Creating entrepreneurs in India. *Journal of Small Business Management*, *38*(1), 86–91.

55 Elliot, J. (1998). Held back by Hindu gods? *New Statesman*, *127*(414), 28.
56 Dana, L. P. (2000). Creating entrepreneurs in India. *Journal of Small Business Management*, *38*(1), 86–91.
57 Dana, L. P. (2000). Creating entrepreneurs in India. *Journal of Small Business Management*, *38*(1), 86–91.
58 Elliot, J. (1998). Held back by Hindu gods? *New Statesman*, *127*(414), 28.
59 Salovaara, I., & Wade, J. (2018). How to Support Women Social Entrepreneurs in India. https://ssir.org/articles/entry/how_to_support_women_social_entrepreneurs_in_india
60 Dasgupta, B. (2018). Co-working spaces go the extra mile to guide woman entrepreneurs. https://economictimes.indiatimes.com/jobs/co-working-spaces-go-the-extra-mile-to-guide-woman-entrepreneurs/articleshow/63275583.cms
61 Saha, D. (2016). Women Run 14% Of Indian Businesses, Most Self-Financed. https://thewire.in/gender/women-run-14-of-indian-businesses-most-self-financed
62 Saha, D. (2016). Women Run 14% Of Indian Businesses, Most Self-Financed. https://thewire.in/gender/women-run-14-of-indian-businesses-most-self-financed
63 Mastercard. (2018). Women in Charge: Mastercard Index reveals how countries are progressing to empower women entrepreneurs. https://newsroom.mastercard.com/press-releases/women-in-charge-mastercard-index-reveals-how-countries-are-progressing-to-empower-women-entrepreneurs/
64 Ganesh, K. (2016). A serial entrepreneur on why starting up is tough but every bit worth it. http://economictimes.indiatimes.com/small-biz/startups/a-serial-entrepreneur-on-why-starting-up-is-tough-but-every-bit-worth-it/articleshow/52919870.cms
65 Piramal, G. (2004). In depth offshoring: In my opinion. *European Business Forum*, *19*, 40–41.
66 Slater, J. (2003). India's nifty number-crunchers. *Far Eastern Economic Review*, 7.
67 Economist. (2005). Business: Busy signals; Indian call centres. *376*(8443), 66.
68 Fest, G. (2005). Offshoring: Feds take fresh look at India BPOs; Major theft has raised more than a few eyebrows. *Bank Technology News*, *18*(9), 1.
69 World Economic Forum. (2016). The Global Information Technology Report 2016: Innovating in the Digital Economy.
70 Waghmare, A. (2024, June 6). Education levels in India. *Data for India*. Retrieved August 29, 2024, from https://www.dataforindia.com/education-levels-in-india/
71 Rai, S. (2014). India emerges as a hotbed of software product entrepreneurship. http://www.techrepublic.com/article/matchmaking-at-intech50-indian-software-product-startups-pitch-to-50-cios/
72 Bhattacharyya, R., & Philip, L. (2024, August 31). Big companies see shortage in skilled talent a risk to growth plans. *The Economic Times*. https://economictimes.indiatimes.com/jobs/hr-policies-trends/big-companies-see-shortage-in-skilled-talent-a-risk-to-growth-plans/articleshow/112928616.cms
73 Cappelli, P., Singh, H., Singh, J. & Useem, M. (2010). The India way: Lessons for the U.S. *Academy of Management Perspectives*, *24*(2), 6–24.
74 Mundy, S. (2016). Indian IT services groups adjust to cloud and big data: Wipro, Infosys and Tata under pressure to adapt or be left behind. https://next.ft.com/content/9ad3b946-3d26-11e6-8716-a4a71e8140b0

75 Chaudhary, D. (2010). Start-ups in fund trouble, even as incubators hike early-stage funding. http://www.livemint.com/2010/01/25215034/Startups-in-fund-trouble-eve.html
76 Tracxn. (2024, October 10). *Accelerators & incubators in India*. Tracxn. https://tracxn.com/d/investor-lists/accelerators-incubators-in-india/__ipYdkLo_FgbzV1gMFal2rdFyLmVPrYS5HEVcIUc9hyY#t-1-ikp-knowledge-park
77 Sharma, D. (2017). India now ranks third globally in number of incubators, accelerators: Report. https://www.vccircle.com/india-now-ranks-third-globally-in-number-of-incubators-accelerators-report/
78 Sharma, D. (2017). India now ranks third globally in number of incubators, accelerators: Report. https://www.vccircle.com/india-now-ranks-third-globally-in-number-of-incubators-accelerators-report/
79 Weitzman, H., & Fontanella-Khan, J. (2011). US and India: the squeeze on small business. http://www.ft.com/cms/s/0/33de9812-8b8f-11e0-8c09-00144feab49a.html#axzz1PgAoaEbA
80 Economist. (2008). Business: Unshackling the chain stores. *387*(8582), 80.
81 Harvard Business Review. (2009). The New Frontiers. *87*(7), 130–137.
82 Mukherji, B. (2021, October 8). India's roads are so bad a third of produce rots in transit. The world's longest expressway hopes to speed things up. *Fortune*. https://fortune.com/2021/10/08/worlds-longest-expressway-delhi-mumbai-india-infrastructure/
83 Ghosh, M. (2024, December 11). Indian govt has a ₹100 trillion infrastructure plan: 50,000 km of expressways, railways & more. *Trak.in*. https://trak.in/stories/indian-govt-has-a-100-trillion-infrastructure-plan-50000-kms-of-expressways-railways-more/#google_vignette
84 Gandhi, G. (2010). Indian entrepreneurs need a hug: Google's Gandhi. http://blogs.wsj.com/india-chief-mentor/2010/02/16/indian-entrepreneurs-need-a-hug-google%E2%80%99s-gandhi/
85 Bergen, M. (2014). Will bank accounts catch on in India? https://www.newyorker.com/business/currency/will-bank-accounts-catch-on-in-india
86 Gandhi, G. (2010). Indian entrepreneurs need a hug: Google's Gandhi. http://blogs.wsj.com/india-chief-mentor/2010/02/16/indian-entrepreneurs-need-a-hug-google%E2%80%99s-gandhi/
87 economictimes.indiatimes.com. (2015). Etailers like Snapdeal seek RBI approval to offer loans to SMEs. http://economictimes.indiatimes.com/news/economy/policy/etailers-like-snapdeal-seek-rbi-approval-to-offer-loans-to-smes/articleshow/49395754.cms
88 asia.nikkei.com. (2018). Indian IPO fervor cools as volatility pinpoints fundamentals. https://asia.nikkei.com/Business/Markets/Equities/Indian-IPO-fervor-cools-as-volatility-pinpoints-fundamentals
89 Guptan, R. (2024, April 11). *Coming of age: A strong year for India's capital markets*. White & Case. https://www.whitecase.com/insight-our-thinking/global-ipos-2024-india-capital-markets
90 Gupta, K. (2024, March 7). SME IPOs: A gateway to emerging market opportunities. *LiveMint*. https://www.livemint.com/market/ipo/sme-ipos-a-gateway-to-emerging-market-opportunities-11709788493743.html
91 Kohli, D. (2011). Some investors keeping away from IPOs in Indian market. http://www.channelnewsasia.com/stories/marketnews/view/1136181/1/.html
92 economist.com. (2011). Building India Inc: A weak state has given rise to a new kind of economy. Without reform, it will hit limits. http://www.economist.com/node/21533396

93 Chugh, G., Lam, A., Lawson, B., Perez-Goropze, J., & Wahal, A. (2024, September 19). *India's growing capital market: Promising first steps to internationalization*. S&P Global. https://www.spglobal.com/en/research-insights/special-reports/india-forward/indias-growing-capital-market-promising-first-steps-to-internationalization
94 Sengupta, S. (2018). Five venture capital dealmakers to watch in 2018. http://www.livemint.com/Opinion/MecRmBTOLZNt3JO4Zn2XTL/Five-venture-capital-dealmakers-to-watch-in-2018.html
95 OpenVC. (n.d.). *India*. https://www.openvc.app/country/India
96 OpenVC. (n.d.). *India*. https://www.openvc.app/country/India
97 Velayanikal, M. (2015). What are the hottest sectors for venture capital in India this year? https://www.techinasia.com/hottest-sectors-venture-capital-india-infographic
98 OpenVC. (n.d.). *India*. https://www.openvc.app/country/India
99 Dossani, R., & Kenney, M. (2002). Creating an environment for venture capital in India. *World Development*, *30*(2), 227–253.
100 Tagare, P. (2011). India's entrepreneurs need to see beyond IPOs. http://online.wsj.com/article/SB10001424052702304432304576370803985701380.html?mod=googlenews_wsj
101 Bhan, A. (2024, September 25). *Fifty years of Indian microfinance: The long journey to profitability*. ORF. https://www.orfonline.org/expert-speak/fifty-years-of-indian-microfinance-the-long-journey-to-profitability
102 Kalesh, B. (2010). SKS Microfinance gets venture capitalists as promoters for IPO. http://www.livemint.com/2010/03/10205245/SKS-Microfinance-gets-venture.html
103 economist.com Road to redemption, January 12, 2013. http://www.economist.com/news/finance-and-economics/21569447-industry-starting-revive-road-redemption
104 Press Trust of India. (2024, June 27). India received $120 billion in remittances in 2023, most from US: World Bank. *India Today*. https://www.indiatoday.in/business/story/india-received-120-billion-in-remittances-in-2023-most-from-us-world-bank-2558738-2024-06-27
105 Beck, T., Pamuk, H., & Uras, B. (2014, April 14). *Entrepreneurial savings practices and reinvestment decisions*. World Bank Blogs. https://blogs.worldbank.org/en/allaboutfinance/entrepreneurial-savings-practices-and-reinvestment-decisions
106 The Wire Staff. (2024, May 31). *'Household savings hit record low at 5.2%, debt at all-time high in FY23': RBI*. The Wire. Retrieved December 16, 2024, from https://thewire.in/economy/household-savings-hit-record-low-at-5-2-debt-at-all-time-high-in-fy23-rbi
107 Mukherjee, A. (2016). A WhatsApp moment for Asia's Banks. http://www.bloomberg.com/gadfly/articles/2016-07-03/a-whatsapp-moment-for-banks-in-asia
108 Babu, V. (2016). Herd Mentality: Crowdfunding platforms are proliferating. And very different models are being tried out by different players. http://www.businesstoday.in/magazine/corporate/crowdfunding-platforms-are-proliferating-with-models/story/232543.html
109 Vodolazhska, A. (2023, July 11). *Crowdfunding in India: Market overview*. LenderKit. https://lenderkit.com/blog/crowdfunding-in-india-market-overview/
110 Statista. (n.d.). *Crowdfunding - India*. Statista. Retrieved December 13, 2024, from https://www.statista.com/outlook/dmo/fintech/digital-capital-raising/crowdfunding/india

111 Vodolazhska, A. (2023, July 11). *Crowdfunding in India: Market overview*. LenderKit. https://lenderkit.com/blog/crowdfunding-in-india-market-overview/
112 economictimes.indiatimes.com. (2015). Etailers like Snapdeal seek RBI approval to offer loans to SMEs. http://economictimes.indiatimes.com/news/economy/policy/etailers-like-snapdeal-seek-rbi-approval-to-offer-loans-to-smes/articleshow/49395754.cms
113 Maheshwari, R. (2016). Amazon plans to offer loans to Indian sellers. http://articles.economictimes.indiatimes.com/2016-02-10/news/70509905_1_amazon-india-collateral-free-loans-amazon-in
114 BW Online Bureau. (2024, October 16). *Tata Motors partners with HSBC India for supply chain financing solutions*. BW Autoworld. https://bwautoworld.com/article/tata-motors-partners-with-hsbc-india-for-supply-chain-financing-solutions-536439
115 Narasimhan, T. E. (2011). 57% of SMEs use internet as sales channel, finds survey. http://www.business-standard.com/india/news/57smes-use-internet-as-sales-channel-finds-survey/439821/
116 Ghosh, M. (2023, August 23). Indian SMEs poised to drive $50 billion in e-commerce sales by 2027, Redseer report finds. *StartupStory*. https://startupstorymedia.com/insights-indian-smes-poised-to-drive-50-billion-in-e-commerce-sales-by-2027-redseer-report-finds/
117 Economist. (2007). Imitate or die; Technology in China and India. 385(8554), 9.
118 Popli, M. (2023, September 28). Investment outlook for India's startup ecosystem in 2023. *India Briefing*. https://www.india-briefing.com/news/investment-outlook-for-indias-startup-ecosystem-in-2023-29731.html/
119 T-Hub. (n.d.). *India's rise to become the third-largest startup economy worldwide*. Retrieved November 26, 2024, from https://t-hub.co/indias-rise-to-become-the-third-largest-startup-economy-worldwide/
120 India Business Trade. (2024, November 22). Govt introduces foreign currency banking norms for startups. *India Business Trade*. https://www.indiabusinesstrade.in/news_buzz/govt-introduces-foreign-currency-banking-norms-for-startups/
121 SAP India, & Dun & Bradstreet. (2024). *The Blueprint for Startup Profitability in India*. https://www.sap.com/india/cmp/dg/in-startup-report-dnb/index.html
122 SAP India, & Dun & Bradstreet. (2024). *The Blueprint for Startup Profitability in India*. https://www.sap.com/india/cmp/dg/in-startup-report-dnb/index.html
123 Economic Times. (2024, August 30). *Why India's startup ecosystem needs more domestic funds*. https://economictimes.indiatimes.com/opinion/et-commentary/why-indias-startup-ecosystem-needs-more-domestic-funds/articleshow/112933285.cms?from=mdr
124 KNN India. (2024, November 29). *India's start-up ecosystem rebounds with infusion of $9.2 billion VC funding*. KNN India. https://knnindia.co.in/news/newsdetails/sectors/indias-start-up-ecosystem-rebounds-with-infusion-of-92-billion-vc-funding
125 India Business Trade. (2024, November 22). Govt introduces foreign currency banking norms for startups. *India Business Trade*. https://www.indiabusinesstrade.in/news_buzz/govt-introduces-foreign-currency-banking-norms-for-startups/
126 Singh, M. (2024, July 23). India scraps 'angel tax' in boost for startups. *TechCrunch*. https://techcrunch.com/2024/07/23/india-scraps-angel-tax-in-boost-to-startups/

127 Cyrill, M. (2024, December 2). End of the Angel Tax in India: Applicable for FY 2025-26. *India Briefing*. https://www.india-briefing.com/news/abolishing-the-angel-tax-in-india-applicable-for-fy-2025-26-35289.html
128 Singh, M. (2024, July 23). India scraps 'angel tax' in boost for startups. *TechCrunch*. https://techcrunch.com/2024/07/23/india-scraps-angel-tax-in-boost-to-startups/
129 Kanakkupillai. (2023, March 18). *Top Challenges Facing Indian Startups and How to Overcome Them*. https://www.kanakkupillai.com/learn/top-challenges-facing-indian-startups-and-how-to-overcome-them/
130 Kanakkupillai. (2023, March 18). *Top Challenges Facing Indian Startups and How to Overcome Them*. https://www.kanakkupillai.com/learn/top-challenges-facing-indian-startups-and-how-to-overcome-them/
131 Kanakkupillai. (2023, March 18). *Top Challenges Facing Indian Startups and How to Overcome Them*. https://www.kanakkupillai.com/learn/top-challenges-facing-indian-startups-and-how-to-overcome-them/
132 Kanakkupillai. (2023, March 18). *Top Challenges Facing Indian Startups and How to Overcome Them*. https://www.kanakkupillai.com/learn/top-challenges-facing-indian-startups-and-how-to-overcome-them/
133 Economic Times. (2024, August 30). *Why India's startup ecosystem needs more domestic funds*. https://economictimes.indiatimes.com/opinion/et-commentary/why-indias-startup-ecosystem-needs-more-domestic-funds/articleshow/112933285.cms?from=mdr

Chapter 10

Entrepreneurship in Latin America

This chapter's objectives are:

1. To demonstrate an understanding of the entrepreneurship landscape in Latin American economies.
2. To analyze the facilitators and inhibitors of entrepreneurship in Latin American economies.
3. To assess the regulatory environments related to entrepreneurship in Latin American economies.
4. To evaluate major aspects of Latin American culture from the standpoint of entrepreneurial activities.
5. To demonstrate an understanding of the attractiveness of entrepreneurial activities in some of the key economic sectors.
6. To evaluate some major sources of entrepreneurial financing in Latin American economies.
7. To assess the environments for technology adoption, innovations and research and development (R&D) activities in Latin American economies.

