# 1. Entrepreneurship, Institutions, and Economic Prosperity

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## 1. Introduction

Entrepreneurs are agents of change who constantly create new environments that breed further opportunities for progress and development. We often think of the big names in the field such as Andrew Carnegie and John D. Rockefeller as the drivers of the economy. Carnegie was the industrialist responsible for the mass expansion of the American steel industry and Rockefeller revolutionized the petroleum industry in the 19th century. Though both of these entrepreneurs have substantially improved our economic well-being, they were only able to achieve their successes because of an existing entrepreneurial environment that allowed them to create and reap the benefits of their enterprises and build upon already existing innovations of previous entrepreneurs. Rockefeller, for example, achieved his successes by relying on the newly constructed railroad infrastructure, which was largely made possible by other entrepreneurs and innovators. And, while Matthew Boulton's and James Watts's steam engine played a key role in sparking the industrial revolution and the development of the modern world, it was only because of an already existing steam engine that allowed Watts to experiment with adjustments and create this new one. Many of these big name innovators whom we readily associate with economic progress and growth can often make us overlook a more important factor: the gist of economic growth comes not from a handful of grand innovators, but from a thriving environment of small, medium, and large-sized businesses in a competitive, entrepreneurial atmosphere where these entrepreneurs are constantly altering the environment and giving rise to further entrepreneurial opportunities and

innovations. This competitive striving is the essence of entrepreneurship. And this is the aspect of entrepreneurship I will be linking to long-run economic progress.

In the last few decades, there has been a renewed interest in entrepreneurship as the driver of economic growth. This renewed interest stands in contrast to post-1950s mainstream or neoclassical economic theories regarding the importance of capital, labor, and technology for economic development and prosperity. These models first emphasized that the accumulation of capital generates economic growth—and the accumulation of capital was only possible through savings and investment. Soon after, economists began analyzing the relationship between capital, labor, and technology as inputs into a growth production function. These models led economists to conclude that nations were poor because people there did not save enough, or that people in these nations did not use technology efficiently. While these statements highlight important patterns in developing countries, they also pose questions: Why are these people not saving? Why do people in poor countries use technology less efficiently than do people in rich countries? Why in certain countries do workers not invest in their own development while workers in other countries do regularly make such investments? The neoclassical growththeory models made no effort to explain why these factors differ from country to country. Scholars using these models therefore failed to analyze the *incentives* that encourage growth-enhancing, as well as growth-destroying, behaviors. Fortunately, growth theories now situate entrepreneurship as an indispensable component of economic growth.

Entrepreneurship refers to the ability to discover profit opportunities—whether they are from market innovations or for arbitrage opportunities across time and place. The entrepreneur is one who is alert to perceived opportunities and motivated by the gain of profit (Kirzner, 1973). Entrepreneurship is omnipresent and the specific entrepreneurial act depends on the different profit opportunities in any given context. In general, entrepreneurs are thought of as the business owners, creators of ideas, and innovators in an economy. An important follow-up question is, then: what influences people to invent, innovate, or open new businesses—or rather, what influences entrepreneurial activities to flourish?

This chapter aims to present an understanding of entrepreneurship and how it relates to economic growth. In doing so, it also focuses on the mechanisms by which entrepreneurship is encouraged and impeded. This chapter does so by analyzing the institutional environment within which entrepreneurial activity takes place. The overall theoretical perspective in this literature is that entrepreneurship

is fundamental for economic growth and long-run prosperity, and institutions that protect property rights and provide favorable business environments encourage greater entrepreneurship and innovation. Thus, the first link will provide an analysis of how entrepreneurship influences economic growth. This link includes a discussion of the importance of small business activities, innovations, inventions, market opportunities, and the overall mechanisms of a market process.

The second link is an analysis of how institutions influence entrepreneurship. Institutions are the "rules of the game", which include such things as legal rules, property rights, constitutions, political structures, and norms and customs. The institutions of a particular country dictate how costly or beneficial certain decisions are to the individuals who make them—including decisions to open a business or to invent a product or production process. Factors like the legal costs of entering a market describe the regulatory environment and thus are part of the "institutions" of a particular country. In addition to providing the theoretical links between entrepreneurship and growth, and then between institutions and entrepreneurship, this chapter also surveys empirical work in this area. This work analyzes the extent of entrepreneurial activity across countries and overtime; it seeks to illustrate the causal relationship between these variables.

# 2. Theoretical perspectives on entrepreneurship

## 2.1. Entrepreneurship and growth

Within the literature on economics and entrepreneurship, there are two main notions of the entrepreneur. On one hand, Kirzner (1973) describes the entrepreneur as one who drives the market toward efficient outcomes by exploiting profit opportunities. These profit opportunities arise because there exists some knowledge that is previously unknown, and the entrepreneur is alert to this knowledge and can act upon it (Kirzner, 1973: 35; 1979: 139). For example, someone who lives in a small town and witnesses an influx of immigrants might now "see" profit in opening an international deli there. Or, as college enrollments are increasing in a particular college town, someone might "see" profit in a new enterprise that renovates homes and turns them into rental units. In these examples, the entrepreneur becomes the "driver" of the market process by redirecting resources from lower-valued to higher-valued uses. This process of market exchange itself generates important feedback regarding valuable projects and encourages entrepreneurship. The profits that entrepreneurs earn (and losses that they suffer) generate information—signals—that promote further efforts to more efficiently allocate resources

and production—that is, to better satisfy human wants. In the case of the international deli owner, if he would have opened the business in a town with no immigrants he likely would have witnessed little demand for his deli items. As a result, he would have earned negative profits (losses). These losses would signal him, and others, that resources channeled into this particular species of production in this particular town do not satisfy enough consumer desires. These signals would then lead him to close down the deli. The shuttering of the deli, far from being a regrettable outcome for society, would free up resources to be used in other ways—ways that will hopefully better satisfy the people in the town.

But in a world where the deli owner correctly predicts or perceives the consumer demand coming from the new immigrant population, the deli will now yield profits for the entrepreneur. These profits "signal" to the entrepreneur, and provide the incentive, to continue operating. These profits also encourage him and other entrepreneurs to continue to be alert for new opportunities for production and innovation. In essence, the Kirznerian entrepreneur discovers an opportunity that allows him to make better use of existing resources and information to better serve human wants.

It is important here to briefly mention why economists care so much about production. The reason production is in the analytical forefront is that individuals produce ultimately in order to satisfy human wants—that is, to consume. Entrepreneurial profit comes precisely from the fact that individuals are interested in buying products or services that entrepreneurs sell. If an entrepreneur, for example, produces 4-foot-long nails, he will be unable to sell that product because people do not desire it. Production of this particular output would yield losses. Market forces would drive this particular enterprise out of business. Merely producing a large quantity of *anything* does not lead to "economic prosperity". Production is important only to the extent that it serves human wants—and the entrepreneurial market process leads to prosperity because it constantly generates the adjustments and innovations that direct resources into uses that better serve people's wants.