10.1 Introduction

Entrepreneurship is thriving in Latin America, a region with a population of 656 million in 2023[1] and a gross domestic production (G.D.P.) per capita at purchasing power parity (PPP) of US$18,560 as of 2021.[2] The entrance of significant venture capital (V.C.) firms, such as Sequoia, Andreessen Horowitz and Accel Partners, and the presence of accelerators like Y Combinator, combined with the rise and exit of renowned unicorns, have firmly placed the region on the global entrepreneurial stage.[3]

In 2021, a total of 47 Latin American companies achieved unicorn status by securing the necessary valuation. Of these, ten companies went public or were acquired in 2022.[4] In 2022, over 220 startups were established across Latin America.[5] According to IDB Lab, the value of tech startups in Latin America and the Caribbean is expected to reach US$2 trillion by 2030.[6]

DOI: 10.4324/9781003565154-10

The region is home to a number of dynamic, creative and innovative companies and entrepreneurs. For instance, Argentina-based MercadoLibre, which is incorporated in the United States, is Latin America's biggest e-commerce and online payments platform. Founded in 1999, it is considered to be a combination of the region's Amazon, eBay and PayPal. In *MIT Technology Review*'s list of 50 Smartest Companies in 2017 MercadoLibre ranked #26.[7] In 2024, MercadoLibre became Latin America's most valuable company, surpassing Petrobras with a market cap exceeding US$100 billion, fueled by its booming fintech operations and strategic innovations. Its data-driven financial services empower entrepreneurs, while fintech revenues, particularly from its credit unit, have grown nearly 50%. Strategic partnerships, such as one with Disney, contribute to its digital ad revenue nearing US$1 billion. MercadoLibre's comprehensive ecosystem positions it to compete with Amazon and fintech leaders like Nubank, aiming to replicate Alibaba's success with Alipay.[8]

As another success story, artificial intelligence (A.I.) customer service startup Aivo, based in Córdoba, Argentina, develops A.I. solutions, which are transforming the way companies interact with customers. Aivo is the leader in Latin American virtual assistants markets. Founded in 2012, Aivo's virtual artificial intelligence customer service agents served over 1 million customers in 2015.[9] As of 2017, it was present in ten countries. In 2016, it handled over 100 million interactions in English, Spanish and Portuguese (Crunchbase).[10] Aivo was the winner of the 2016 Latin American Frost & Sullivan Award for Product Leadership.[11] Aivo expanded to Spain in 2021. Legally registered in the United States, as of 2023, the firm operated in the United Kingdom and 11 Latin American countries, serving 212 corporate clients with 125 employees. It anticipated US$15 million in revenue for 2023.[12]

A.I. is transforming Latin America's entrepreneurial landscape by driving innovation, enhancing efficiency and opening new opportunities for startups and businesses (In Focus 10.1). By 2030, A.I. is expected to increase Latin America's G.D.P. by 5%. Brazil leads the region, accounting for 73.65% of A.I. startups and investment, with A.I.-focused startups receiving R$2 billion in 2022 – a 50% increase from the previous year. Colombia and Mexico each represent 6.64% of the region's A.I. startup ecosystem, while Chile, Argentina and other countries contribute smaller shares.[13]

IN FOCUS 10.1 A.I. STARTUPS IN COLOMBIA: GROWTH, OPPORTUNITIES AND REGIONAL CHALLENGES

A 2024 Microsoft study revealed that Colombia leads Latin America in A.I. investment, with 82% of major Colombian companies planning to increase their A.I. budgets over the next two years. This is the highest

percentage in the region. Across Hispanic South America, 55% of large companies had already implemented A.I. tools, and 44% of Colombian businesses had adjusted their A.I. spending or planned to do so soon (Microsoft, 2024).[14]

Colombia, a regional leader in technology adoption, ranked second only to Brazil in ChatGPT usage during the first quarter of 2023. This notable achievement highlights Colombia's rapid progress in embracing A.I.-powered solutions.[15]

In 2019, the Colombian Ministry of I.T. and Communications initiated a program to train 4,413 students in A.I.-related subjects such as machine learning, Python and deep learning. Additionally, the World Economic Forum established its first Latin American Centre for the Fourth Industrial Revolution in Medellín to advance and update public policies for A.I. and other emerging technologies.[16]

In 2024, over 68% of Colombian fintechs leveraged A.I. for decision making, making it the most widely used A.I. application in the sector. Additionally, nearly 66% of fintechs applied A.I. for task automation, highlighting its prominence in streamlining operations.[17]

Global Investors Boost Colombia's Growing A.I. Sector

Foreign investors, including those in foreign direct investment and venture capital, are increasingly drawn to Colombia's growing A.I. sector, recognizing its promising entrepreneurial opportunities. In August 2019, Founder of DeepLearning.AI, Founder and CEO of Landing AI, General Partner at AI Fund Andrew Ng revealed the establishment of a Medellín office in Colombia. It functions as the regional hub for Landing AI, deeplearning.ai and AI Fund, with plans to grow alongside the ecosystem's development. deeplearning.ai provides A.I. education globally, with over 400,000 enrolled in its Deep Learning Specialization and 150,000 in *AI for Everyone*, now available in Spanish for Latin American learners, particularly in Mexico, Brazil and Colombia. Landing AI collaborates with Latin American manufacturers, leveraging computer vision to optimize operations. AI Fund, backed by a US$175 million startup studio, builds A.I.-driven companies tackling global challenges and runs an A.I. education initiative in Colombia, training engineers from over 400 applicants to connect with global opportunities. Additionally, the Colombia office supports four stealth startups focused on A.I. solutions for healthcare, education and customer support.[18]

In May 2024, Celes, a Colombian A.I. platform for retailers, secured US$3 million in a funding round led by venture capital firm FEMSA Ventures, based in Mexico, increasing its valuation to US$12 million. The company planned to use the funds to improve its product and expand into

Latin America, particularly Mexico. The round also included investments from MatterScale Ventures, Rockstart and others. Celes served clients in Colombia, Peru, Bolivia, Guatemala, Argentina and Ireland, and planned to enter the Mexican market.[19]

In September 2024, Colombian fintech Finkargo secured US$20 million in equity and US$75 million in debt through a Series A extension round, led by US-based QED Investors and CIM, with participation from Quona, Flybridge, Nazca, Maya and OneVC.[20]

Development of A.I. Solutions

Colombian startups have developed A.I.-based solutions across diverse industries and functions to drive innovation and efficiency. This section highlights examples of three such startups.

*Vozy's A.I. **Tools to Enhance Communication and Streamline Operations for Businesses***

Colombian startup Vozy leverages generative A.I. to develop virtual assistants that interact naturally with users, improving customer experiences and boosting operational efficiency.[21] Vozy is described as a voice communication platform enabling users to interact seamlessly with companies through A.I.-driven conversational assistants, enhancing engagement and streamlining customer communication. Vozy emerged as the top voice A.I. solution in Latin America, thanks to its innovative platform featuring Lili, the conversational assistant; speech analytics for analyzing conversations; and voice biometrics for user identification. Serving over 150 clients in 16 countries in 2022, Vozy has grown by 250% annually and is aiming to process 100 million user interactions, enhancing customer service efficiency by 40%.[22]

*Demetria's **A.I.-Based Agritech** Solutions to **Improve Agricultural** Productivity*

Demetria, an agritech startup founded in 2018 and based in Bogotá, Colombia, provides a cloud-based platform for quality and traceability data in the coffee industry. Using portable near-infrared sensors, it analyzes green coffee beans' biochemical markers and uses A.I. to match each bean profile to the industry-standard Coffee Flavor Wheel.[23] This process, trained by quality data from certified Q Graders, aims to predict coffee taste accurately. While not replacing cuppers, Demetria's technology helps identify samples that don't require cupping, allowing for more efficient

use of cuppers' time and helping farmers identify high-quality lots, potentially increasing their income.

Demetria completed a pilot project with Carcafe, which is the Colombian coffee division of agricultural commodity traders, Volcafe/ED&F Man. Demetria's solution determines which green beans suit a distinct high-value cupping profile identified by Carcafe.

Demetria is transforming coffee-bean quality evaluation by using A.I. to replace the traditional cupping process, which is expensive and time-consuming. The company also offers Software as a Service solutions for assessing bean quality, cupping and taste profiling.[24]

Finkargo's A.I.-Driven Platform to Enhance Credit Access and Support Small and Medium-Sized Enterprise (S.M.E.) Importers

Finkargo Colombia SAS, headquartered in Bogotá, Colombia, provides S.M.E. importers with quick access to credit through a streamlined application process, leveraging imported goods as collateral. Additional services include shipment tracking and supplier evaluation to assist clients throughout their operations.[25] Finkargo's A.I.-driven model improves lending decisions based on S.M.E. track records and helps S.M.E.s make smarter business choices using data from the end-to-end purchase process.[26]

Established in February 2021, the company employed 63 people as of early 2024.[27] As of September 2024, Finkargo served 450 clients across Colombia and Mexico, facilitating over 4,000 import transactions.[28] Finkargo secured additional funds in 2024, which will support expanding complementary services, including fleet financing and shipping insurance, with the goal of tripling operational capacity.[29]

Bold Vision for A.I.: Government Policies, Investments and Educational Initiatives

In early 2024, the Colombian government announced a commitment of 50 billion pesos (approximately US$12.6 million) toward the establishment of a cutting-edge A.I. center in Bogotá. The new A.I. center, managed by The National Training Service (In Spanish: Servicio Nacional de Aprendizaje (SENA)), will be located in Usme to advance digital education, reduce the technology gap and boost the I.C.T. sector. It will provide training in cybersecurity, cloud computing, data analytics, Internet of Things and more. This is Colombia's second government-developed A.I. center, following the first in Zipaquirá, Cundinamarca. I.C.T. Minister Mauricio Lizcano announced plans to establish 100 new A.I. centers in partnership with local governments to foster regional public digital

innovation. Additionally, the ministry aims to develop 300 innovation centers nationwide, prioritizing A.I.-focused initiatives.[30]

The I.C.T. Minister has introduced Bill 447 of 2024 to promote responsible data use for public policy and A.I. development in Colombia. The bill seeks to position the country as a leader in digital transformation while ensuring stakeholder privacy. It mandates state entities to produce anonymous, relevant data to support governmental decisions and technological progress.[31]

In August 2024, President Gustavo Petro announced that the University of Caldas in Manizales would house Latin America's first academic unit dedicated to A.I. The initiative aimed to provide certifications, undergraduate degrees, specializations and master's programs to train A.I. professionals.[32]

The International Labour Organization (I.L.O.) and the Government of Huila, Colombia, have launched a pilot A.I. chatbot, *AgroasesorIA*, to support coffee producers in the region. The tool, accessible via WhatsApp, offers personalized guidance on labor formalization, business management, occupational health and agricultural best practices, aiming to improve productivity and working conditions. Benefiting 700 producers in its six-month trial, the initiative aligns with the I.L.O.'s efforts to transition economies from informal to formal systems, bolstered by partnerships with local stakeholders and co-financing from the European Union.[33]

Challenges

Colombian S.M.E.s have lower rates of A.I. adoption compared to advanced economies such as the United States. A May 2024 survey conducted by CIPE in partnership with iNNpulsa and the National Consulting Center found that LGBTIQ+-owned businesses lead in advanced technology adoption, including A.I., with 18% using it, compared to 16% for male-owned and 13% for female-owned businesses. In conflict-affected areas, only 12% of companies adopted advanced technologies, while 16% of companies in other regions did.[34] This contrasts with a March 2024 GoDaddy survey of U.S. small business owners, where 26% reported using advanced technologies like A.I. for business purposes, though 73% had tried the technology.[35]

According to the 2024 Microsoft survey noted above, 40% of companies in Colombia express concerns over the lack of expertise needed to successfully implement A.I.[36] This underscores the importance of developing targeted educational and training programs to ensure the workforce is adequately equipped to embrace A.I.

Colombian startups are facing significant financing challenges. In 2023, venture capital investments in technology-based startups in Colombia totaled

US$373 million across 82 deals, a 63% decrease from the US$1.2 billion in 124 deals in 2022, according to Latin American Venture Capital Association (LAVCA).[37] The concentration of investment in Bogotá presents a challenge, as the city secured 93% of Colombia's total capital for 2023 in the first half of 2024, capturing 97% of the country's funding. Bogotá also accounted for 77% of all investment rounds during this period. Meanwhile, Medellín, a hub for software development, attracted only 2.4% of foreign investment, and Barranquilla and Cali received just 0.6% and 0.1%, respectively.[38]

Conclusion

Colombia is rapidly advancing in A.I. adoption, with a strong government commitment and growing private sector engagement, especially in sectors like fintech and agritech. Despite challenges in A.I. adoption among small and medium-sized enterprises and a significant concentration of investment in Bogotá, the country is positioning itself as a regional leader. However, further efforts in expanding education, addressing financing gaps and promoting regional equity are essential for sustainable growth in Colombia's A.I.-driven economy.