The second main notion of entrepreneurship comes Joseph Schumpeter (1942 [1950]) who describes the entrepreneur as a creative and bold innovator in a constant process of replacing old technologies with new technologies. Schumpeter emphasized the entrepreneur as a "disruptive" agent in society engaging in creative destruction. Creative destruction is the process introduced by the entrepreneur whereby new products or services or production techniques render old products or services or supply techniques obsolete (Schumpeter, 1950: 81–86). The most

common example of creative destruction is the automobile, which led to the disappearance of the horse and buggy. But consider also how personal computers destroyed many mainframe computer companies, or how DVDs ended the production and sale of VCRs. Examples are practically endless. In Schumpeter's view, the entrepreneur is an innovator for whom profits are the incentive to come up with new technologies and inventions; the entrepreneur thereby becomes the engine of economic growth. The entrepreneur discovers new information and new combinations of capital and resources and introduces these into the market place. By doing so, this "daring" entrepreneur disrupts the current state of production in the economy and brings forth this new idea that fundamentally alters economic production.

Schumpeter gives an example of the textile industry that produces only with "hand labor" where the role of the entrepreneur is to notice and act upon the possibility of using power looms for production and forever altering this industry (Schumpeter, 1934 [2008]: 129–130). The introduction of assembly lines is another example of Schumpeterian entrepreneurship because it fundamentally changed the nature of production in ways that greatly increased industrial productivity. Entrepreneurs are, in essence, creating and then offering the insights that lead to new goods or services, or to new processes and combinations for producing already existing goods and services, or new methods in the organization of an industry. Schumpeter's entrepreneur is a constant catalyst for disrupting the current economic conditions and generating economic growth.

Economists often discuss the tension between the two notions of entrepreneurship: the Kirznerian entrepreneur is an "equilibrating" force in society while the Schumpeterian entrepreneur is "disequilibrating". For the purposes of this chapter, this tension is unimportant because both roles of the entrepreneur improve society's material standard of living and, hence, each is crucial to long-run economic prosperity.<sup>1</sup>

There are, of course, real distinctions between these two roles. For example, Kirzner's entrepreneur does not fundamentally change the nature of production or an industry; instead, this entrepreneur makes better use of already existing information and resources in society. In contrast, Schumpeter's entrepreneur disrupts the current nature of production and of the industry by introducing new innovations and production processes. Yet in both Kirzner and Schumpeter's

<sup>1.</sup> Boudreaux (1994) argues that Schumpeter's entrepreneur and Kirzner's entrepreneur have complementary roles and both, in a broader sense, act in equilibrating ways.

account, entrepreneurs are motivated by profits—profits provide the incentive for the Kirznerian entrepreneur to channel resources to their most highly valued uses and profits are what encourage the Schumpeterian entrepreneur to innovate. While these two entrepreneurial roles are distinct from each other, it is the interaction between them that drives much of the economic process of development. In other words, the combined role of *both* the Kirznerian and the Schumpeterian entrepreneur provides the theoretical link between entrepreneurship and long-run economic prosperity and growth.

In Kirzner's notion of entrepreneurship, the important mechanism is that entrepreneurs drive the market toward efficient use of existing resources. This corresponds to the movement of a point *inside* of what economists call the production possibilities frontier (PPF) to a point on the PPF. At any given point, the total output that a society can produce depends on the resources available and available technology. As entrepreneurs engage in the process of discovery and arbitrage, they reallocate resources to push the economy toward the maximum potential level of output. In essence, as the entrepreneur discovers previously unexploited opportunities, he channels resources to their most highly valued uses and, thus, ensures that each resource contributes as much as it can to the well-being of society. In contrast, an economy operating at any point inside of the PPF is not making full and best use of its resources. When such inefficiency exists (as it always does, to some degree, in reality), "entrepreneurs rearrange given resources to push the economy closer to the PPF. In general, arbitrage ensures a tendency toward a given PPF" (Boettke and Coyne, 2009: 158). It is through these adjustments that Kirzner's entrepreneur increases economic productivity and, hence, creates widespread wealth. Says Kirzner: "the entrepreneur is to be seen as responding to opportunities rather then creating them; as capturing profit opportunities rather then generating them ... Without entrepreneurship, without alertness to the new possibility, the long-term benefits may remain untapped" (1973: 74). The vital role of Kirzner's entrepreneur is to drive the market process toward greater efficiency in production.

Schumpeter's entrepreneur, again, is different. He is an innovator whose initial actions disrupt rather than smooth out economic activities. For example, the entrepreneur who introduces power looms both raises the productivity of some textile-industry workers by allowing each worker to produce more output per hour *and*, by allowing textile mills to operate with fewer workers, releases labor that can be used to produce other goods and services. As Schumpeter explains, "[a] worker with such a loom is now in a position to produce six times as much as a hand-worker

in a day" (Schumpeter, 1934: 130). This means that entrepreneurs enhance growth by innovating in ways that shift the PPF outward. Society can use fewer resources and produce more of the same things in the industry where the innovation occurred. But this is not the end of the story. When machines are introduced in one industry and production is now more efficient there, resources are thus freed up to produce other outputs that would otherwise be too costly to produce.

In the 19th century, a majority of Americans worked in farming to feed the entire country. With technological breakthroughs in agricultural productivity in the 20th century, fewer than 2% of Americans now work in farming to feed a nation that has more than four times the population it had in 1900. Increasing productivity in agriculture allows people to use fewer workers and other resources to produce more output (food), which frees up labor to go into satisfying other consumer demands. When the majority of the population is no longer needed to just keep us alive by producing food, workers move into other areas to produce the likes of cellphones, computers, cars, and contact lenses. Through these market innovations, the entrepreneur acts as a powerful force in moving the economy forward and making societies wealthier. In doing so, the entrepreneur also destroys old products and generates new ones—what is called "creative destruction" (Schumpeter, 1950). It is through this mechanism that Schumpeterian entrepreneurship leads to economic growth and prosperity.

Randy Holcombe (2008) discusses yet another aspect of entrepreneurship. Inspired by Kirzner's research, he points out that entrepreneurially driven adjustments to the economy actually create additional profit opportunities. New profit opportunities arise, or are more likely to be noticed, as entrepreneurs encounter the discoveries of previous entrepreneurs. This process repeats itself as new entrepreneurs build on the ideas and actions of these previous entrepreneurs. The result is a continual growth in entrepreneurial opportunities and activity. Holcombe explains: "When entrepreneurs take advantage of profit opportunities, they create new entrepreneurial opportunities that others can act upon. Entrepreneurship creates an environment that makes more entrepreneurship possible" (2008: 61). In this case, when the entrepreneur seizes profit opportunities, he creates new profit opportunities for other entrepreneurs to act on. It is important to understand this process because the entire notion of the Kirznerian entrepreneur rests on this idea that entrepreneurs are seizing previously unnoticed profit opportunities.

But from where do these profit opportunities come? They come from an entrepreneurial environment—an environment where entrepreneurs are constantly

seizing profit opportunities. Entrepreneurs then are also constantly changing the economic environment and giving rise to new profit opportunities. This on-going activity creates new market opportunities and generates the possibility for greater specialization. Opportunities for greater specialization are vital because these entrepreneurial insights create new niches, which generate innovations and lead to greater economic growth. In summary, an entrepreneurial environment allows for various profit opportunities to arise, encouraging the entrepreneur not only to act upon them but also, without intending to do so, to create yet newer opportunities for profitable entrepreneurial activity.

Holcombe's mechanism for economic growth rests on Adam Smith's observation that the division of labor and the growth that it engenders are limited by the extent of the market. As Smith explains: "When the market is very small, no person can have any encouragement to dedicate himself entirely to one employment" (Smith, 1776: 27). But, as markets grow, this growth encourages greater specialization which, in turn, promotes more innovation. The more immediate source of this greater innovation is greater specialization. As tasks become more specialized, people become both more alert to the possibility of mechanizing tasks as well as more knowledgeable about how to carry out this mechanization.

For example, someone working in retail will probably not be able to discover potential profit opportunities in the way that internal-combustion engines are currently manufactured. But someone with training in mechanical engineering or experience in that area of work *is* more likely to find unexploited profit opportunities. Such opportunities can include finding a way to manufacture the engine more efficiently or finding lower-cost sources of inputs. These profit opportunities arise in part from differences in *knowledge* among people: the retail agent does not have the same knowledge as the mechanical engineer so practically he cannot spot available profit opportunities in the existing process used to produce internal-combustion engines. But the retail agent may have greater knowledge about where and how to sell the internal-combustion engine. Different knowledge in a particular area of work creates opportunities to notice things that would be difficult to notice without detailed knowledge of that area. This entrepreneurial activity increases the extent of the market and allows for new market opportunities and greater specialization in the niches.

It is this entrepreneurial process that drives economic growth. Efforts to foster such a process should not focus on particular businesses, corporations, or people. Instead, such efforts should strive to create an environment that allows for entrepreneurial activity of all kinds to thrive. Such an environment, of course, would reliably reward successful entrepreneurs with profits and punish unsuccessful ones with losses. As Holcombe explains:

With few opportunities, there is little incentive to devote any resources toward seeking them out. In an environment of economic change, new opportunities will continually be presenting themselves. When entrepreneurs take advantage of some opportunities, the economic environment changes, creating additional opportunities. Thus, entrepreneurship leads to more entrepreneurship. (2008: 65)

In the literature about entrepreneurship and growth, the tendency is to assume that "entrepreneurial activity" refers specifically to the activities of large firms. The reason is that large firms have historically been viewed as the most important sources of jobs and innovation. However, the mechanisms described in this paper apply both to small, medium, and large-sized firms. In fact, Acs, Carlsson, and Karlsson (1999) argue that small firms have an advantage over large firms at generating more innovative products, but that many large firms have an advantage specifically in *process* innovation.<sup>2</sup> This reality might be explained by the fact that diseconomies of scale perhaps characterize innovative activities—diseconomies specifically caused by the "inherent bureaucratization process which inhibits both innovative activity and the speed at which innovations move through the corporate system towards the market" (Links and Rees, 1990: 25). Others suggest that the company organization and culture in smaller businesses are more conducive to employee participation during the product innovation processes. The larger the company, the more difficult it is to maintain this creative type of environment. Furthermore, Acs, Carlsson, and Karlsson explain that:

new industries are characterized by a high rate of product innovation, carried out mostly by small firms. As entry rates decline over time, so does the rate of product innovation. The firms remaining in the industry devote an

<sup>2. &</sup>quot;Process innovation" refers to a new and improved production or delivery method. This may include changes in technique or equipment used to produce the product. This is in contrast to product innovation, which refers to a new good or service or improvements in that good or service. Yet another type of innovation is organizational innovation, which leads to new business practices or a new workplace organization.

increasing share of their R&D efforts to process innovation, in which large firms may have an advantage due to their ability to spread costs over a large output. (1999: 29)

For example, many large companies today—such as Google—purchase innovative products from small enterprises and specialize in giving a wider pool of customers access to the product. In other words, innovative products are generally created by smaller start-ups, but Google and other large firms end up purchasing rights to produce these products from their creators and then building production and distribution arrangements that effectively get these products into consumers' hands. Acs, Carlsson, and Karlsson conclude that "a dynamic economy requires a high level of innovation activity, which in turn requires vigorous entry of new firms, most of which are necessarily small" (1999: 33). The complementary roles of small, medium, and large-sized businesses illustrate the importance not only of "large corporations" for economic growth, but of a dynamic entrepreneurial environment that includes firms of different sizes to discover new products, generate improvements, and, in the end, raise living standards.

This notion of entrepreneur-driven economic growth differs from the standard neoclassical explanations of growth. Those models emphasize physical and human capital inputs as central inputs into the production process. In line with this emphasis, economists have cited savings as key to growth because it allows for capital accumulation. Accordingly, these models then discuss technological knowledge as another factor of economic growth. All of these factors are seen as "inputs" into a production process. The importance of an entrepreneurial environment is that it can attract these inputs and lead to greater investment and spur growth. But the main emphasis ought to be, not on production-function inputs, but instead on the *institutions* that best encourage the flourishing of entrepreneurial activity.

## 2.2. Institutions and entrepreneurship

While the above analysis explored the link between entrepreneurship and economic growth, not all forms of entrepreneurship are growth enhancing. Because the entrepreneur is motivated by personal profit opportunities, the institutions governing a society have a big influence on the extent to which entrepreneurial activities lead to innovation and productive outcomes. Institutions as the "rules of game" facilitate economic, social, and political interactions and can alter the incentives and payoffs to engage in growth-enhancing entrepreneurial behavior.

Depending on the rules, the institutions create incentives for particular actions and may dissuade individuals from taking other actions. As individuals respond to incentives by evaluating the costs and benefits of various activities, they are always in a sense influenced by institutions. If in a particular society individuals are not able to reap the benefits of their invention, we would not expect this society to be a technological hub. In other societies, if it is particularly costly to open up new businesses, many potential entrepreneurs will be dissuaded from becoming *actual* entrepreneurs. The rules of the game determine the relative payoffs to different entrepreneurial activities and these rules change over time and among states and countries. Where people find it profitable to engage in activities such as arbitrage and innovation, entrepreneurship flourishes. Thus, depending on the institutions, entrepreneurial activity can either encourage or impede economic growth.

Baumol (1990) was one of the first to make this distinction between various forms of entrepreneurship encouraging or impeding economic growth. He identified three forms of entrepreneurship: productive, unproductive, and destructive. Productive entrepreneurship involves the introduction of new goods into the marketplace, the introduction of new methods of production, the opening of new markets, the discovery or creation of new sources of supplies of raw materials and intermediate goods, or the implementation of new organizational or managerial strategies (Baumol, 1990). The discussion above of entrepreneurship and growth was confined to "productive" entrepreneurship. Unproductive entrepreneurial activities, in contrast, include rent-seeking and other redistributive efforts.