It is also noted that a culture of innovation has emerged in the region. Governments in the region and the private sector have promoted programs such as accelerators and coworking spaces that are dedicated to promote entrepreneurship.[39] Global startup organizations such as 500 startups and StartupBootcamp have also made inroads into the continent.[40]

10.2 Latin America's Emerging Business Landscape: Challenges, Successes and Opportunities in Emerging Sectors

Due to the region's unique culture, history, political structures and natural heritage, one can observe interesting patterns in entrepreneurship development. There is also a wide regional variation in the entrepreneurship landscape. Examples exist of both successful and unsuccessful efforts to develop an entrepreneurial ecosystem.

Chile can be considered an example of an entrepreneurially successful economy in the region. Chile was ranked as Latin America's top country for entrepreneurship in the 2020 edition of the Global Entrepreneurship Index, supported by a progressive and adaptable tech community that is expected to drive recovery following the COVID crisis.[41] In 2023, Chile had over 8,000 I.T. companies, a number expected to increase as the 5G telecommunications network expands.[42]

A study of the World Economic Forum of 44 countries identified Chile as a country that has been able to avoid a trap that is common in entrepreneurial impact. Here is how the trap works: In a less-competitive economy, there is a higher tendency among the population to start businesses, most of which are informal. The entrepreneurs, however, are rarely innovative and thus fail to create many jobs. However, as the economy becomes more competitive, the tendency to start businesses among the population decreases, but those who do tend to be more innovative or ambitious. In both of these cases, the conditions lack for achieving full entrepreneurial potential.[43]

On the opposite continuum is Venezuela. One estimate suggested that Venezuela's per capita income reduced from US$12,688 in 2012 to US$4,019 in 2024.[44] The country's unemployment rate was 5.9% in 2023.[45]

A survey by Fedecamaras, Venezuela's largest business federation, found that 81% of private companies are negatively affected by sanctions, with significant indirect consequences. Issues like fuel shortages (84% of respondents) and electricity grid failures (89%) stem from underinvestment in the energy sector. Many businesses have had to develop their own infrastructure, including power generation and water systems, while also assuming social security responsibilities. The survey highlighted that a lack of finance, overcompliance with sanctions and reputational risks are limiting business operations. Fedecamaras' president argued that sanctions, while not the root cause of Venezuela's crisis, have worsened the country's situation and hindered economic growth.[46]

In 2022, 80% of startup investment in Latin America was concentrated in Brazil and Mexico.[47] In some countries, there is a large geographical disparity in entrepreneurial activities. For instance, in Chile, 80% of startups have been registered in the capital, Santiago.[48] Santiago leads venture capital funding in Chile, with startups raising US$125.5 million in 2020, according to PitchBook. Across Chile, the total funding raised by startups in 2020 reached US$143.2 million.[49]

Informality is perhaps among the most notable features of the Latin American entrepreneurial landscape. Indeed, informality is considered to be a principal barrier facing entrepreneurial firms from growing and creating more jobs.[50] One estimate suggested that Latin America had 47–57 million S.M.E.s, of which only 3 to 4 million were formal.[51]

Over half of all workers in Latin America are employed in the informal economy.[52] The proportion of informally employed workers is much higher in some economies. In Guatemala, more than 70% of the workforce is employed in the informal economy. Guatemala has a low unemployment rate, but its share of informal workers is significantly higher than in comparators, including Central America and Mexico. The country also has a much lower share of formal workers, with high informality rates across

both contract and firm-based measures, particularly among older workers and across genders.[53]

As is the case of other parts of the world, informally employed workers are less productive and would earn less. For instance, the informal economy employs 60% of the workforce in Mexico but accounts for only 26% of G.D.P.[54]

Various factors contribute to the region's informal economy. In Brazil, many firms decide to operate in the informal economy due to the country's unfavorable business environment such as complex regulations, a high tax rate, corruption, red tape and difficult customs system. These factors make it hard for businesses to keep their products' prices low. High prices in the formal sector also push consumers into buying products from the informal economy such as smuggled and counterfeit goods.[55]

In some countries, high informality can be partly attributed to high minimum wages. For instance, in 2017, Colombia raised its minimum wage by 7%. The new minimum wage increased to US$1.18 per hour or US$246 per month.[56] It is argued that due to the high minimum wage certain disadvantaged groups such as low-skilled workers, youth and old-age workers are less likely to be employed in the formal sector. This is especially the case in less developed regions of the country where productivity is lower.[57]

A concern is that economic benefits of entrepreneurship are accruing mainly to the rich. For instance, by several accounts, Chile is among the most entrepreneurially successful countries in the region. For instance, among the Organisation for Economic Co-operation and Development (O.E.C.D.) countries, Chile has the highest and Mexico has the second-highest Gini index.[58] This means that there is a high degree of inequality in the distribution of income and wealth in these countries. This highlights the need to promote financial inclusion.[59]

In the rest of this section, we will discuss some examples of entrepreneurial activities in two important economic sectors: e-commerce and fintech.

10.2.1 E-commerce

According to Worldpay's 2017 Global Payments Report, the Latin American e-commerce was US$59 billion in 2017, which will increase to[60] US$769 billion in 2025 (https://paymentscmi.com/latin-america-ecommerce-blueprint-market-data/#:~:text=E%2Dcommerce%20in%20Latin%20America,volume%20of%20US%24507%20billion). The region is expected to experience the biggest growth during this period. MercadoLibre is an example of a company that is taking advantage of this entrepreneurial opportunity by offering a number of e-commerce solutions.

MercadoLibre, together with its Portuguese version, MercadoLivre (for Brazil), operated in 19 Latin American economies by 2017 and had 182 million registered users.[61] Using MercadoLibre platform, consumers can buy,

sell and pay. Sellers also use the platform to collect and generate leads in order to initiate consumer interest or inquiry into products or services.[62] In 2016, the company's revenue exceeded US$650 million.[63]

As of 2017, Mexico was the only market where both MercadoLibre and Amazon competed. MercadoLibre bet Amazon to become the leader in Mexico's e-commerce market in 2016.[64] One key factor that differentiated MercadoLibre from its competitors was that it allowed consumers to buy online by paying cash at Oxxo convenience stores.[65] Oxxo is Mexico's largest convenience store chain, which has over 15,000 locations across Latin America.[66]

10.2.2 Fintech

The World Bank's "Global Findex Database" reports that 49% of adults in Latin America and the Caribbean lacked bank accounts in 2014.[67] According to Global Findex figures for 2021, 41.67% of adults in Latin America and the Caribbean (L.A.C.) still lacked access to an account, although the proportion of unbanked individuals has been decreasing since 2014.

According to the World Bank, 61% of Mexican adults did not have a bank account. There are 14 bank branches per 100,000 inhabitants in Mexico, compared to 33 in the United States.[68] The problem is further compounded by Mexico's under-developed transport infrastructure. The government's National Survey for Financial Inclusion carried out in 2015 found that the average travel time to a bank branch was 42 minutes in rural areas and 22 minutes in urban settings.[69]

Thus strong business opportunities exist for providing financial services to fulfill the banking and financial needs of the unbanked population (In Focus 10.2). Unsurprisingly the region's fintech sector is gaining traction as a V.C. magnet. As of November 2024, venture capital investment in Latin American fintech companies has surpassed 2023's total, with US$2.6 billion invested across 174 deals, compared to US$1.5 billion in 241 deals in 2023. This represents a 73% increase in funding volume.[70]

Acquiring new customers has become difficult for traditional banks due to their heavy dependence on human resources. The cost of serving a customer through technology is much smaller compared to a bank.[71] Peer-to-peer lending platforms have helped match savers with borrowers and penetrate areas where financing is expensive.[72] Finnovista estimated that these platforms could capture up to 30% of Mexico's banking market by 2027.[73]

Mexico is described as a regional hub for fintech startups, especially those focusing on financial inclusion. According to the fintech startup accelerator, Finnovista Mexico accounts for more than a third of fintech companies in Latin America that target the underbanked or unbanked populations.

Some regulations have been introduced to control fintech companies. In December 2017, Mexico's Senate approved a bill that would regulate the fintech sector, including crowdfunding and cryptocurrency firms.[74] The regulation requires crowdfunding companies to assess users' creditworthiness. Crowdfunding companies may also need to submit credit information from a bureau and communicate the methodology used to determine borrowers' risk to the National Banking and Securities Commission. All fintech firms are required to have adequate infrastructure to prevent money laundering and protect against cybersecurity risks.[75] Some fintech entrepreneurs have expressed concerns that the law significantly increase compliance costs and discourage investment in the industry.[76]

IN FOCUS 10.2 THRIVING FINTECH OPPORTUNITIES IN LATIN AMERICA: DISRUPTING TRADITIONAL BANKING MODELS

Fintech opportunities in Latin America are thriving, with V.C. investment growing from US$4.1 billion in 2020 to US$15.7 billion in 2021, according to LAVCA. The region's strong ties to financial services make it a prime hub for fintech startups.[77] Latin America and the Caribbean saw a 37% annual funding growth from 2015 to 2023, despite an 81% decline in V.C. funding since the 2021 peak, highlighting the region's potential for fintech development.[78]

Entrepreneurial Opportunity in the Fintech Sector

An entrepreneurial opportunity is the chance for individuals or teams to deliver new value to society, often by introducing innovative products or services through the creation of a startup.[79] The current state of financial services in Latin America and the Caribbean presents significant entrepreneurial opportunities.

Latin American banks have historically served only affluent individuals, leaving 30%–50% of the population underbanked. Despite having bank accounts or credit cards, many users face poor experiences due to outdated infrastructure. High interest rates have led to new players like Nubank and Creditas disrupting the market. Additionally, favorable demographics, with about 40% of the population under 25 in countries like Mexico and Brazil, and evolving consumer preferences for smartphones and digital ease, indicate strong fintech potential.[80] Fintech startups are thus uniquely positioned to deliver new value to customers by leveraging technology to address gaps in traditional financial services. They can offer innovative solutions such as improved accessibility, lower costs, enhanced

user experiences and tailored financial products, meeting the evolving needs of underserved and tech-savvy populations.

Nubank: Redefining Banking in Latin America with Digital Innovation

Latin American fintechs have excelled in identifying and creating "blue ocean" opportunities – unexplored market segments with minimal competition and high entry barriers. By tapping into these spaces, they have successfully cultivated a new type of consumer, reshaping the region's financial landscape.[81] Among the most high-profile fintech companies is Nubank, a Brazilian neobank headquartered in São Paulo, Brazil. In May 2024, Nubank announced that it surpassed 100 million customers across Brazil, Mexico and Colombia, becoming the first digital banking platform outside Asia to achieve this milestone.[82]

Companies like Nubank created a new consumer category by leveraging a strong digital focus. By eliminating physical branches, streamlining product offerings and minimizing overhead costs, they passed significant cost savings to consumers. This approach enabled them to deliver a superior customer experience and disrupt traditional banking models.[83]

Conclusion

The fintech sector in Latin America is poised for continued growth, driven by the region's underserved population and evolving consumer preferences. With significant venture capital investment and a growing demand for digital financial services, fintech startups are well-positioned to address gaps in traditional banking. As a result, the region is becoming a hub for innovation, offering entrepreneurial opportunities to reshape the financial landscape.

10.3 Regulatory Frameworks and Cultural Dynamics Shaping Entrepreneurship

10.3.1 Regulatory Framework

New regulatory approaches have been evolving in the region to promote entrepreneurship.

In 2017, in an attempt to better promote entrepreneurship, Argentina passed its Ley de Emprendedores, which was supported by the Association of Entrepreneurs in Argentina and Argentina Association of Private Equity, Venture and Seed Capital. The law provides tax incentives, a fast-track

process to register a company and support for accelerators. Under the new law, new business can be set up in 24 hours and all the processes can be completed online.[84] There is also the provision of public funds to co-invest with private investors in entrepreneurial ventures.[85]

Likewise, Startup Peru was launched by the Peruvian Ministry of Production in 2012. The objective was to stimulate startups and innovative products. In 2017, 837 projects applied for seed capital from Startup Peru. A total of 106 of them received the equivalent of US$5,000, US$46,000 and US$153,000 in funding.[86] A number of ambitious plans have been considered for enhancing innovation profiles. StartUp Peru plans to provide funding to more than 350 local startups by the end of 2018.[87]

Below we discuss the key elements of regulatory frameworks in two major economies in the region: Brazil and Venezuela.

10.3.1.1 Brazil

Bureaucracy, red tape and inefficiency in the public sector are among the most important issues facing Brazilian entrepreneurial firms. According to the World Bank, an average business in Brazil spent 1,958 hours on filing taxes in 2017.[88] This was three times higher than in Venezuela and 15 times more than in European Union countries.[89]

A problem is that Brazil is polarized by politics and weak judicial institutions. The country's bureaucracy is characterized by inefficiency and excessive red tape. In order to get things done quickly, there is a tendency among business and individuals to pay bribes to government officials.[90]

Some encouraging efforts have nevertheless been made in recent years at the national as well as local levels. The Brazilian government has dedicated an online portal to facilitate entrepreneurship among Black families and other socially and ethnically disadvantaged groups.[91]

Some local governments have digitized the activities associated with starting a business, which has streamlined the business registration processes. The São Paulo city government launched a program called Empreenda Fácil, or "Easy Business", in May 2017. The goal was to reduce the time taken to start a business to seven days. Potential entrepreneurs can visit an online portal, which integrates all the processes needed by agencies at the federal, state and municipal levels. Within about a month after the program was launched, Empreenda Fácil received about 18,000 applications. In the first phase, the program processes only applications from businesses that do not require specific licensing. Such businesses are reported to make up about 80% of enterprises in São Paulo. The second phase is expected to include businesses that require higher levels of scrutiny and approval such as hospitals. The third phase of the program will focus on speeding up the process for closing businesses. The long-term goal is to reduce the time

taken to start a business to two days or less.[92] This approach is also likely to reduce corruption.

10.3.1.2 Venezuela

Venezuela is among the world's most difficult places to start a business. The country ranked #190 in the environment to start a business. An entrepreneur is required to spend 351.6% of per capita income to start a business in the country compared to 37.5% in Latin America and Caribbean and 3.1% in O.E.C.D. high-income countries.