An example of such unproductive entrepreneurship is a business owner spending resources to lobby legislators for subsidies or other favors. These efforts and expenditures diminish long-run economic growth, both directly and by creating additional opportunities for such unproductive entrepreneurship. Coyne, Dove, and Sobel (2010) describe how unproductive entrepreneurial activities breed more unproductive opportunities by creating unproductive niches for profit, altering for the worse the pattern of incentives in that society, and creating unproductive social capital and networks. Through these mechanisms, unproductive entrepreneurship breeds more unproductive opportunities for entrepreneurs to exploit, which further minimizes and crowds out productive activity and growth. Destructive entrepreneurship is similar to unproductive entrepreneurship, but also destroys existing resources or existing productive capacity as the entrepreneur attempts to increase his own wealth. For example, violent conflict and theft are examples of destructive entrepreneurship because these acts destroy existing societal resources

in an attempt to redistribute wealth. Institutions can thus shape the relative payoffs to partaking in productive, unproductive, or destructive entrepreneurial activities. When there is relatively greater benefit to engaging in unproductive activities, entrepreneurs spend more resources on rent seeking and lobbying and other redistributive—as opposed to productive—efforts. Only when institutions generate incentives to induce *productive* entrepreneurship will entrepreneurs contribute to growth. In order words, the link between entrepreneurship and economic growth is only *activated* with certain institutions.

One of the most important institutional structures identified with allowing productive entrepreneurship to flourish is the institution of secure private property rights. When there is poor protection of property rights, it is less profitable to engage in business ventures because entrepreneurs might not be able to keep enough of their profits, or they might perceive that their capital investments will be seized, stolen, or destroyed (Boettke and Coyne, 2003; 2009). Acs, Carlsson, and Karlsson explain that the protection of property rights is vital for entrepreneurs also because they "need to rely on the security of their residual claims for the returns from the organizations they have created ... [and] entrepreneurs must raise capital, bear risks, and enter new markets. Such activities require transactional trust over a long-term horizon, and this is strengthened by stable property rights that are effectively enforced" (2013: 22).

The structure of a tax system is also important. If the tax system punishes market success, entrepreneurs will divert their resources into other, more profitable ventures outside the market, such as lobbying legislators for favors. If the "rules of the game" are such that lobbying efforts yield more reward than inventing a new product or exploiting arbitrage opportunities, entrepreneurial activities will be unproductive and destructive, thereby stymieing economic development or even causing economic decline. Thus, various institutional arrangements including aspects of legal rules, property rights, and structures—alter the balance of incentives among various forms of entrepreneurship, and can thereby influence or impede economic growth. Moreover, one of the most important institutional structures for encouraging market entrepreneurial activity is to allow for competition among firms. Kirzner discusses how competition in the market exists as long as there are no arbitrary barriers to entry (1973: 97; 1985: 130, 142). Without barriers to entry, the competition among firms for profits generates entrepreneurial activity leading to the creation of new products and services and lower-cost methods of producing goods and services. Thus, barriers to entry into

a market are barriers to exercising entrepreneurship: such barriers impede the competitive process and the incentives entrepreneurs face in exploiting potential profit opportunities.

Thus, productive entrepreneurship is a consequence of the institutional setting. Boettke and Coyne (2009) also explain:

Only under a certain institutional environment will entrepreneurs have an incentive to discover new resources, substitutes for existing resources or trading partners to obtain resources ... only in certain institutional contexts will entrepreneurs have an incentive to discover new technological knowledge such as new production processes or new organization structures. (Boettke and Coyne 2009, 158).

It is important to emphasize the role of institutions because entrepreneurs are in some sense omnipresent: they exist across cultures and over time and they will always employ their creativity in search for personal gain (Baumol, 2002; Koppl, 2007). Boettke and Coyne explain: "An African tribesman, a European peasant, or an American farmer are all acting entrepreneurially when they pursue opportunities to better their personal circumstances through beneficial exchange and interaction. It is a human trait to be alert to those things that are in our interest to be alert to" (2009: 137–138). Differences in entrepreneurship in a society should then be attributed to differences in institutions and not purely to differences in the inherent entrepreneurial spirit of a person or a culture. Individuals respond to perceived costs and benefits, and not all societies have environments that reward the invention of new goods or the discovery of a low-cost way of producing a product. In any given population, the institutional environment shapes and constrains the opportunities and incentives to entrepreneurship.

In a broader light, an institutional environment favorable to entrepreneurship includes more than laws and formal institutions, but encompasses norms, attitudes, and informal institutions. McCloskey (2010) provides a rich account of how the ethics and language surrounding the role of the entrepreneur changed in Northwest Europe during the 18<sup>th</sup> century (she calls this "the Bourgeois Revaluation"), and how this change was vital for sparking economic growth and the modern world. She ties her work with Kirzner's, explaining: "A new rhetorical environment in the eighteenth century encouraged entrepreneurs. As a result over the next two centuries the production possibility curve leapt out by a factor of

one hundred" (2011: 53). McCloskey does acknowledge the role of formal institutions governing entrepreneurship, but argues that entrepreneurial discovery and creativity also depends on other factors, such as the virtues of courage and hope, and a context of entrepreneurial dignity. McCloskey is employing the Kirznerian entrepreneur in her work and arguing that this sort of entrepreneurial discovery and innovation in the late 18<sup>th</sup> century came from "releasing of the West from ancient constraints on the dignity and liberty of the bourgeoisie, producing an intellectual and engineering explosion of ideas" (2011: 49). This mechanism also ties to Holcombe's (2008) argument above: once breeding ideas were set free, they created more and more opportunities for entrepreneurial activities and Kirznerian alertness. McCloskey explains: "The idea of the steam engine had babies with the idea of rails and the idea of wrought iron, and the result was the railroads. The new generation of ideas—in view of the continuing breeding of ideas going on in the background—created by their very routinization still more Kirznerian opportunities" (2011: 50).

McCloskey's work is showing that the change in rhetoric and ethics encouraged individuals to enter commercial life. Ethics, attitudes, and norms are an aspect of the institutional environment—called the "informal institutions"—and thus, when the institutional environment becomes more favorable to the entrepreneurial environment, there would be increase in entrepreneurial activity. Martin summarizes this connection between the Kirznerian entrepreneur and McCloskey's work; he argues:

The application [of Kirzner's work] to McCloskey's case is entirely straightforward: the Bourgeois Revaluation can be interpreted as an ecological shift in entrepreneurial alertness ... Innovative discoveries—those that create rather than dissipate sheer profit—require not only formal private property rights and free prices, but a social environment characterized by Bourgeois Dignity and Liberty. (2012: 760)

In explaining the history of the modern world, McCloskey attributes this Bourgeois Revaluation as a significant cause of the take-off in economic growth. Thus, in addition to the formal institutions discussed in this section, the attitudes, norms, and informal institutions in a society also have a significant impact on economic growth. Many of the findings discussed in the next section reveal this connection between institutions, entrepreneurship, and economic growth.