Venezuela's Fair Prices Law gives the Superintendencia Nacional para la Defensa de los Derechos Socioeconómicos the broad power to regulate the price of a product. The price can be controlled in any stage of the production chain based on the product's strategic importance and social benefit.[93] If a government bureaucrat without giving serious thought and analysis decides that the price of a product is unfair, the business owner may face prison time or expropriation.[94] Price controls have been used to maintain essential goods' prices at affordable levels.

Price controls have been used to achieve various political goals of the ruling elite. In recent years, price controls have reportedly expanded to a wide variety of products such as food, medicines and medical services, car batteries, deodorant, diapers and toilet paper. The stated goal of these programs was to control inflation and keep products affordable for the poor.[95]

In many cases, however, such a system forces firms to set prices below production costs. Consequently, products disappear from the market.[96] In order to deal with this shortage of basic goods, the government started importing goods and selling them at subsidized prices.[97]

10.3.2 Values, Culture and Skills

In Chapter 3, we discussed some of the key cultural and sociopolitical features of Latin American economies from the standpoint of entrepreneurship, especially in the context of equity-based crowdfunding (E.C.F.). This section covers other key elements of values, culture and skills that have an influence on the region's entrepreneurial landscape.

10.3.2.1 Cultural Orientation toward Entrepreneurs and Entrepreneurial Failure

One key challenge is that the region's culture has little respect for entrepreneurs and innovators. Some close observers of the regions have noted that whereas soccer stars are role models for millions of children, relatively few young people think that it is "cool" to be a scientist or a successful entrepreneur.

As discussed in Chapter 1, acceptance of failure and a celebration of risk-taking are key elements of startup culture. Failure in business is distinguished from personal failure, and bankruptcy is not seen as a disgrace.[98] Entrepreneurial activity in the region is negatively correlated with the stigma of failure. Observers have noted that there is also the lack of social tolerance of failure in the region.[99] Some have noted that people are uncomfortable to talk about failure.[100] Many entrepreneurs believe that to fail in a business is to let down the family.[101]

10.3.2.2 Gender and Entrepreneurship

Like most other parts of the world, women are underrepresented in the region's entrepreneurial landscape. For instance, only 15% of Latin America and the Caribbean region's high-growth entrepreneurs are women.[102] According to Startup Chile, women account for only one out of every ten team members in startups in the accelerator.[103] Women-led startups in Latin America and the Caribbean raised 13% of the capital in 2019, 21% in 2020 and 26% in 2021.[104] The V.C. space remains male-dominated, with women comprising only 2.5% of partners.[105]

Another observation about gender and entrepreneurship in the region is that women are more likely to be employed than men in the informal sector; 54% of women in Latin America and the Caribbean in nonagricultural jobs are in the regional informal employment.[106] The proportion is much higher in some economies. For instance, in Peru, 76% of women are reported to work in the informal sector.[107]

In recent years, however, there is some sign that a culture is emerging in which women increasingly participate in entrepreneurial ventures. A study by Global Entrepreneurship Monitor found that women led 35% of the country's 6 million micro and small businesses. They, however, represent 50% of the leadership in newly started businesses.[108] According to Ernst & Young G20 Entrepreneurship Barometer of 2013, half of all new businesses in Brazil were owned by women.

Multiple initiatives are supporting female entrepreneurship in L.A.C., with programs like the Women Entrepreneurs Finance Initiative and Women Entrepreneurship Banking backed by multilaterals, the private sector and governments. Despite a remaining financing gap for women-owned microenterprises, L.A.C. has made the most progress in closing it compared to other developing regions. These positive results demonstrate the powerful impact of collaborative efforts between international agencies, governments, civil society and the private sector.[109]

10.3.2.3 Entrepreneurship Skills and Talent

There is a severe shortage of entrepreneurship-related skills in Latin America. Only a small proportion of Latin American college students go into science

or engineering. According to the World Bank, in 2024, Chile had 518 researchers in R&D per million inhabitants, while South Korea had 9,082 researchers per million inhabitants based on the latest available data.[110]

According to staffing firm ManpowerGroup's 2015 Talent Shortage Survey, about 50% of formal Latin American firms were unable to find candidates with the skills they need, compared to 36% of firms in O.E.C.D. countries.[111] This was reported to be a particularly pressing issue in Peru and Brazil.[112] A total of 68% of employers in Peru and 61% of Brazil were struggling to fill jobs.

Some educational institutions are offering courses and programs that are directed at improving students' mindset and skills in entrepreneurship. For instance, the Universidad de Ingeniería y Tecnología (U.T.E.C.) in Peru created business accelerator, U.T.E.C. Ventures in 2014. As of 2024, U.T.E.C. Ventures had successfully accelerated more than 90 companies (https://utecventures.com/). It educates and informs students, startups and the public about startups and innovation by organizing events regularly.[113]

10.4 Challenges and Opportunities in Access to Finance, Markets, R&D and Technology

10.4.1 Market Access

In order to understand the market access situation in Latin American economies, it is important to look at these economies' antitrust laws or competition laws, which are designed to ensure that free and fair competition exists in an open-market environment.[114] Broadly speaking, antitrust laws in many Latin American countries and the United States have similar elements. However, such laws in the United States have a much longer history compared to Latin American countries. For instance, the Sherman Antitrust Act in the United States was passed in 1890. Since then the Act has been expanded and amended. On the contrary, antitrust laws in most Latin American countries are relatively new. Most major Latin American countries adopted antitrust laws in the 1990s.[115] Such laws are rapidly changing and evolving.[116] An upshot of the newness is that meaning of the law is unclear and there is less predictability in the enforcement.

10.4.2 Access to Finance

As is the case of most developing economies, general consumer and business finance companies have had limited success in serving the needs of economically active low-income families and microenterprises cost-effectively and sustainably in Latin American economies. One problem is that low-income families and small businesses in these economies often have poor or no credit histories.[117]

In 2024, nearly half of Latin Americans lacked bank accounts, with the unbanked rate ranging from under 33% in Brazil to almost 60% in Peru. Cost issues affect about 60% of the unbanked in Brazil, Peru and Colombia.[118] About a third of companies in the region identified lack of credit as a major constraint.[119]

Small enterprises in the region find it difficult to get access to financing from the bank. For instance, S.M.E.s represent over 90% all enterprises in the region. They generate over half of all jobs and a quarter of the region's G.D.P.[120] However, only 12% of total credit in the region goes to S.M.E.s.[121] In Mexico, micro, small and medium-sized firms account for more than 99.8% of enterprises in 2014, but they received only 11.1% of total bank credit for businesses.[122]

In some economies, banks and other financial institutions charge extremely high interest rates. For instance, consumers in Brazil are reported to pay an annual average interest rate of 190% for unsecured overdraft, credit card and consumer loans.[123]

In recent years, the entrepreneurial financing situation in the region has been improving. Various alternative funding sources are rapidly evolving.

10.4.2.1 Bank Loans

Unavailability of bank loans and high interest rates of available loans are major barriers to access in entrepreneurial financing in the region. In general, Latin American countries have high annual lending rates compared to advanced O.E.C.D. countries.

A main obstacle for potential borrowers is the lack of collateral. Banks in the region generally prefer using assets such as land and buildings as guarantees for loans. However, in many developing economies, movable assets such as machinery, equipment, livestock or crops account for over three-quarters of a firm's capital.

There have been some encouraging policy and institutional reforms in order to increase S.M.E.s' access to financing. In order to enable banks to lend to small entrepreneurs that have only movable assets as security, the International Finance Corporation (I.F.C) worked with governments and banks in Latin American economies to introduce the concept of collateral registries and to implement secured-transaction laws.[124] As of 2016, the I.F.C. had worked with governments in more than 30 countries to establish the legal and institutional frameworks which would make it possible to use movable assets to guarantee loans.[125]

The registry was launched in Colombia in March 2014. By November 2016, over 1 million registrations were recorded, which were valued at more than US$93 billion.[126] By 2016, in Colombia, over 100 financial institutions, including some of the country's largest banks, had participated in the registry as lenders.[127] The joint efforts of the Colombian government, the

Association of Chambers of Commerce and the I.F.C. led to the required legislative reforms.

A World Bank study published in 2022 highlighted limited progress in diversifying the range of movable assets that can be used as collateral to secure loans. Despite modern legislation, financial institutions predominantly rely on vehicles as guarantees, with limited adoption of more sophisticated instruments.[128]

Mexico has also implemented an electronic movable-collateral registry. It was reported that 97% of the registrations support loans to S.M.E.s. Likewise, in mid-2015, a new secured-transactions system came into effect in Costa Rica. By 2016, over 4,500 S.M.E.s in the country received loans that were secured by movable assets.[129]

10.4.3 Government-Sponsored Funding

In order to promote entrepreneurial spirit and practices, some governments in the region such as those of Argentina, Brazil and Chile are offering equity free funding for startups from all over the world with breakthrough ideas. In Argentina, a city government seed fund program IncuBAte offers startups up to US$30,000 in funding. National and international entrepreneurs with high-impact ideas can apply for the program. The selected startups also receive free office space for a year and mentoring.[130]

10.4.3.1 Crowdfunding

As noted in Chapter 3, the region's crowdfunding market is less developed compared to most other regions. For instance, per capita E.C.F. in the United States in 2015 was about 28,000 times that of the L.A.C. regions. However, as discussed in Chapter 3, a number of crowdfunding platforms in the region are attempting to harness the power of crowdfunding by making it easier for entrepreneurs to raise money through the Internet.

10.4.3.2 Venture Capital

In 2016, the Silicon Valley-based V.C. firm Andreessen Horowitz made its first Latin American investment in Rappi, a Colombian grocery delivery service.[131] As of December 2018, Rappi offered more than 15,000 products such as groceries, food, alcohol, pharmacy products, apparel and electronics from its partner companies for home delivery.[132] Rappi also offers a courier service, pays bills and delivers cash.[133] Rappi's cofounder and C.E.O., Simon Borrero, noted that Latin America provides strong market opportunities for on-demand delivery services due to a growing middle and upper class.[134]

Latin America led the world in venture capital investment growth in 2021, hitting a peak of US$15.7 billion. By the end of 2021, 47 companies

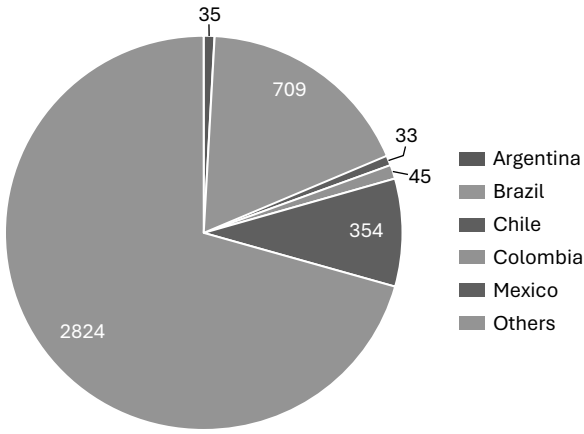

Figure 10.1 V.C. Investment in Latin American Economies in 2023 (US$, million)

from the region had attained unicorn valuations.[135] The most promising sectors for investment include fintech, A.I., agritech and healthtech. Despite the saturated early-stage fintech market, the region is well-positioned to lead in financial services and blockchain applications.[136] Figure 10.1 illustrates the distribution of venture capital investment across Latin American economies in 2023.

10.4.3.3 Private Accelerators

Private accelerators in the region also play a significant role in improving access to finance for promising startups. Telefonica launched a corporate accelerator Wayra Peru to support digital ventures with potential for international expansion. It provides up to US$50,000 in funding and access to an accelerator program in the capital city of Lima.

The startups selected by Wayra Peru also have access to a network of global partners, mentors and experts.[137] Through Wayra Peru, Peruvian startups received more than US$1.8 million in 2016 from foreign investors.[138]

10.4.4 R&D and Technology

10.4.4.1 Research and Development

Compared to industrialized countries, Latin American economies make lower investment in R&D activities (Figure 10.2). Investment in R&D of economies in the region increased from 0.63% of G.D.P. in 2009 to 0.74% in 2014 but decreased to 0.62% in 2020. The proportion in 2020 is

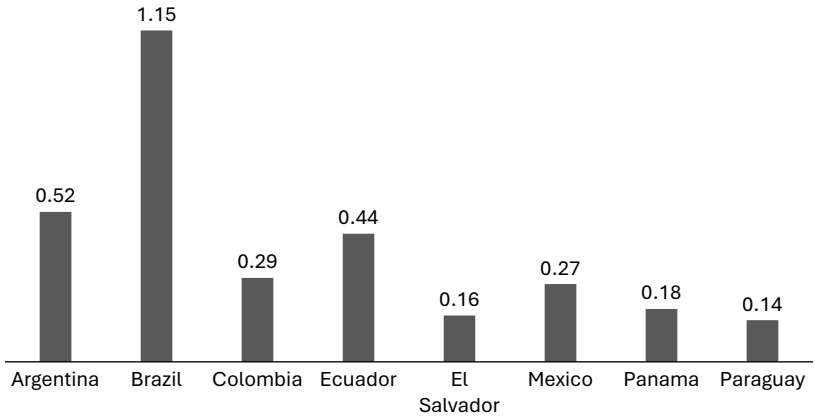

Figure 10.2 Gross Domestic Expenditure on R&D as a Percentage of G.D.P. in Selected Latin American Economies (latest data available as of 2024)

significantly lower than most other regions and groups of economies such as the O.E.C.D.'s 2.95%, North America's 3.33% and upper-middle-income countries' 1.83%. Most Latin American economies even trail behind South Asia, which spent 0.63% of G.D.P. in R&D in 2020.

The lack of investment in R&D and limited private-sector involvement pose additional challenges to innovation. For instance, in Colombia, the public sector accounts for 57% of all R&D investments.[139] In the O.E.C.D. countries, on the other hand, government-financed R&D was only 27% of total R&D expenditures in 2014.[140]

Consequently, Latin America performs poorly in measures of innovation, such as patent statistics. The number of patent applications in the region is growing at a slower rate than most other geographic regions. For instance during 2006–16, the annual growth in number of patent applications in Latin America and the Caribbean was 1.3% compared to Asia's 8.5%.

In 2007, Latin America filed 58,100 patent applications, dropping to 57,600 by 2017. The region invests less than 0.5% of G.D.P. in innovation and lacks strong R&D policies, contributing to slow patent processes. In Brazil, patent approval takes about eight years, compared to 22 months in Europe and 9 months in Russia. Of the 25,000 applications Brazil received in 2017, 80% were from foreign applicants. In Mexico, the process takes three years, with 52.8% of non-resident applications submitted by U.S. entities, highlighting foreign companies seeking intellectual property protection in the region.[141]

Some economies in the region, however, have ambitious plans to increase R&D investment. For instance, the Peruvian Ministry of Production has

announced a plan to increase investment in innovation by tenfold by 2027.[142]

10.4.4.2 I.C.T. Use

As of 2024, Latin American and Caribbean countries, with a regional Internet penetration of 74.63%, still face challenges in creating an inclusive online environment due to disparities between nations and internal divisions. However, growing mobile connectivity is improving access and boosting local markets, particularly in social media and e-commerce, where the region's potential rivals leading global economies.[143]

As of April 2023, around 72 million people in Latin America and the Caribbean lacked access to Internet services that meet minimum quality standards, according to a study by the Inter-American Institute for Cooperation on Agriculture. However, rural connectivity has improved by 12% over the past two years, reducing the number of people without quality Internet from 77 million.[144] Only 44% of people in rural areas of Latin America had access to high-speed Internet, compared to 79% of urban residents. This gap is particularly wide in countries like Colombia, Bolivia, Ecuador, Paraguay and Suriname.[145]

The lack of connectivity and digital illiteracy are contributing to poverty in rural areas. A previous analysis by the Inter-American Development Bank found that a 1% increase in fixed broadband penetration leads to a 0.08% boost in G.D.P., while a 1% increase in mobile broadband penetration results in a 0.15% gain in G.D.P.[146]

10.5 Concluding Comments

Compared to most O.E.C.D. countries, Latin America performs poorly in terms of key ingredients of entrepreneurship such as R&D, innovation and access to finance. In some economies such as Venezuela, market distortion has resulted from the governments' actions. Informality is more prevalent in Latin America compared to most other regions. Some deep-seated psychological and cultural barriers in the region cannot be easily overcome. For instance, most young people in the region often lack a mindset that considers successful entrepreneurs or scientists as role models. A related point is that entrepreneurial failure is likely to evoke shame in the family.

Nonetheless, entrepreneurship is thriving in most of the Latin American economies. In general, entrepreneurship in most major economies is getting a big boost in the region thanks to encouraging policy and institutional reforms. Some economies in the region have taken measures to streamline the process to start new business ventures. Some governments have provided funding for promising business ideas. The favorable regulatory and policy frameworks for entrepreneurs may increase incentives for business

formalization and may encourage informal businesses to move out of the informal market.

Innovative startups such as Rappi have launched business models to address unique, region-specific challenges. For instance, many fintech ventures have addressed gaps that exist in traditional banks' practices.

10.6 Discussion Questions

1. What are some of the recent regulatory and legislative changes in Latin American countries that are likely to change the entrepreneurial landscape?
2. What are some of the unique aspects of cultural issues of Latin American countries from the entrepreneurial perspective?
3. How does the common trap in entrepreneurial impact work? How has Chile avoided such a trap?
4. Why are some Silicon Valley-based V.C. companies finding Latin American countries attractive?
5. What is the current situation of R&D and innovation performance of Latin American countries? How do they compare with other major economies?
6. How do Latin American countries compare with the United States in terms of antitrust laws?

10.7 End of the Chapter Case: Start-Up Chile in the Chilecon Valley

Start-Up Chile was launched in 2010 in the capital city Santiago's Providencia neighborhood. The goal of this initiative was to create one of the biggest startup communities in the world.[147] It is an entirely government-funded initiative and is among about 15 accelerators in the country.[148]

The idea of a government-funded startup incubator is not necessarily a new one. What is unique and striking about Start-Up Chile is that entrepreneurs get equity-free funding. Its "Seed" program was launched in 2010. It is an acceleration program for startups that have a functional product and early validation (Seed).[149] When the program was launched, it offered US$40,000 grants to successful participants. In the subsequent years, the Chilean government lowered the amount to US$30,000. For the 2018 application round, the amount was again increased to the original level of US$40,000.[150] The startups selected by the program also receive office space, as well as opportunities for mentoring and coaching.[151] As of 2021, the program collaborated with over 1,500 startups from 80 countries, earning recognition as a world-leading initiative.[152]

Chile has become a role model in this type of accelerator program. As of 2017, the program was replicated in more than 50 countries around the world.[153]

Start-Up Chile also offers two additional programs:

(a) "S Factory" is a preacceleration program for female entrepreneurs, who receive 10 million Chilean pesos (about US$14,000 based on 2017 exchange rates). Female founders selected in the program from around the world can get a one-year working visa to move to Chile to develop their ideas and prototypes.[154] For the March 2017 application cycle, for the "fifth generation" of the program, it announced a plan to accept 20–30 startups in this category.
(b) "Scale" was launched in early 2015 as a follow-on support for start-ups, which receive 60 million pesos (US$100,000).[155] To be eligible, the business must be incorporated in Chile. Moreover, it must be run from the country.[156] Companies selected in this category are also required to have tested their solutions and demonstrated the soundness of their business models.[157]

10.7.1 Encouraging Response from Entrepreneurs Worldwide

Every year as many as 3,000 startups are reported to apply to enroll in Start-Up Chile's accelerator program. About 250 are selected for a six-month program. Around three-quarters of the selected startups are from foreign countries.[158]

Start-Up Chile's success in attracting promising startups can also be attributed to other unforeseen circumstances. When Start-Up Chile was started in 2010, Europe had not yet recovered from the 2008 global financial crisis.[159] U.S. businesses were facing difficulty in hiring highly skilled foreign workers.[160] Due to these events in other parts of the world, Chile's open-arms approach became attractive for companies and entrepreneurs worldwide.

10.7.2 Major Goals of the Program

In launching the Start-Up Chile program, the Chilean government has pursued two major goals. First, the Chilean government wants to revitalize the country's economy by attracting new tech startups and reduce the country's dependence on commodities such as copper and minerals.[161]

Second, the Chilean government wants the local communities to be more enterprising, growth-oriented and innovation-driven. Along this line, another major goal of Start-Up Chile is to utilize the global entrepreneurial talent to bring a change in the Chilean business culture.[162] In return for the free seed capital from the government, the selected startups are expected to take part in various events and activities to promote entrepreneurship awareness among the local population. The startups are required to earn

4,000 "social capital points". These points can be earned in a number of different ways such as hosting entrepreneurship-related workshops, mentoring and coaching local entrepreneurs, teaching classes and organizing hackathons.[163] The idea is to engage the local population in activities related to entrepreneurship, technology and innovation.

10.7.3 An Active and Innovative Accelerator

According to New York-based Gust and Fundacity, Start-Up Chile (with 250 startups) was the world's third most active accelerator after the U.K.-based Entrepreneurial Spark (660 startups) and the Silicon Valley U.S.-based Plug and Play Tech Center (403 startups).[164] In 2017, *Fast Company* Chose Start-Up Chile as the most Innovative Startup accelerator in Latin America.[165]

10.7.4 Favorable Regulatory and Political Climate

Chile has also created favorable regulatory and policy frameworks for entrepreneurs. In 2013, Chile passed the "Law of Businesses in One Day". A new business can be established in a day, which is one of the fastest in the world.[166] It is possible to complete all the paperwork and registration requirements online. The Chilean Association of Entrepreneurs played a pivotal role in passing the law.[167]

A main concern was Chile's punitive bankruptcy law. A positive development in this respect is a new insolvency law approved by the Chilean Congress in 2013. The law became effective in October 2014. The new law has provisions that allow reorganization of businesses that are in financial trouble. The old law mainly focused on the liquidation of debtors' assets. Under the new law, insolvency proceedings fall under the jurisdiction of specialized insolvency courts for insolvency proceedings. Before the law was enacted, randomly selected civil tribunals were responsible for insolvency cases.[168]

Foreign entrepreneurs selected for Start-Up Chile's accelerator program also receive a one year temporary visa.[169] In recent years, Chile has started offering easier and faster visa processing for individuals with high-technology skills and entrepreneurs. A visa is granted in 15 days for qualified foreigners.[170]

10.7.5 Social and Economic Impact

Start-Up Chile has had a favorable impact on the Chilean economy. For instance, by 2016, more than 1,300 startups had gone through the Start-Up Chile program,[171] which helped over 3,000 entrepreneurs.[172]

More than 30% of the startups that have been through the Start-Up Chile program were reported to raise additional capital.[173] By mid-2015, the startups had raised US$135 million, which was more than four times the investment of the Chilean government.[174] Most of that came from the United States.[175]

As of 2016, the Chilean government had invested US$40 million in startups enrolled in Start-Up Chile.[176] By then these startups were estimated to have a total value of US$1.4 billion.[177] As of the summer of 2016, companies enrolled in Start-Up Chile's accelerator program had created about 1,600 jobs in Chile.[178]

The entrepreneurial activities in Start-Up Chile have also led to significant social and cultural changes. As of 2017, entrepreneurs from 79 countries had participated in the Start-Up Chile program, which makes it among the most diverse startup programs in the world.[179] Observers have noted that a robust and vibrant entrepreneurial culture has been the main outcome of this initiative.[180] Not long ago Chile excessively relied on extractive industries. This means that local businesses engaged in low value-added activities.[181] The creation of Start-Up Chile has been a turning point that significantly increased the local population's engagement in high-value added entrepreneurial companies.

Indeed social impacts and cultural changes can be clearly seen among the local population. For instance, only 10% of the applicants to Startup Chile were Chileans when the program started in 2010. By 2014, the proportion had increased to 29%.[182]

10.7.6 Key Barriers Facing Entrepreneurial Firms Enrolled in the Program

There are a number of challenges that entrepreneurs need to consider to locate their businesses in Santiago. For one thing, with a population of only 18 million, Chile's domestic market is small.

The country's private V.C. is also small.[183] For instance, during 2011–15, V.C. investments in Chile were US$85 million with 52 funds.[184]

As many as 80% of Start-Up Chile participants leave Santiago after the six-month program.[185] More than a third of them were reported to move to the United States.

Another concern is Chile's low investment in R&D. In 2016, out of more than 62,000 patents registered in the region, Chile registered only 3,274.[186]

Chile is also facing competition from other economies in the region. As noted earlier, Argentina's IncuBAte is modeled after the Start-Up Chile program. Likewise, Start-Up Brasil was launched in 2013.[187] Startups selected to participate in the program receive investments up to about US$100,000 over the course of a year in the form of monthly grants.[188] The goals are to

attract foreign entrepreneurs to the local consumer market and bring positive changes in the local entrepreneurial culture. The program was backed by US$78 million from the government.[189]

There are also allegations of misuse of the funds by some of the startups selected to participate in the program. It was reported that some young entrepreneurs used the Chilean government grants for leisure instead of developing their business plans.[190]

10.7.7 Case Summary

Some critics have questioned the sensibility of offering as much as US$40,000 grants to startups for free. Others think that it would be wiser and more appropriate for the government to invest money in the startups in return for equity. These viewpoints, however, fail to recognize the importance of social and cultural changes that have occurred since the inception of the Start-Up Chile program. As noted above, one key contribution of the Start-Up Chile initiative is bringing a dramatic change in the country's entrepreneurial culture. These effects, however, are difficult to measure in monetary terms.

Notes

1 Statista Research Department. (2024, July 16). *Latin America - statistics & facts*. Statista. https://www.statista.com/topics/11251/stock-exchanges-in-latin-america/#editorsPicks
2 Economic Commission for Latin America and the Caribbean. (2024, May 30). Latin America and the Caribbean represent 7.3% of global GDP. ECLAC. https://www.cepal.org/en/news/latin-america-and-caribbean-represent-73-global-gdp#:~:text=For%20the%20Latin%20America%20and,significant%20heterogeneity%20among%20the%20countries
3 Prada Ángel, J. M. (2023, September 1). Latin America is set to become a global powerhouse for innovation. Here's why [Image: Caio Silva on Unsplash]. https://www.weforum.org/agenda/2023/09/latin-america-global-powerhouse-innovation
4 Berg, R. C., Rubio, J., & Laske, N. (2024, March 8). *Catalysts of change: How entrepreneurs are transforming Latin America*. https://www.csis.org/analysis/catalysts-change-how-entrepreneurs-are-transforming-latin-america
5 Crunchbase. (n.d.). *Latin America startups founded in 2022*. https://www.crunchbase.com/hub/latin-america-startups-founded-in-2022
6 Peña, I. (2021). *Tecnolatinas 2021: The LAC startup ecosystem comes of age*. Inter-American Development Bank. https://publications.iadb.org/en/tecnolatinas-2021-lac-startup-ecosystem-comes-age
7 Technology Review. (2017). 50 smartest companies 2017. www.technologyreview.com/lists/companies/2017/intro/#dji
8 Finimize Newsroom. (2024). MercadoLibre becomes Latin America's most valuable company with fintech success. *Finimize*. https://finimize.com/content/mercadolibre-becomes-latin-americas-most-valuable-company-with-fintech-success