# 3. Empirical findings

There are multiple ways in which scholars attempt to measure entrepreneurial activity. First, there are framework conditions of entrepreneurship. These include such things as the ease and cost of doing business and "favorableness" of regulatory environments. These measures equate "entrepreneurship" with conditions that allow entrepreneurial activity to flourish. Second, there are output indicators, such as those that track the creation of new firms or that use registries to create an index of the prevalence of high-growth firms. These indicators include measures of the number of firms, the sizes of different firms, or growth of new enterprises. Third, there are attitude and cultural traits that gauge citizens' opinions and behavior toward entrepreneurship—traits that can be discovered and quantified by survey questions. For example: "Do people in this particular society want to start new businesses? Do people in the society believe that the entrepreneur has an important role to play? Are entrepreneurs praised? How likely are individuals to start a new business?" Measures of these attitudes are distilled from population surveys with the aim of attempting to capture the attitudes of a population toward entrepreneurship or trying to understand the extent of the "entrepreneurial spirit" of the people.

Within the entrepreneurship literature, there is no consistent agreement on which of these three measures best captures and quantifies the notion of entrepreneurship. Ideally, a measure of entrepreneurship should include all three components (framework, attitude/culture, and output). To review the empirical findings, I address a handful of studies that use each of these measures of entrepreneurship. One of the most expansive studies done on the framework measures of entrepreneurship is the index published in Economic Freedom of the World (EFW; Gwartney, Lawson, and Hall, 2014). This index has five components as part of economic freedom: Area 1. Size of Government; Area 2. Legal System and Property Rights; Area 3. Sound Money; Area 4. Freedom to Trade Internationally; and Area 5. Regulation. For purposes of measuring an entrepreneurial environment, Area 5. Regulation and Area 2. Legal System and Property Rights are the most important. The regulation component includes credit market regulations, labor market regulations, and business regulations. All of these are vital for understanding an entrepreneurial environment because each influences the incentives to engage in entrepreneurial activity. Is it costly to start a business? Am I even allowed to start a business? Will my business face unduly high labor costs? Can I fire bad or redundant workers? These components are key for allowing entrepreneurship to flourish. Where regulations make it difficult to start and operate businesses, entrepreneurs will have a hard

time bringing their new ideas and innovations to fruition. Promising entrepreneurs who face onerous regulations might opt out of doing business or may decide to take their ideas to countries with a more favorable business climates.

Legal System and Property Rights, Area 2 of the EFW index, plays one of the most important roles in the measure of an entrepreneurial environment. This component includes such things as protection of property rights, legal enforcement of contracts, business costs of crime, reliability of the police, and impartial courts, among others. This component, in addition to measuring the security of property rights, also in essence measures the degree to which each country is governed by the rule of law. Well-established legal rules, a rule of law, and protection of business owner's property rights help ensure that entrepreneurs are safe from both private and public predation. An individual who has an idea to start a business might not invest in the business if he believes that his government can easily shut him down or that police will not protect his building from looters. This component is also important for encouraging capital flows, which help entrepreneurs to expand their businesses, ideas, and innovations. If people outside the country perceive it to be unstable, then they will not invest in that particular country. Property rights and the rule of law thus play a key role in attracting capital. The authors explain this linkage: "When individuals and business lack confidence that contracts will be enforced and the fruits of their productive efforts protected, their incentives to engage in productive activity is eroded" (Gwartney, Lawson, and Hall, 2014: 5).

The EFW index is produced annually, ranking today 152 countries. The general findings are consistent from year to year, though specifics regarding each particular country change. The most consistent finding is that the most economically free countries tend to have the highest incomes while the least economically free countries have the lowest incomes (mostly countries in sub-Saharan Africa). The findings from year to year in the EFW index are also consistent regarding Area 2. Legal System and Property Rights. Each year, the study finds that countries that have good legal rules and protection of property rights are always the high-income countries—and countries that rank the lowest in this particular component are the poorest countries in the world.

Take, for example, the rankings from the 2014 report. The top five countries ranked highest in protection of property rights and legal systems are Finland, New Zealand, Norway, and Singapore, and Switzerland (Gwartney, Lawson and Hall, 2014). These countries are industrial countries in the sample with the highest income. The five countries ranked worst in protection of property rights and legal

systems are Venezuela, Haiti, Democratic Republic of the Congo, Central African Republic, and Togo. The countries in this latter group all are in the lowest-income category in the sample. Furthermore, not only is strong protection of property rights correlated with high incomes, but it is also correlated with rapid economic growth (Gwartney, Lawson and Hall, 2014: 21). Hall and Lawson (2014) also find that, almost without exception, countries with higher and improving economic freedom scores tend to grow more rapidly. In fact, a one-point decline in the economic freedom rating is associated with a reduction in the long-term growth of GDP of between 1.0 and 1.5 percentage points annually (Gwartney, Holcombe, and Lawson, 2006).

The findings in *Economic Freedom of the World* on the importance of property rights for entrepreneurship and also for economic prosperity are in line with the overall literature on this topic. In general, entrepreneurial opportunities and activities differ significantly across societies and these differences stem chiefly from differences in property rights protection and the rule of law (Boettke and Subrick, 2002; Scully, 1988; Gwartney, Holcombe, and Lawson, 1998, 1999; Johnson, McMillan, and Woodruff, 2000) are also among those who argue that there is little incentive for entrepreneurs to invest without strong protection of property rights, even if capital is abundant and available. The key finding in this line of literature is that property rights are essential for a thriving entrepreneurial environment.

The second component of the EFW index that theoretically should be important for economic growth is Area 5. Regulation. However, there is not as strong a correlation between regulation and economic prosperity as there is with property rights and economic prosperity (Gwartney, Lawson, and Hall, 2014). Many highincome and high-growth countries ranked extremely low in the regulation component (meaning they had unfavorable business, labor, or credit market regulations) and many low-income countries ranked highly in the regulation component. Take, for example, the top five highest ranked in freedom from regulation: Hong Kong, Fiji, Bahamas, New Zealand, and Qatar. While Hong Kong and New Zealand are high-income countries, the other three countries in this group are middle-to-low income. Other high-income countries like Australia, Germany, France, the United States, and the United Kingdom rank at about the global average on regulatory burdens, and also rank alongside countries like Uganda and Rwanda in this component. This fact could indicate that, without protection of strong property rights, having a favorable business climate free from burdensome regulation is not sufficient to foster vibrant entrepreneurship. This reality might explain why relatively poor

countries such as the Bahamas rank very poorly in protection of property rights and legal rules but rank highly on the regulation measure. If the actual institutions of property rights are not present, it might not matter very much if regulations are burdensome or not. Another way to explain this phenomenon is that the benefits of property rights on economic growth almost always outweigh the costs of burdensome regulation, so countries with strong property rights and burdensome regulations can still experience high levels of income and wealth.

The finding on the regulation component in the EFW Report is slightly different than other studies in this literature. Djanjov, La Porta, Lopez-de-Silanes, and Shleifer (2002) find that countries with heavier regulation tend to be more corrupt and have larger unofficial economies. This study concludes that stricter regulation is not associated with higher-quality production or better pollution or health outcomes. Instead, countries that heavily regulate their businesses and do not allow for a flourishing entrepreneurial environment also have extremely high levels of corruption—and these countries are, unsurprisingly, mostly in sub-Saharan Africa.

The Doing Business index (World Bank Group, 2014) is another attempt to measure the entrepreneurial environment by analyzing indicators of regulation. These two main indicators are (1) complexity and cost of regulatory process and (2) strength of legal institutions. Complexity and cost of regulatory process includes such things as costs of starting a business (number of procedures, payments, minimum capital requirements), paying taxes, and dealing with construction permits. The strength of legal institutions includes things such as enforcement of contracts, labor market regulation, and protection of minority investors. This index is updated annually and covers 189 economies. Klapper, Love, and Randall (2014) use this index and find that better business regulatory environments are associated positively with economic growth.<sup>3</sup> The *Doing Business* (2014) report summarizes the main findings of the index of the costs of doing business with the recent economic-growth literature, reporting that studies overwhelming find that better business environments are vital for economic growth. The report also concludes that one important implication of the findings is that "fostering an efficient regulatory environment for the financial and private sector can contribute to economic growth by aiding the efficient exit of insolvent firms during economic slowdowns and encouraging a speedier recovery in the formation of new firms during economic expansions (World Bank Group 2014: 103). In another study,

<sup>3.</sup> The study includes 109 countries over the period from 2002 to 2012.

Jovanovic and Jovanovic (2014) investigate how business regulation (as measured by the *Doing Business* indicators mentioned above) affects the flow of foreign direct investment in 28 Eastern European and Central Asian countries. The study finds a positive relationship between freedom from burdensome regulation and foreign indirect investment. Their study shows that a reduction in the cost of starting a business is positively associated with increases in foreign direct investment flows. One of the main conclusions to be drawn from the study by Jovanovic and Jovanovic (2014) is that "governments may be able to attract foreign direct investment by creating a more efficient and more business-friendly regulatory environment" (World Bank Group, 2014: 104). Overall, these findings indicate that burdensome regulations have a negative impact on such things as economic growth and foreign direct investment.

As mentioned, firm creation is also one of the measures used to capture the concept of entrepreneurship. In measuring entrepreneurship through output conditions such as number of firms, the relationship between entrepreneurship and economic growth is still positive. Klapper, Love, and Randall (2014) find that country-specific GDP growth is associated with higher new firm registration, even after controlling for global macroeconomics shocks. Other studies analyze the relationship between the "framework" conditions (regulations) and output conditions. They find that reforms that simplify business registration lead to more firms being created (Branstetter, Lima, Taylor, and Venâncio, 2014; Bruhn, 2011; Monteiro and Assuncao, 2012). In another in-depth study, Bripi (2013) focuses on differences among provinces in Italy. Bripi analyzes differences in local regulatory burden and firm creation and finds a negative relationship between the time and cost of regulatory-compliance procedures and the rate of creation of small firms. The study controls for many important variables, including measures of financial development and efficiency of bankruptcy procedures—yet still concludes that bureaucratic time delays due to inefficient regulatory procedures reduce the entry rate in industries that should have "naturally" high entry rates relative to low-entry sectors. Overall, Bripi's study draws significant distinction between heavily regulated southern provinces and lightly regulated northern provinces to demonstrate how regulations are a significant obstacle to entrepreneurship and economic performance in the southern regions.

Along these lines, Desai, Gompers, and Lerner (2003) find that better protection of property rights and less government corruption (they call this "greater fairness") increase firm entry rates, reduce firm exit rates, and lower the average size

of the firm. This important paper analyzes 33 European studies. Their definitions of "entrepreneurial activity" is the combination of entry and exit rates, the average firm size, and a weighted-average of a firm age. The authors conclude that "[g]reater fairness and stronger protection of property rights are critically important in encouraging both the emergence and the growth of new enterprises, particularly in emerging markets" (Desai, Gompers, and Lerner, 2003: 31). Likewise, Scarpetta, Hemmings, Tressel, and Woo (2002) find that regulations have a significant impact upon entrepreneurial outcomes. This study concludes that business entry rates are significantly lower with stricter administrative regulations and stricter sector-specific market regulations. Similarly, using World Bank measures, Klapper, Laeven, and Rajan (2006) find that higher costs of business entry significantly reduce the fraction of new firms in a country. This is in contrast to an earlier study relying on the same World Bank measures but in this case finding that entry barriers do not robustly affect entrepreneurship (van Stel, Wennekers, Thurik, Reynolds, and de Wit, 2003). In other studies, Ovaska and Sobel (2005) and Bjørnskov and Foss (2008) also do not find strong evidence of regulation's impact on entrepreneurial activity. They use the EFW index reporting the regulation component, which is consistent with my preceding discussion of this component. However, when employing the same data and making a few minor adjustments, Freytag and Thurik (2007) show that the degree of regulation does indeed significantly weaken entrepreneurial activity.

In a recent study, Dreher and Gassebner (2013) measure entrepreneurship using survey data in an attempt to capture "entrepreneurial culture/attitude/ spirit". The survey comes from the Global Entrepreneurship Monitor (Amoros and Bosma, 2014) and measures individuals between 18 and 64 years old who have taken some action toward creating new businesses in the past year. Their study includes 43 different countries and 93 observations in total. The authors find that firm regulation discourages entrepreneurship and worsens overall economic performance. Also using the measures of entrepreneurship from the Global Entrepreneurship Monitor, van Stel, Carree, and Thurik (2005) find that entrepreneurial activity does have a positive impact on economic growth, but this result only holds true for relatively rich countries. In poorer countries, entrepreneurship seems to have a negative impact on growth. They explain this finding in two ways: this finding might indicate (1) that there are not enough larger companies present in these poor countries to complement the activities of small-scale entrepreneurs; or (2) that entrepreneurs in these poorer countries have lower humancapital levels compared to entrepreneurs to high-income industrial countries. Yet

another explanation for this finding could be that, because poorer countries lack strong protection of property rights, entrepreneurial activity does not translate into economic growth there.

Recall that strong protection of property rights are important to help ensure that entrepreneurs are safe from both private and public predation, and that in an environment where property rights are not well protected, individuals will not make long-term business investments. Further, strong protection of property rights are important for encouraging capital flows and helping entrepreneurs to expand their businesses, which is necessary for economic growth. Thus, when individuals are surveyed about their "entrepreneurial activity/spirit" with the backdrop of a bad institutional environment, this does not necessarily translate into business and job creation or what we may typically think of as thriving entrepreneurial and innovative activities present in developed countries. Individuals in the developing world who attempt to start businesses have to deal with corrupt local and national governments, with burdensome and arbitrary regulations, and with uncertain environment about whether they can keep their profits. It is no surprise that in this type of institutional environment measures of entrepreneurial spirit or attitude or activity would not result in economic growth.