9 Pena, I. (2015). Startups like to Tango", 21 April. www.huffingtonpost.com/ignacio-peaa/startups-like-to-tango_b_6710884.html
10 Crunchbase. Aivo. www.crunchbase.com/organization/aivo
11 Frost & Sullivan. (2016). Frost & Sullivan acknowledges the innovation behind Aivo's development of AgentBot, its Intuitive Virtual Agent Software. www.przoom.com/news/158632/Frost-and-Sullivan-Acknowledges-the-Innovation-behind-Aivos-Development-of-AgentBot-its-Intuitive-Virtual-Agent-Software/
12 Teixeira, M. (2023, June 20). *How Latin American startups are expanding into Spain to scale up*. Bloomberg Línea. https://www.bloomberglinea.com/english/how-latin-american-startups-are-expanding-into-spain-to-scale-up/
13 Bellido, A. (2023, November 21). Artificial Intelligence startups in Latin America attract record investments: AI startups in Latin America experienced a 50% growth in investments in 2022, with Brazil emerging as the regional leader in development and innovation. https://contxto.com/en/startups/the-startups-of-artificial-intelligence-in-latin-america-attract-record-investments/
14 Salamanca, D. (2024, June 23). *Colombia's AI budget to soar as companies ramp up investment*. ColombiaOne. https://colombiaone.com/2024/06/23/colombia-ai-companies-investment/
15 Salazar Castellanos, D. (2023, April 11). ChatGPT: Which Latin American Countries Are the Biggest Users of the AI Tool? *Bloomberg Línea*. https://www.bloomberglinea.com/english/chatgpt-which-latin-american-countries-are-the-biggest-users-of-the-ai-tool/
16 Ng, A. (2019, August 21). *AI in Latin America: Announcing our first international office in Colombia*. Medium. https://medium.com/@andrewng/ai-in-latin-america-announcing-our-first-international-office-in-colombia-ac4e203c1564
17 Statista Research Department. (2024, August 23). *Use of AI in fintech operations in Colombia 2024, by business segment*. Statista. https://www.statista.com/statistics/1488807/colombia-use-of-ai-fintech-operations/
18 Ng, A. (2019, August 21). *AI in Latin America: Announcing our first international office in Colombia*. Medium. https://medium.com/@andrewng/ai-in-latin-america-announcing-our-first-international-office-in-colombia-ac4e203c1564
19 Finance Colombia (2024, May 25). *Colombian AI startup Celes lands $3 million USD in seed investment round*. Finance Colombia. https://www.financecolombia.com/colombian-ai-startup-celes-lands-3-million-usd-in-seed-investment-round/#google_vignette
20 Tomé, M. (2024, September 17). Finkargo raises a $95M Series A extension round. *LatAm List*. https://latamlist.com/finkargo-raises-a-95m-series-a-extension-round/
21 Nivelics. (n.d.). *Generative AI in Colombia: Transforming the future with Nivelics*. Nivelics. https://www.nivelics.com/en/blog/generative-ai-in-colombia-nivelics
22 Cruz García, A. (2022, October 11). Voice AI platform Vozy raises $5M Pre-Series A to expand to the US and Spain. *LatamList*. https://latamlist.com/voice-ai-platform-vozy-raises-5m-pre-series-a/
23 Tracxn. (2024, December 1). *Demetria company profile*. Tracxn. https://tracxn.com/d/companies/demetria/__QEFUXS3Xq-1tS-VhaSjWckig-xp3ryX-Qnp_5S7I79i8

24 Tracxn. (2024, December 1). *Demetria company profile*. Tracxn. https://tracxn.com/d/companies/demetria/__QEFUXS3Xq-1tS-VhaSjWckig-xp3ryX-Qnp_5S7I79i8
25 Tomé, M. (2024, September 17). Finkargo raises a $95M Series A extension round. *LatAm List*. https://latamlist.com/finkargo-raises-a-95m-series-a-extension-round/
26 Quona Capital. (2022, May 10). *The digital platform aiming to transform Latin America's import industry*. https://quona-capital.medium.com/the-digital-platform-aiming-to-transform-latin-americas-import-industry-1579e2133ac4
27 EMIS. (2024). *Finkargo Colombia SAS (Colombia)*. Retrieved April 15, 2024, from https://www.emis.com/php/company-profile/CO/Finkargo_Colombia_Sas_en_13493801.html
28 Tomé, M. (2024, September 17). Finkargo raises a $95M Series A extension round. *LatAm List*. https://latamlist.com/finkargo-raises-a-95m-series-a-extension-round/
29 Tomé, M. (2024, September 17). Finkargo raises a $95M Series A extension round. *LatAm List*. https://latamlist.com/finkargo-raises-a-95m-series-a-extension-round/
30 bogotapost. (2024, April 17). *Colombia's government to contribute 50 billion pesos to new AI center in Bogotá*. The Bogotá Post. https://thebogotapost.com/colombias-government-to-contribute-50-billion-pesos-to-new-ai-center-in-bogota/52590/
31 Newsletter. (2024, May 31). *Colombia seeks to advance towards AI*. Data Privacy. https://olartemoure.com/en/colombia-advance-towards-ai/
32 BELatina Daily. (2024, August 14). *Colombia to train the next generation of AI experts in Latin America*. BELatina. https://belatina.com/colombia-to-train-the-next-generation-of-ai-experts-in-latin-america/
33 International Labour Organization. (2024, October 28). New ILO-backed AI tool to support Colombia's coffee producers. https://www.ilo.org/resource/news/ILO-AI-tool-supports-Colombia-coffee-producers
34 Castro, A. M. (2024, May 31). New survey results will help Colombia's businesses go digital. *Center for International Private Enterprise (CIPE)*. https://www.cipe.org/blog/2024/05/31/new-survey-results-will-help-colombias-businesses-go-digital/
35 Small Businesses Adopting AI Expect to Thrive Against Competitors. *GoDaddy*, Mar. 26, 2024 [Online]. https://aboutus.godaddy.net/newsroom/news-releases/press-release-details/2024/Small-Businesses-Adopting-AI-Expect-to-Thrive-Against-Competitors/default.aspx
36 Salamanca, D. (2024, June 23). *Colombia's AI budget to soar as companies ramp up investment*. ColombiaOne. https://colombiaone.com/2024/06/23/colombia-ai-companies-investment/
37 Bnamericas. (2024, April 18). Startup struggles: Colombia and Chile facing similar hurdles for innovation. https://www.bnamericas.com/en/analysis/startup-struggles-colombia-and-chile-facing-similar-hurdles-for-innovation
38 The City Paper. (2024, September 17). Bogotá leads Colombia's startup funding with 97% of capital raised by mid-2024. *The City Paper*. https://thecitypaperbogota.com/bogota/bogota-leads-colombias-startup-funding-with-97-of-capital-raised-by-mid-2024/
39 finnovista.com. (2017). Interview Julie Ruvolo. 2017 Trend Watch: Latin American Venture Capital. www.finnovista.com/interview-julie-ruvolo-2017-trend-watch-latin-american-venture-capital/?lang=en

40 Egusa, C. (2018). More than EL Dorado: 3 less obvious benefits of launching in Latin America", https://thenextweb.com/contributors/2018/01/16/el-dorado-3-less-obvious-benefits-launching-latin-america/
41 Cashen, E. (2024, February 9). *Top 5 Latin American tech hubs*. World Finance. https://www.worldfinance.com/markets/top-5-latin-american-tech-hubs
42 Biz Latin Hub. (2023, May 4). Labor reform in Chile: An analysis of the 40-hour work week legislation. *Biz Latin Hub*. https://www.bizlatinhub.com/labor-reform-in-chile-an-analysis-of-the-40-hour-work-week-legislation/?utm_source=mondaq&utm_medium=syndication&utm_content=articleoriginal&utm_campaign=article
43 Drexler, M., & Amoros, J. E. (2015). Guest post: How Chile and Colombia eluded the entrepreneur trap. www.ft.com/content/9a3b67c1-4215-3fd8-b85a-12624ed2569c
44 O'Neill, A. (2024, November 28). Gross domestic product (GDP) per capita in Venezuela 2025. *Statista*. https://www.statista.com/statistics/371876/gross-domestic-product-gdp-per-capita-in-venezuela/
45 Trading Economics. (n.d.). Venezuela unemployment rate. *Trading Economics*. Retrieved December 11, 2024, from https://tradingeconomics.com/venezuela/unemployment-rate
46 Ferrer-Breda, E. (2024, February 9). *Fedecamaras: 81% of Venezuelan businesses are negatively affected by sanctions*. Forbes. https://www.forbes.com/sites/eliasferrerbreda/2024/02/09/fedecamaras-81-of-venezuelan-businesses-are-negatively-affected-by-sanctions/
47 Latin America News. (2022, June 21). 80% of Latin American startup investment is concentrated in Brazil and Mexico. *The Rio Times*. https://www.riotimesonline.com/brazil-news/brazil/eighty-percent-of-startup-investment-is-concentrated-in-brazil-and-mexico/
48 OECD. (2016). *Start-up Latin America 2016: Building an innovative future, development centre studies*. Development Centre Studios.
49 Perez, Y. B. (2021, June 30). The rise of 'Chilecon Valley' and the double-edged sword of government intervention. *fDi Intelligence*. https://www.fdiintelligence.com/content/Feature/the-rise-of-chilecon-valley-and-the-double-edged-sword-of-government-intervention-79908
50 International Labour Conference. (2015). *Small and medium-sized enterprises and decent and productive employment creation*. International Labor conference, 104th Session.
51 IFC. (2010). IFC: Scaling-up SME access to financial services in the developing world. www.ifc.org/wps/wcm/connect/bd1b060049585ef29e5abf19583b6d16/ScalingUp.pdf?MOD=AJPERES
52 The Economist. (2016). Casual Mondays to Fridays: The high cost of joining the formal sector. www.economist.com/news/americas/21709073-high-cost-joining-formal-sector-casual-mondays-fridays
53 International Monetary Fund. European Dept. (2023, May 24). *Addressing Guatemala's informality challenge*. https://www.elibrary.imf.org/view/journals/002/2023/173/article-A004-en.xml
54 Peter, V. (2015). Top 10 things to know about the Mexican economy. www.weforum.org/agenda/2015/05/top-10-things-to-know-about-the-mexican-economy/
55 Hodgson, A. (2015). Top 3 challenges in reaching the Brazilian consumer. https://blog.euromonitor.com/2015/11/top-3-challenges-in-reaching-the-brazilian-consumer.html

56 Alsema, A. (2017). Colombia raises minimum wage with 7% to $1.18/hour. https://colombiareports.com/colombia-raises-minimum-wage-7-1-18-hour/
57 de la Maisonneuve, C. (2017). *Towards more inclusive growth in Colombia. OECD Economics Department Working Papers*, No. 1423, OECD Publishing. http://dx.doi.org/10.1787/334902e0-en
58 Peter, V. (2015). Top 10 things to know about the Mexican economy. www.weforum.org/agenda/2015/05/top-10-things-to-know-about-the-mexican-economy/
59 Multilateral Investment Fund. (2015). *Creating a Crowdfunding ecosystem in Chile*. Multilateral Investment Fund.
60 Contify Retail News. (2018). Connecting the World's inventories: eBay and PideloRapido partner to provide increased access to Latin American shoppers. www.marketwatch.com/story/connecting-the-worlds-inventories-ebay-and-pidelorapido-partner-to-provide-increased-access-to-latin-american-shoppers-2018-02-09.
61 Technology Review. (2017). 50 smartest companies 2017. www.technologyreview.com/lists/companies/2017/intro/#dji
62 . Forbes, (2017). "Mercadolibre", at https://www.forbes.com/companies/mercadolibre/.
63 Carlen, J. (2017). Lessons from three little-known entrepreneurs shaping our world | Expert column. https://pilotonline.com/inside-business/news/columns/article_789539a6-0031-5a0f-bf13-8ead23e004c0.html.
64 Technology Review. (2017). 50 smartest companies 2017. www.technologyreview.com/lists/companies/2017/intro/#dji
65 Israel, S. (2018). VIVA e-MEXICO: Amazon, Alibaba and Walmart are investing heavily south of the border. http://dailycaller.com/2018/01/01/viva-e-mexico-amazon-alibaba-and-walmart-are-investing-heavily-south-of-the-border/
66 Asmann, P. (2017). Insecurity leads Mexico convenience store chain to close stores. www.insightcrime.org/news/brief/rising-insecurity-regional-closures-mexico-largest-convenience-store-chain/
67 The World Bank. (2014). World Bank "Global Findex Database." http://datatopics.worldbank.org/financialinclusion/
68 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec
69 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec
70 Szkutak, R. (2024, November 24). *Latin America fintech will be a market to watch in 2025*. TechCrunch. https://techcrunch.com/2024/11/24/latin-america-fintech-will-be-a-market-to-watch-in-2025
71 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec
72 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec
73 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec
74 Sheky, E. (2017). Mexican Senate passes fintech law. www.reuters.com/article/us-mexico-finance/mexican-senate-passes-fintech-law-idUSKBN1E00HX
75 Press Release. (2018). Pablo Soria de Lachica comments on recent moves to regulate Mexico's Fintech sector. www.digitaljournal.com/pr/3635963
76 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec

77 Tsao, A. (2024, December 10). LATAM: Emerging as a global leader in fintech. Silicon Valley Bank. https://www.svb.com/industry-insights/fintech/latam-emerging-as-a-global-leader-in-fintech/
78 Hingel, G., Schneider, C., & Chan, C. (2024, September 4). Unlocking global fintech potential: Bridging the venture capital funding divide. *World Economic Forum*. https://www.weforum.org/stories/2024/09/unlocking-global-fintech-potential-bridging-the-venture-capital-funding-divide/
79 Lee, J.-H., & Venkataraman, S. (2006). Aspirations, market offerings, and the pursuit of entrepreneurial opportunities. Journal of Business Venturing, 21(1), 107–123. https://doi.org/10.1016/j.jbusvent.2005.01.002
80 Tsao, A. (2024, December 10). LATAM: Emerging as a global leader in fintech. Silicon Valley Bank. https://www.svb.com/industry-insights/fintech/latam-emerging-as-a-global-leader-in-fintech/
81 Limonta-Volkova, I. (2023, June 4). What Silicon Valley can learn from Latin American fintech startups. *Forbes*. https://www.forbes.com/sites/ilonalimontavolkova/2023/06/04/what-silicon-valley-can-learn-from-latin-american-fintech-startups/
82 Nubank. (2024, May 8). Nubank surpasses 100 million customers. *Nubank Newsroom*. https://international.nubank.com.br/100m/nubank-surpasses-100-million-customers/
83 Limonta-Volkova, I. (2023, June 4). What Silicon Valley can learn from Latin American fintech startups. *Forbes*. https://www.forbes.com/sites/ilonalimontavolkova/2023/06/04/what-silicon-valley-can-learn-from-latin-american-fintech-startups/
84 Cruz, M. (2017). Argentina's government is wooing entrepreneurs with a new law", https://techcrunch.com/2017/06/21/argentinas-government-is-wooing-entrepreneurs-with-a-new-law/
85 Egusa, C. (2017). Argentina: A look into Latin America's most global tech hub. https://thenextweb.com/contributors/2017/07/04/argentina-a-look-into-latin-americas-most-global-tech-hub/
86 Stunt, V. (2017). Peru is on a bid to catch up with its American neighbors. https://techcrunch.com/2017/08/10/peru-is-on-a-bid-to-catch-up-with-its-innovative-latin-american-neighbors/
87 Egusa, C. (2018). Tech Ceviche: Why Peru has all the ingredients for a healthy startup ecosystem. https://thenextweb.com/contributors/2018/02/01/tech-ceviche-peru-ingredients-healthy-startup-ecosystem/
88 Time to prepare and pay taxes. (2017). https://data.worldbank.org/indicator/IC.TAX.DURS
89 Flueckiger, L. (2015). Brazil cost' bureaucracy continues to hinder business. *The Rio Times | Brazil News*. http://riotimesonline.com/brazil-news/rio-business/brazilian-companies-need-15-times-more-to-pay-taxes-with-bureaucracy/
90 Guillian, M. (2016). This is what could really fix brazil's corruption crisis. http://fortune.com/2016/04/07/dilma-rousseff-brazil-corruption/
91 Coetzee, J. (2014). The Brazilian entrepreneurial landscape according to Ernst & Young – Ventureburn. http://ventureburn.com/2014/01/the-brazilian-entrepreneurial-landscape-according-to-ernst-young/
92 Kaiser, A. J. (2017). How a new program is cutting the brazil cost for entrepreneurs. www.americasquarterly.org/content/how-new-program-cutting-brazil-cost-sao-paulos-entrepreneurs
93 Beneke, F. (2015). How does competition policy in Venezuela look like? https://developingworldantitrust.com/2015/12/28/how-does-competition-policy-in-venezuela-look-like/