Furthermore, in other studies, Acs and Audretsch (1988) specifically find the strong impact of entrepreneurship on innovation and Blanchflower (2000) and Parker (2009) find the relationship between a strong entrepreneurial environment and subsequent job creation. Other studies have followed along these lines in measuring entrepreneurship, innovation, job creation, and economic growth. Van Praag and Versloot (2007) review and summarize this literature and conclude that differences in entrepreneurship account for varying levels of wealth and prosperity across nations—with greater entrepreneurial activity associated with greater economic growth and prosperity.

Some scholars have investigated also the relationship specifically between *small* business firms and growth. Thurik (1996) studied European economies and found that a rise in the share of small firms in certain economies and a high share of "smallness" in a specific industry creates additional output in the entire economy. Follow-up studies were done by Carree and Thurik (1998, 1999) and in both found similar results, namely, that small business enterprises are uniquely associated with economic growth. Similarly, Acs and Audretsch (1990) and Audretsch (1995) find that small businesses play an important role specifically in innovative activities. Acs (1992) reviews the empirical literature of small-business activity in the 1970s

and 1980s; he summarizes the findings on the importance of small firms for (1) an entrepreneurial environment (2) routes of innovation (3) industry dynamics and (4) job generation. On this last component, Audretsch and Thurik (2000) found that an increase in the rate of entrepreneurship (as measured by the number of business owners as a percentage of the labor force) led to lower levels of unemployment in 23 OECD countries during the period from 1984 to 1994.

Overall, while there are different ways to measure entrepreneurship, the findings in the empirical literature generally illustrate that entrepreneurship is linked to economic growth and innovation. A number of studies also find that institutions or "conditions" such as property rights and regulatory environments have an impact upon entrepreneurial activity. In a recent historical, comprehensive overview of the evolution of entrepreneurship, Landes, Mokyr, and Baumol (2012) document how entrepreneurship and innovation have been principal causes of technological progress, rising living standards, productivity, and economic growth. More importantly, the authors show that favorable institutions facilitate those productive entrepreneurial actions that were crucial to the rise of the modern world.

## 4. Current state of entrepreneurship

So far this chapter has presented theoretical considerations and empirical findings on how a thriving entrepreneurial environment is vital for the long-run health of an economy. Yet it is also important to evaluate the current state of entrepreneurship to gauge either the hopes or perils of growth in the United States and other Western countries. This section will present a variety of reports that rely on different measures of entrepreneurship.

According to the measures of the framework conditions of entrepreneurship, the business climate in the United States is slowly deteriorating. The 2014 EFW index reports that the United States has seen a decline in its average economic freedom scores from 8.65 in 2000 (when it ranked second) to 7.81 in 2012 (rank 14th).<sup>4</sup> In Area 2. Legal Systems and Property Rights, there has been a significant decline in rating, falling from 9.23 in 2000 to 7.02 in 2012. Specifically, Component 2C. Protection of Property Rights fell from a high rating of 9.10 in 2000 to 6.95 in 2012. This trend poses a long-term problem: if the conditions that foster entrepreneurial activity are eroding, what will become of economic prosperity for future Americans? The United States seems to be one of the only countries in the West

<sup>4.</sup> Scores range from 0 to 10; 10 is the best possible score a country can receive.

with such a large decline in property rights. The United Kingdom has seen only a slight decline in protection of property rights since 2000 and Canada has actually improved, moving from a score of 7.98 in 2000 to 8.39 in 2012.

The United States' rating for Area 5. Regulation is also declining, though more slowly than the decline in property-rights protection. The 2014 edition of the regional report, *Economic Freedom of North America*, says: "The expanded use of regulation in the United States has resulted in sharp rating reductions for components such as independence of the judiciary, impartiality of the courts, and regulatory favoritism. To a large degree, the United States has experienced a significant move away from rule of law" (Stansel, Torra, and McMahon, 2014: 51). The most significant feature of the lower rating for regulation is found in Sub-component 5Cii. Bureaucracy costs for business, for which the United States had a rate of 8.15 in 2000, falling to a low of 2.59 in 2012. This reality means that it has become increasingly more difficult for entrepreneurs in the United States either to start companies or to continue running their companies without significant administrative and bureaucratic obstacles. But this trend is not novel to the United States. Canada, the United Kingdom, Germany, France, and other Western democracies have all similarly dropped in their ratings for bureaucracy-costs measures.

In general, the EFW index seems to reflect the current reality that the United States is becoming a more highly regulated, more politicized, and more heavily policed state. Moreover, the growing regulatory burden on businesses all across the Western world poses a major problem by impeding an entrepreneurial business climate. Overall, when entrepreneurship is measured in terms of the framework conditions by the *Economic Freedom of the World*, serious concerns arise about the current and future state of entrepreneurship in the United States and the Western world.

According, however, to the 2014 *Doing Business* index, the United States seems still to be performing moderately well—ranking 7<sup>th</sup> worldwide in a sample of 189 economies (World Bank Group, 2014). The *Doing Business* index includes components of the ease of starting a business, registering property, paying taxes, dealing with construction permits, and a host of others. In the component, Ease of starting a business, the United States ranks 46<sup>th</sup>, which is on par with average rank of 45 held by OECD high-income economies. Canada, in this same measure, ranks 2<sup>nd</sup> for the ease of starting a business, while the United Kingdom is ranked 44<sup>th</sup>. The United States ranks relatively poorly here because it requires on average six procedures and 5.6 days, and costs 1.2% of income per capita to start a business in the United States. In the business-taxes component of this index, the United States

ranks 47<sup>th</sup>, which is slightly above the average rank of 53 for OECD high-income economies. The United States' low ranking stems mainly from the fact that it is very costly to file, prepare, and pay taxes as a business in the United States—totaling about 43.8% of business profits (World Bank Group, 2014). While the *Doing Business* index does show a somewhat favorable state of entrepreneurship in the United States, the trajectory of the costliness of starting a business and paying taxes again raises concerns for a favorable business environment in the future.

When the current state of entrepreneurship is measured with output variables, the results are mixed. According to the *State of Entrepreneurship Report* (Kauffman Foundation, 2014), the rate of new business creation in the United States has been flat or falling in the last two decades. The report explains, "the per-capita entrepreneurship rate has been steadily declining, meaning that even as the population expanded and the overall number of new businesses formed each year held steady or grew, the pace slowed, failing to keep up with population growth" (Kauffman Foundation, 2014: 7). The overall conclusion of the *State of Entrepreneurship Report* is that a decreasing business-creation environment indicates that the state of entrepreneurship in the United States is slowly declining.

Similarly, Decker, Haltiwanger, Jarmin, and Miranda (2014) conclude that the pace of business dynamism has declined over recent decades and that there has been a falling trend in the pace of job creation. An important aspect of the declining trends is a marked decline in the firm startup rate, which they note naturally leads to a reduction in the number of young firms operating in the economy. The authors suggest this declining rate of business creation and subsequent fall in the number of young firms contributed disproportionately to the overall fall in employment growth from 2006 to 2009.

The Global Entrepreneurship Monitor (GEM) report provides a different story: this report finds that the current trend of entrepreneurship in the United States is positive and that we should be optimistic about entrepreneurial prospects in the United States (Amoros and Bosma, 2014). GEM conducted a survey in 2013 of 5,698 working-age adults and found high and stable new business-startup rates for the third consecutive year. GEM finds that nearly 13% of the US working-age population was in the process of starting or running a business—which is the highest entrepreneurship rate reported among the 25 developed economies in their sample. GEM's indicators include societal attitudes toward entrepreneurship, surveys asking about the participation of entrepreneurs in multiple phases of the entrepreneurship process, and profiles of the entrepreneurs. GEM relies on an

important measure called "total early-stage entrepreneurial activity" (TEA), which includes what they refer to as "nascent entrepreneurs". These are entrepreneurs who are in the process of starting businesses or are currently owners of new business. <sup>5</sup> The United States has the highest percentage of its adult population in the process of starting a business (9.2%), compared to the average level (4.4%) of nascent entrepreneurial activity in other wealthy countries in North America, Europe, and Asia.

Lastly, another way to gauge the current state of entrepreneurship is to analyze attitudes and opinions toward entrepreneurs and the activities involved in starting businesses. Eurobarometer is a survey of European Union countries designed to measure the level of interest in starting businesses and the public's attitudes toward entrepreneurs. In the 2012 report of Eurobarometer, a majority (58%) of EU respondents said they would prefer to work as an employee rather than attempt to start their own business (European Commission, 2012). A large majority of EU respondents think it is difficult to start one's own business due to a lack of available financial support (79%); and that it is difficult to start one's own business due to the complexities of the administrative process (72%). These perceptions and attitudes have been relatively stable in the last ten years. 6 When asked their opinions of entrepreneurs in general, 87% of EU respondents agree that entrepreneurs are important job creators. This finding might seem to indicate that the Europeans have a positive outlook on entrepreneurs, but at the same time a majority of Europeans (over 50%) also believe that entrepreneurs take advantage of other people's work and that they think only about their own narrow monetary interests.<sup>7</sup> This somewhat negative portrayal of entrepreneurs perhaps helps to explain the current tepid state of entrepreneurship in the European Union. Surveys such as the Eurobarometer are deemed important because they provide important insights into each country's climate of opinion and its entrepreneurial culture. However, in terms of properly assessing the current actual state of entrepreneurship, these surveys are not helpful because they tell us little about actual entrepreneurial

<sup>5.</sup> The exact definition of "nascent entrepreneurship" is those individuals, between the ages of 18 and 64 years, who have taken some action toward creating a new business in the past year.

<sup>6.</sup> According to the 2003 *Eurobarometer*, 50% of the population in 2002 answered that they would prefer to be an employee rather than to start a business. And, in 2002 76% of EU respondents think it is difficult to start one's own business due to a lack of available financial support and 69% said that it is difficult to start one's own business due to the complexities of the administrative process.

<sup>7.</sup> The survey also covered the US population, where only 30% answered that entrepreneurs take advantage of other people's work and think only about their own narrow monetary interests.

activity. Furthermore, when taking into consideration how institutions can influence entrepreneurship, these factors merely reflect the "consequence" of an entrepreneurial environment. Perhaps if the administrative costs to starting a business were lower, more Europeans would be open to the idea.

Finally, according to the 2013 Global Entrepreneurship and Development Index (GEDI), the United States ranks highest in entrepreneurship across the world, and has remained at this position for a number of years (Acs, Szerb, and Autio, 2013). The GEDI report is unique in that it attempts to capture many measures of entrepreneurship—including the framework conditions of entrepreneurship, output measures, and attitude measures—in one index. The GEDI measures entrepreneurship on three indicators: Entrepreneurial Attitudes, Abilities, and Aspirations.

Measures of Attitudes include things such as market size, a country's general riskiness for business, cultural attitudes toward entrepreneurs, and population's use of the Internet. The Abilities index includes measurements of the business regulatory environment, the political influence of powerful business groups, and the level of formal education of entrepreneurs. The Aspiration index includes a measure of high-growth businesses, the availability of risk finance, and a measure of a country's new product potentials. The report ranks 120 countries annually and provides a measure of the "efficient use of entrepreneurial resources". The United States ranks highest among all countries and scored highest in the measure of efficient use of entrepreneurial resources. Australia and Sweden came in 2<sup>nd</sup> and 3<sup>rd</sup>, respectively. The United Kingdom ranked 9<sup>th</sup> in the index. The conclusion of this study is that in the United States there seems to be, in general, optimism in terms of a growing entrepreneurial environment.

Overall, the evidence on the state of entrepreneurship in the United States (and partly in Canada and the West) is mixed. Measures of entrepreneurship that attempt to capture the current levels of entrepreneurial activity and attitudes do clearly demonstrate that entrepreneurship is at an all-time high in the United States. And yet the framework conditions used to analyze the "institutions" necessary for entrepreneurial activity seem to indicate that favorable institutions are slowly declining. So when entrepreneurship is measured by these framework conditions, it seems to indicate that the state of entrepreneurship in the United States and in Europe is low. One way to reconcile the tensions between the various measures of the current state of entrepreneurship is to realize that the framework conditions are better

<sup>8.</sup> Canada cannot be compared here because its measure and rank are absent from this index.

indicators of the *future* state of entrepreneurship than of current activities of firms. When property rights or the regulatory environment get worse, it takes some time before individuals and businesses alter their behaviors. The framework-conditions measures of entrepreneurial activity might actually serve as trend predicators for the future state of entrepreneurship in the United States and the West. As the institutions—the "rules of the game"—are now making it more costly to engage in productive entrepreneurship relative to unproductive entrepreneurial behavior, what should we expect about the future profit opportunities and patterns of entrepreneurs?

#### 5. Conclusion

Productive entrepreneurial activity is a fundamental force for long-run prosperity and economic growth. People living in the United States and much of the developed world today experience significantly higher standards of living because entrepreneurs constantly introduce and improve market products—not only items such as personal computers and cell phones, but new medicines, better clothing, and other technologies that improve ordinary people's daily lives. Not only are new and improved products entering the market, but they are also becoming more affordable due to entrepreneurial innovations in production processes.

The most important force powering economic growth is not a handful of grand innovators and "big names" but, rather, a constant and thriving entrepreneurial environment that consists of different-sized firms each exploiting various profit opportunities and thereby breeding innovations and opportunities for further entrepreneurial activities. But this type of productive entrepreneurship also depends on the institutions and incentive structures that govern it. New technological improvements are sparked in areas where entrepreneurs are able to reap the benefits of their innovations, and new businesses arise in areas where start-up costs are lower while general business activity thrives in areas where property rights of individuals and businesses are well protected. It is no surprise that differences in institutional arrangements governing entrepreneurial behavior explain differences in global income levels and economic growth. In parts of the world where important institutional structures such as the strong protection of property rights are lacking, there is also an absence of entrepreneurial insights and innovations. Such places suffer also a slower rate of business creation and lower levels of income. Though entrepreneurship exists in all environments, institutions will dictate how it manifests itself. It is thus of fundamental importance to understand how different institutions and policies affect the incentives of entrepreneurs and entrepreneurial activity.

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