94 Chacon, A. (2015). Venezuelan entrepreneurs are the country's true heroes. https://panampost.com/valerie-marsman/2015/11/04/venezuelan-entrepreneurs-are-the-countrys-true-heroes/
95 Toro, M. N. (2016). Venezuela is falling apart. www.theatlantic.com/international/archive/2016/05/venezuela-is-falling-apart/481755/
96 Toro, M. N. (2016). Venezuela is falling apart. www.theatlantic.com/international/archive/2016/05/venezuela-is-falling-apart/481755/
97 Benzaquen, M. (2017). How food in Venezuela went from subsidized to scarce. www.nytimes.com/interactive/2017/07/16/world/americas/venezuela-shortages.html
98 Koskinen, H. (2020). Domesticating startup culture in Finland. *European Journal of Cultural and Political Sociology*, *8*(2), 175–196. https://doi.org/10.1080/23254823.2020.1788963
99 Oppenheimer, A. (2014). Latin America's economic challenge: Innovate or die. www.miamiherald.com/news/nation-world/world/americas/article3925884.html
100 Heim, A. (2011). Startup failure in Brazil: A taboo to break. https://thenextweb.com/la/2011/09/18/startup-failure-in-brazil-a-taboo-to-break/
101 Montealegre, O. (2012). Santiago: Chile's silicon valley. www.diplomaticourier.com/santiago-chile-s-silicon-valley/
102 Citizen Today. (2015). Women entrepreneurs leading the way in Latin America. www.ey.com/gl/en/industries/government---public-sector/ey-dynamics-public-private-partnerships
103 Panniagua, M. R. (2012). In Latin America, women are breaking barriers to entrepreneurship. https://techcrunch.com/2012/12/22/latin-american-women-work-to-break-barrier-to-entry-in-tech/
104 Berg, R. C., Rubio, J., & Laske, N. (2024, March 8). *Catalysts of change: How entrepreneurs are transforming Latin America*. https://www.csis.org/analysis/catalysts-change-how-entrepreneurs-are-transforming-latin-america
105 Berg, R. C., Rubio, J., & Laske, N. (2024, March 8). *Catalysts of change: How entrepreneurs are transforming Latin America*. https://www.csis.org/analysis/catalysts-change-how-entrepreneurs-are-transforming-latin-america
106 UN Women. Women in informal economy. www.unwomen.org/en/news/in-focus/csw/women-in-informal-economy#notes
107 IUCN. (2014). Peru commits to mainstream gender equality into climate policy. www.iucn.org/content/peru-commits-mainstream-gender-equality-climate-policy
108 women2.com. (2014). What's next for entrepreneurship in Brazil? www.women2.com/2014/10/24/whats-next-entrepreneurship-brazil/
109 Berg, R. C., Rubio, J., & Laske, N. (2024, March 8). *Catalysts of change: How entrepreneurs are transforming Latin America*. https://www.csis.org/analysis/catalysts-change-how-entrepreneurs-are-transforming-latin-america
110 World Bank. (2024). *Researchers in R&D (per million people)*. World Development Indicators. https://databank.worldbank.org/source/world-development-indicators/Series/SP.POP.SCIE.RD.P6
111 Prising, J. (2015). 2015 talent shortage survey. http://manpowergroup.com/talent-shortage-2015/talent+shortage+results
112 Melguizo, A., & Pages-Serra, C. (2017). In Latin America, companies still can't find the skilled workers they need. www.weforum.org/agenda/2017/03/in-latin-america-companies-still-can-t-find-the-skilled-workers-they-need/

113 Egusa, C. (2018). Tech Ceviche: Why Peru has all the ingredients for a healthy startup ecosystem. https://thenextweb.com/contributors/2018/02/01/tech-ceviche-peru-ingredients-healthy-startup-ecosystem/
114 Bynum, J. (2018). What is an antitust law? www.investopedia.com/ask/answers/09/antitrust-law.asp
115 fcpamericas.com. (2015). Antitrust enforcement trends in Latin America", http://fcpamericas.com/english/brazil/antitrust-enforcement-trends-latin-america/#
116 Ames, A. N. (2014). Antitrust Laws are rapidly changing in Latin America. www.natlawreview.com/article/antitrust-laws-are-rapidly-changing-latin-america
117 Espejo, S. (2018). Leveraging big data, Mercado Libre offers loans in Brazil and Mexico. www.reuters.com/article/us-mercadolibre-mexico/leveraging-big-data-mercado-libre-offers-loans-in-brazil-and-mexico-idUSKBN19E233
118 Contxto. (2024, February 29). *Latin America's venture capital: $4 billion, 864 deals and shifts*. Contxto. https://contxto.com/en/venture-capital/latin-americas-venture-capital-4-billion-864-deals-and-shifts/
119 Arias, I. (2014). Supporting entrepreneurs: Breaking down barriers for access to finance. https://blogs.worldbank.org/voices/supporting-entrepreneurs-breaking-down-barriers-access-finance
120 Arias, I. (2014). Supporting entrepreneurs: Breaking down barriers for access to finance. https://blogs.worldbank.org/voices/supporting-entrepreneurs-breaking-down-barriers-access-finance
121 IFC. (2016). Collateral registries: A smart way to expand access to finance. October. www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/collateral-registries-smart-way-to-expand-a2f
122 Woodman, S. (2017). Fintechs could take 30% of Mexican banking market. www.ft.com/content/5e092fb8-3bb9-11e7-ac89-b01cc67cfeec
123 Rodrigues, R., (2017). "Brazil's fintech boom offers new vertical opportunities for investors", May13, at https://techcrunch.com/2017/05/13/brazils-fintech-boom-offers-new-vertical-opportunities-for-investors/.
124 IFC. (2016). Collateral registries: A smart way to expand access to finance. October. www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/collateral-registries-smart-way-to-expand-a2f
125 IFC. (2016). Collateral registries: A smart way to expand access to finance. October. www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/collateral-registries-smart-way-to-expand-a2f
126 Arias, I. (2014). Supporting entrepreneurs: Breaking down barriers for access to finance. https://blogs.worldbank.org/voices/supporting-entrepreneurs-breaking-down-barriers-access-finance
127 IFC. (2016). Collateral registries: A smart way to expand access to finance. October. www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/collateral-registries-smart-way-to-expand-a2f
128 Finance, Competitiveness and Innovation Global Practice, World Bank. (2022, January). *Colombia Financial Sector Assessment Program: Technical note - NPL resolution and insolvency and creditors' rights*. World Bank.
129 Finance, Competitiveness and Innovation Global Practice, World Bank 2022.

130 Garrison, C. (2017). Soros, Cohen among big name investors betting on Argentine startups. www.reuters.com/article/us-argentina-economy-startups/soros-cohen-among-big-name-investors-betting-on-argentine-startups-idUSKBN1DG32R.
131 Ruvolo. (2017) Trend Watch: Latin American Venture Capital. www.finnovista.com/interview-julie-ruvolo-2017-trend-watch-latin-american-venture-capital/?lang=en
132 larepublica.co. (2018). Conozca varias aplicaciones para hacer mercado sin salir de casa. www.larepublica.co/internet-economy/aplicaciones-para-hacer-mercado-sin-salir-de-casa-2595645
133 Izquierdo, D. (2017). Can Colombia's one-stop app become profitable?. https://rctom.hbs.org/submission/can-colombias-one-stop-app-become-profitable/
134 Whymedellin. (2017). Rappi: A Colombian startup who wants to deliver everything. http://whymedellin.com/2017/05/12/rappi-a-colombian-startup-who-wants-to-deliver-everything/
135 Berg, R. C., Rubio, J., & Laske, N. (2024, March 8). *Catalysts of change: How entrepreneurs are transforming Latin America*. [Report]. Available at https://www.csis.org/analysis/catalysts-change-how-entrepreneurs-are-transforming-latin-america
136 Contxto. (2024, February 29). Latin America's venture capital: $4 billion, 864 deals and shifts. Contxto. https://contxto.com/en/venture-capital/latin-americas-venture-capital-4-billion-864-deals-and-shifts/
137 Egusa, C. (2018). Tech Ceviche: Why Peru has all the ingredients for a healthy startup ecosystem. https://thenextweb.com/contributors/2018/02/01/tech-ceviche-peru-ingredients-healthy-startup-ecosystem/
138 andina.com. (2016). Wayra Perú impulsó US$ 1.8 millones de inversión para startups en 2016. www.andina.com.pe/agencia/noticia-wayra-peru-impulso-18-millones-inversion-para-startups-2016-652614.aspx
139 Daza, E. (2016). Driving the Colombian economy with entrepreneurs. https://thecitypaperbogota.com/business/driving-the-colombian-economy-with-entrepreneurs/13794
140 Intellectual Property Watch. (2017). Brief: Government-Financed R&D Declining; Private Sector, Tax Incentives Rise, OECD Finds. www.ip-watch.org/2017/02/07/government-financed-r-private-sector-tax-incentives-rise-oecd-finds/
141 BR Latin America. (2024, October 21). *Latin America falls behind in intellectual property protection*. BR Latin America. https://brlatina.com/blog/2024/latin-america-falls-behind-in-intellectual-property-protection/
142 Stunt, V. (2017). Peru is on a bid to catch up with its American neighbors. https://techcrunch.com/2017/08/10/peru-is-on-a-bid-to-catch-up-with-its-innovative-latin-american-neighbors/
143 Bianchi, T. (2024, November 22). *Internet usage in Latin America - statistics & facts*. Statista. https://www.statista.com/topics/2432/internet-usage-in-latin-america/#topicOverview
144 Ammachchi, N. (2023, April 18). 72 million lack access to quality internet in rural LATAM. *Nearshore Americas*. https://nearshoreamericas.com/72-million-lack-access-to-quality-in-rural-latam/
145 Ammachchi, N. (2023, April 18). 72 million lack access to quality internet in rural LATAM. *Nearshore Americas*. https://nearshoreamericas.com/72-million-lack-access-to-quality-in-rural-latam/

146 Ammachchi, N. (2023, April 18). 72 million lack access to quality internet in rural LATAM. *Nearshore Americas*. https://nearshoreamericas.com/72-million-lack-access-to-quality-in-rural-latam/
147 Espinosa, J. E. A. (2015). Why Chile and Colombia lead the world for entrepreneurship. www.weforum.org/agenda/2015/01/why-chile-and-colombia-lead-the-world-for-entrepreneurship/
148 Griffin, O. (2017). The secret new startup hub. www.raconteur.net/current-affairs/the-secret-new-startup-hub
149 Seed. Start-Up CHILE EN ES. www.startupchile.org/programs/seed/
150 Ventureburn. (2018). Start-up Chile opens applications to accelerator programme, increases funding. http://ventureburn.com/2018/01/start-up-chile-opens-applications/
151 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/
152 Cashen, E. (2024, February 9). *Top 5 Latin American tech hubs*. World Finance. https://www.worldfinance.com/markets/top-5-latin-american-tech-hubs
153 Larsson, N. (2016). Welcome to Chilecon Valley: a startup hub with its own special charm. www.theguardian.com/small-business-network/2016/dec/22/chile-accelerator-startup-grants
154 www.startupchile.org/the-s-factory-announces-a-new-application-process/
155 www.startupchile.org/the-s-factory-announces-a-new-application-process/
156 Start-up Chile. www.fastcompany.com/company/startup-chile
157 Start-up Chile (Scale Factory). www.globalinnovationexchange.org/funding/startup-chile-scale-factory
158 Griffin, O. (2017). The secret new startup hub. 6 February. www.raconteur.net/current-affairs/the-secret-new-startup-hub
159 Egusa, C. (2016). A Look into Chile's innovative startup government. https://techcrunch.com/2016/10/16/a-look-into-chiles-innovative-startup-government/
160 Scott, I. E. (2013). Want to create American jobs? Remove American Barriers to Immigration. www.forbes.com/sites/realspin/2013/09/06/want-to-create-american-jobs-remove-american-barriers-to-immigration/#2c58a6816c84.
161 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/
162 Espinosa, J. E. A. (2015). Why Chile and Colombia lead the world for entrepreneurship. www.weforum.org/agenda/2015/01/why-chile-and-colombia-lead-the-world-for-entrepreneurship/
163 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/
164 Noto, A. (2016). 8 facts to know about startup accelerators across the globe. www.bizjournals.com/newyork/news/2016/06/14/8-facts-to-know-about-startup-accelerators-globe.html.
165 Hinchliffe, T. (2017). Visa Tech: Chile is streamlining 15 day visa process for foreign startups, tech workers. https://sociable.co/business/chile-visa-tech/
166 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/

167 Cruz, M. (2017). Argentina's government is wooing entrepreneurs with a new law", https://techcrunch.com/2017/06/21/argentinas-government-is-wooing-entrepreneurs-with-a-new-law/
168 Mark, D. (2014). New Chilean insolvency law promotes reorganizations. www.jonesday.com/new-chilean-insolvency-law-promotes-reorganizations-12-01-2014/
169 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/
170 Hinchliffe, T. (2017). Visa Tech: Chile is streamlining 15 day visa process for foreign startups, tech workers. https://sociable.co/business/chile-visa-tech/
171 Margolis, M. (2017). Latin America's Star Pupil Needs Some New Ideas Chile can't rely on copper to pull it out of its middle-income funk. www.bloomberg.com/view/articles/2017-11-24/latin-america-s-star-pupil-needs-some-new-ideas
172 Ravanona, A. (2016). How start-up Chile put their ecosystem on the global map and became a benchmark for other countries. www.huffingtonpost.com/anne-ravanona/how-start-up-chile-put-th_b_9140198.html
173 Cruz, M. (2017). Argentina's government is wooing entrepreneurs with a new law. https://techcrunch.com/2017/06/21/argentinas-government-is-wooing-entrepreneurs-with-a-new-law/
174 Ravanona, A. (2016). How start-up Chile put their ecosystem on the global map and became a benchmark for other countries. www.huffingtonpost.com/anne-ravanona/how-start-up-chile-put-th_b_9140198.html
175 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/
176 Griffin, O. (2017). The secret new startup hub. www.raconteur.net/current-affairs/the-secret-new-startup-hub
177 Larsson, N. (2016). Welcome to Chilecon Valley: a startup hub with its own special charm. www.theguardian.com/small-business-network/2016/dec/22/chile-accelerator-startup-grants
178 Egusa, C. (2016). A Look into Chile's innovative startup government. https://techcrunch.com/2016/10/16/a-look-into-chiles-innovative-startup-government/
179 Larsson, N. (2016). Welcome to Chilecon Valley: a startup hub with its own special charm. www.theguardian.com/small-business-network/2016/dec/22/chile-accelerator-startup-grants.
180 Egusa, C. (2016). A Look into Chile's innovative startup government. https://techcrunch.com/2016/10/16/a-look-into-chiles-innovative-startup-government/
181 Espinosa, J. E. A. (2015). Why Chile and Colombia lead the world for entrepreneurship. www.weforum.org/agenda/2015/01/why-chile-and-colombia-lead-the-world-for-entrepreneurship/
182 Insight, E. (2014). Start-up Chile: Heading toward failure or success? www.ecosysteminsights.org/start-up-chile-heading-toward-failure-or-success/
183 The Economist. (2012 The Chilecon Valley challenge in the war for talent, America can learn a lot from Chile. www.economist.com/node/21564564
184 LAVCA. (2016). Latin America venture capital: Five-year trends. https://lavca.org/industry-data/latin-america-venture-capital-five-year-trends/

185 West, D. M., & Karsten, J. (2015). Start-up Chile: A "start-up for start-ups" in Chilecon Valley. www.brookings.edu/blog/techtank/2015/08/19/start-up-chile-a-start-up-for-start-ups-in-chilecon-valley/
186 WIPO. (2016). *WIPO IP Facts and Figures 2016*. World Intellectual Property Organization. www.wipo.int/edocs/pubdocs/en/wipo_pub_943_2016.pdf
187 Egusa, C. (2013). The silicon valleys of Latin America: A tale of 3 nations. https://venturebeat.com/2013/09/29/the-silicon-valleys-of-latin-america-a-tale-of-3-nations/
188 Cutler, J. (2013). The Brazilian government is doing a startup program, too, and they're putting a call out for entries. https://techcrunch.com/2013/04/15/startup-brasil-brazil/
189 Egusa, C. (2017). Argentina: A look into Latin America's most global tech hub. https://thenextweb.com/contributors/2017/07/04/argentina-a-look-into-latin-americas-most-global-tech-hub/
190 Egusa, C. (2013). The silicon valleys of Latin America: A tale of 3 nations. https://venturebeat.com/2013/09/29/the-silicon-valleys-of-latin-america-a-tale-of-3-nations/

Appendix

Preparing an International Business Plan

A business plan is a written document prepared by an entrepreneurial firm, which is based on a current and future state analysis of the firm (e.g., management team, product or services) and the environment facing it. It defines the short-term and long-term goals and how they will be accomplished.[1] The most common readers of a business plan include potential funders, who make their funding decision based on the company's business plan.

An international business plan (I.B.P.) describes internal and external elements associated with internationalizing a business. It is a vital tool for setting goals, evaluating performance and communicating with stakeholders. It identifies cash needs, outlines risk mitigation strategies and provides benchmarks to track progress and returns.[2] An I.B.P. thus demonstrates the feasibility of internationalizing and helps organize associated activities. As is the case of any business plan, a good I.B.P. is based on sound international market research and accurate financial projections.

Elements of an I.B.P.

Executive Summary

The most important component of an I.B.P. is probably the executive summary. The executive summary must be clear, concise, convincing, appealing and effective so that it is able to capture the reader's interest. At a time of intense funding competition, potential investors often dismiss an I.B.P. after reading the executive summary. An effective executive summary tells the reader, inter alia, what the business is about and helps understand the main points the entrepreneur is making. Whereas there may be some disagreement as to the length of an executive summary, a single page is probably the best length.

The first part of the executive summary normally includes name and location of the business, the product or service being sold and purpose of the I.B.P. Other important elements to be included in the I.B.P. are as follows:

(a) Business description: Nature and unique features of products or services, how they will fit in the foreign market and whether they are going to change in the future.
(b) Strategic direction and strategy formulation*:* Appraisal of the current status of the company, direction and goals of the company for the next five to ten years and how they will be achieved.
(c) Description of the foreign market: Profile of the market segment in the foreign country that the company is targeting, the channels through which they are reached and value proposition to the target groups of the company's products or services.
(d) Management team: Professional background, responsibilities and potential contributions to the company of the founders and top management.
(e) Financial aspect: Expected revenue and net earnings for the next five years and contributions of the foreign operations, capital needed and how it will be used, expected returns to investors and how and when they will get their money (e.g., initial public offering or sale of the company through an acquisition).

The rest of the business plan consists of information about the following:

I. History and overview of the company
   (a) History of the company: History of the company's product and services and evolution to the current stage.
   (b) Background information: Backgrounds and experiences (including international experience) of the owners, number of years in business, number of employees, why and by whom the organization was formed, whether the organization's mission changed since the organization was formed, strategic fit of the company's international business activities with the existing resources.
   (c) Current status of the company: Definition, scope, nature and importance of the business (the company's product or services, where and how they will they be used, number of countries in which the company is doing business, profile of the customer), technical specification, features and design (for technologically complex products).
   (d) The business concept: Key factors that determine the success in the industry (e.g., low price, high quality and technological/marketing capability), how the company's products meet these requirements, unique selling propositions of the products or services, evidence and reasons as to why buyers in the foreign market are likely to prefer the company's products over its domestic and international competition.[3]

(e) Objectives: Overall objective, specific objectives for sales, profitability, market share, product, innovation, branding, management development, employee morale, social responsibility.

II. Foreign market entry and expansion

The elements to be included in this section include the following:

(a) Whether the company has received inquiries from foreign markets for its products or services.
(b) Availability of the financial resources to perform market research and promote the product in the foreign market.
(c) Whether the company has personnel export skills, customer service and networking skills required for the operation in the foreign market.
(d) Whether a new position will be created in the company to develop international markets.
(e) The level of control the company wants to maintain in the foreign country over sales, customer service and customer credits.
(f) Choosing a market entry method (e.g., licensing, joint venture or investment as possible options).

III. Industry and market analysis

The following are described in this section:

(a) Overall market*:* Description of present and projects markets in terms of locations, sales, growth rate, profitability and trends.
(b) Projected industry sales: Over the next three to five years and the company's market share and whether they will be different in the foreign market.
(c) Specific market segment*:* Description of present and future market segments and major competitor in each segment, expected strategic changes about market segments, detailed information about major customers and prospects.
(d) Competitor analysis: Expected effects on sales due to existing competitors, potential competitors, buyers' substitute products, detailed information about the leading competitors (e.g., sales volume, market share and profitability), whether the company's domestic competitors are exporting similar or closely related products or services, whether foreign competitors in the industry are active in the home country.

IV. Macroeconomic factors

Some important indicators related to macroeconomic features include the following:

(a) GDP growth.
(b) Inflation rate.
(c) Effects of disruptive economic events such as the global financial crisis (GFC), The Russo-Ukrainian War and COVID-19,

and whether such events have differential effects in the foreign country.
(d) Infrastructural situation.
(e) Credit rating of the country.
(f) Currency fluctuation issues and how they will affect customers' ability and willingness to buy the company's product.

V. Development, production and logistics

It is important to explain in detail about the following with necessary diagrams:

(a) Stages involved in the development and production process and budget and time for each stage.
(b) A comparison of production versus subcontracting.
(c) Whether the factory will be located in the target country, the home country or a third country.
(d) A description of engineering and operations department.
(e) Production requirements (raw materials, supplies and labor).
(f) Details of plant facilities, machinery and equipment required.
(g) The most appropriate form of transportation.
(h) Shipping and associated costs.
(i) The degree and location of R&D activities.
(j) How quality assurance will be undertaken.
(k) Whether the product requires special storage and if the foreign country has such facilities
(l) The current status of the company's production capacity (operating at full capacity, running under capacity) and difficulty involved in increasing the capacity to meet international demand.
(m) Whether there is a minimum order requirement and if this requirement is different for international sales.
(n) Whether the company uses a freight forwarder for export shipments.
(o) Packaging and labeling needed for the product to reach the foreign country.
(p) Documentation needed to meet the government regulations in the home country and the foreign country.
(q) The bank to be used for international transactions.
(r) Acceptable payment methods in the foreign market.

VI. Political and legal forces that are likely to shape the industry and the business

It would be important to explain in detail about the following:

(a) Whether there are special policies favoring the industry.
(b) Whether subsidies are available for the industry.
(c) Special Economic Zones benefits.
(d) Tax breaks and import tariff reductions.
(e) Political stability condition.

(f) The legal system and rule of law status.
(g) Whether the foreign country has a special trade relation with the home country and if so how it would affect the company's business.
(h) Laws and enforcement mechanisms to protect from the infringement of copyright and related rights (for products with copyright issues).
(i) Whether there are certain business ownership restrictions for foreigners.
(j) Whether accreditation from agencies such as professional associations is needed.
(k) Whether the product can be manufactured in a cost-effective way to meet the overseas regulatory requirements or standards.

VII. Social forces that are likely to shape the industry

The potential readers of an I.B.P. would be interested to know about the following aspects:

(a) Demographic profile of the customer: age, gender, income, occupation, etc.
(b) Predicted shift in the demographic makeup of the foreign country's population and how it will affect the company's business.
(c) The public's perception of the industry.
(d) Whether there are some cultural aspects that influence the product's acceptance in the foreign market (e.g., religious beliefs, taste preferences, habits and lifestyles).
(e) Crime rates including organized crimes and cybercrimes and how they will affect the company's business in the foreign country.

VIII. Technical forces that are likely to shape the industry

It would be necessary to discuss in detail about the following:

(a) Penetration rates of various technologies in the foreign market and their effect on the company's business.
(b) The foreign country's position in the adoption of emerging technologies and its effect on the success of the business.
(c) The level of the product's technology (simple, advanced and state of the art).
(d) Degree of fit of the technology in the foreign market.
(e) Potential profitability of the industry in the foreign market.
(f) Important trends in the industry in the foreign market.

IX. S.W.O.T. analysis

An analysis of a firm's strengths, weaknesses, opportunities and threats (S.W.O.T.) entails the process of analyzing the firm and its environments and is commonly used to assist the firm in identifying strategic direction.

X. Organizational overview

The typical contents of this section are as follows:

(a) Organizational structure.
(b) Human resource strategies.
(c) Key personnel and other personnel.
(d) International staffing requirements and degree of fit with the available resource skills in the organization.

XI. Financial overview

The primary components of this section are the following:

(a) Business financing issues.
(b) Selected financial ratios (e.g., return on assets, net sales to net worth ratio and net income to net sales ratio and earnings per share).
(c) Projected profit and loss statement.
(d) Projected balance sheet.
(e) Capital needed and how it will be spent: working capital, marketing, R&D, export budget, international overhead expenses and startup costs.
(f) Break even analysis.
(g) Seasonal effect on financial performance.
(h) Receivables and payable management.

XII. Marketing strategy

The major components of this section are as follows:

(a) Results of international marketing research.
(b) Segmentation: Selection of market segments and rationales, environmental analysis of various market segments.
(c) Products: Description of products and services and comparison with major competitors, selection of possible products and services to be exported, importance of the protection of proprietary methods, trademarks and intellectual property rights for the product, product adaptations (e.g., technical, design, content, functionality and cosmetic changes) needed to meet regulative, cultural, economic and technical conditions in the foreign country, modifications needed in product packaging, instructions, manuals and translations involved, whether there are technical terms that might be difficult to translate in the language of the foreign country, differences in geography- or climate-related factors (e.g., humidity, heat, cold, rain, wind, sand, dust and terrain) that may affect product functions in the foreign country, buyer preferences in the foreign country with respect to various product features (e.g., size, packaging and color), warranty and servicing standards in the foreign market and whether the company needs to include this in pricing, stage of the product life cycle (introduction, growth, maturity and decline) and whether the stage is different in the foreign market, whether and how after-sale services will be provided in the foreign country.

(d) Pricing: Pricing strategy, whether the company prefers to have the ability to change price, terms and conditions, profit margin in the company's domestic price, relative price sensitivity of the foreign market and its effect on profit margin, whether the company's price is competitive after adding export-related costs and tariffs to the product's price, direct materials and labor costs involved in the production for export.
(e) Distribution: Standard distribution practice in the foreign market, how the company's domestic competitors sell in the foreign market, distribution channels to be employed by the company in the foreign country, selection of distribution partners, types of discounts (trade, cash and quantity) or allowances (advertising, trade-off) commonly given to a member of the distribution channel for similar products in the foreign market, agent and distributor markups in the foreign country.
(f) Promotions: Advertising tactics and other promotional measures, whether different benefits of the product will be emphasized in the foreign country, activities related to branding, packaging and labeling.
(g) Sales forecast for the next five years.

XIII. Strategic gap analysis

The elements of this section constitute the following:

(a) Company's current position.
(b) An alternative strategy better suited to the current context (due to change in objectives, decision makers or performance levels).
(c) Ideal outcome corresponding to the alternative strategy.
(d) Changes needed to achieve the ideal outcome.

XIV. Ownership

Key elements of this section should include the following:

(a) Legal form of ownership (e.g., sole proprietorship, partnership and corporation).
(b) Whether there has been a change in ownership in recent years.
(c) Investment made by the business founders.
(d) Debt and equity funding needed.
(e) Condition for doing business if it is established as a partnership.
(f) List of owners (e.g., individuals, corporations and trusts) if the business is established as a corporation.
(g) Proportion of stocks owned by the employees.
(h) The company's share price.
(i) The number of shares owned and investment by each director.

XV. References

XVI. Appendices and supporting information

Notes

1 Schilit, W.K. 1987. "How to write a winning business plan", *Business Horizons*, 30(5), pp. 13–22.
2 The Forum for International Trade Training (FITT) Team. (2022, July 29). *A guide to preparing an international business plan*. TradeReady. Retrieved from https://www.tradeready.ca/2022/fittskills-refresher/a-guide-to-preparing-an-international-business-plan/
3 Murphy, P. 2004. "International business plan workbook", Massachusetts Export Center, www.msbdc.org/publications/intlbizplan/intl_busplan.pdf.

Index

Note: Page references in **bold** represent tables.