

2. Economic Freedom and Entrepreneurship

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1. Introduction

Entrepreneurship is a primary driving force behind economic growth and prosperity. A large share of the differences in national economic growth rates across countries is explained simply by differing levels of entrepreneurial activity. Reynolds, Hay, and, Camp (1999) find that one-third of the difference in economic growth rates across countries is explained by differing levels of entrepreneurship, while Zacharakis, Bygrave, and Sheperd (2000) find that differing levels of entrepreneurial activity explain approximately one half of the differences in economic growth among countries.

The actions of entrepreneurs create not only wealth and jobs, but also new goods and services that improve the well-being of consumers. During the past century alone, medical innovations have resulted in life expectancy increasing by approximately 30 years in the United States,¹ and those years are spent in more comfort because of entrepreneurs such as Willis Carrier who invented modern air conditioning, and Italian immigrant Candido Jacuzzi who developed the first hydrotherapy pump for bathtubs to help his son who suffered from juvenile rheumatoid arthritis.

Economists have long recognized the important role that entrepreneurs play in advancing society. Schumpeter (1942) described how entrepreneurs search for new combinations of resources, guided by the profit and loss system, and unleash

1. Life expectancy at birth was 78.7 in 2010 and 47.3 in 1900 (United States Centers for Disease Control and Prevention, 2014: table 19).

a process of “creative destruction” in which new goods and services replace old ones. Kirzner (1997) argued that the entrepreneurial discovery process is vital to the effectiveness of markets.

As is discussed at length elsewhere in this book, there is a clear and robust link between the level of economic freedom across countries (and states) and their levels of economic performance. Simply stated, better institutions that are consistent with more economic freedom result in higher levels of income and faster economic growth. However, entrepreneurship is a main *reason* higher levels of economic freedom promote growth. More economic freedom results in higher prosperity precisely because it results in higher levels of entrepreneurial activity (Sobel, 2008a; Kreft and Sobel, 2005; Sobel, Clark, and Lee, 2007; Hall and Sobel, 2008; Hall, Sobel, and Crowley, 2010).

More specifically, better economic institutions tend to more productively allocate the entrepreneurial talent within a society (Sobel, 2008a, Baumol, 1990, 1993, 2002). Every state and nation has large numbers of people who are innovative and entrepreneurial. However, the proportion of those individuals who choose to actually pursue a life as a for-profit market entrepreneur is influenced by the existing institutions. These individuals have many options, including using their talents to generate income for themselves in the political and legal arenas. Thus, differences in measured rates of *private-sector* entrepreneurship are due to the different directions entrepreneurial energies are channeled by prevailing economic and political institutions through the rewards and incentive structures they create for entrepreneurial individuals.

In countries with institutions providing secure property rights, a non-corrupt and independent judicial system, contract enforcement, and effective limits on government's ability to transfer wealth through taxation and regulation, creative individuals are more likely to engage in productive market entrepreneurship—activities that create wealth (for example, deliver innovative products such as the smart phone). In areas without strong institutions, these same individuals are instead more likely to attempt to manipulate the political or legal process to capture transfers of existing wealth through unproductive political and legal entrepreneurship—activities that destroy wealth (for example, lobbying and unjustifiable lawsuits). This reallocation of effort occurs because the institutional structure largely determines the relative personal and financial rewards that accrue to investing entrepreneurial energies into productive market activities compared to investing those same energies instead into unproductive political and legal activities.

This chapter discusses this relationship between institutions consistent with economic freedom and entrepreneurship. I begin by providing a more detailed discussion of the underlying ideas and literature summarized above, then continue to explore data on institutions and entrepreneurship rates both internationally and across US states.

2. Understanding market entrepreneurship and its role in prosperity

For over three centuries, economists have attempted to understand and define the concept of an “entrepreneur” and the role such people play in economic progress. In the 1700s, Richard Cantillon identified the willingness to bear the personal financial risk of a business venture as the defining characteristic of an entrepreneur (Sobel, 2008b). In the mid-1800s, John Stuart Mill used the term to refer to a person who assumes both the risk and management of a business, providing a clearer distinction than Cantillon between an entrepreneur and other business owners (such as shareholders of a corporation) who assume financial risk, but do not actively participate in the day-to-day operations of the firm (Sobel, 2008b).

Schumpeter ([1911] 1934, 1942) stressed the role of the entrepreneur as an innovator who finds new combinations of resources and creates new goods and services. He termed this process “creative destruction” because the introduction of new products and production processes often leads to the obsolescence of others, such as when the car replaced the horse and buggy. Because new products displace old industries this process is disruptive, and often leads to calls to restrict or prohibit the new products. The opposition to new “big box” stores, and calls to ban them so they do not displace “mom and pop” stores is one example. However, to Schumpeter this process of creative destruction is the source of true economic progress. Societies that can and do tolerate this recycling of labor and capital from older and less productive industries to new ones are the ones that prosper and grow. According to McCloskey (2010), innovation and creative destruction increase when societal attitudes become more favorable.

Kirzner (1973, 1997) viewed entrepreneurship as an equilibrating force in which entrepreneurs discover previously unnoticed profit opportunities and act on them, bringing markets toward equilibria. Holcombe (1998) ties the ideas of Kirzner and Schumpeter together by noting that Schumpeterian innovation results in a host of new profit opportunities in related complementary areas (such as producing tires or accessories for the automobile once it is invented).

Wealth creation is fundamentally about channeling limited resources into the production of those goods and services with the highest value in the marketplace. According to Hayek (2002 [1968]), the pattern of resource use that yields the highest value, however, is something that must be discovered within the marketplace through competition, and entrepreneurial trial and error. This target is an ever shifting one, with new opportunities arising and others dwindling every day. One important reason the economic system of capitalism is especially good at generating prosperity is that it does a good job at chasing this ever-moving target through the continuous process of entrepreneurship and discovery.

Sifting through these many combinations is a difficult task because the number of possible combinations of society's resources is almost limitless. Two quick illustrations will help to clarify the vastness of these opportunities. First, consider the typical automobile license plate. Many have three letters, a space, and three numbers. There is a formula for calculating the total number of "combinations"—the total number of possible different license plates—that could be created using these three letters and three numbers. The number is more than you might think: 17,576,000. Second, let us consider the number of possible ways to arrange a deck of cards. Even with only 52 cards, there is a mind-blowing number of ways to arrange them—the answer is a 68 digit number: 80,658,175,170,943,878,571,660,636,856,403,766,975,289,505,440,883,277,824,000,000,000,000.

With this many ways to rearrange a deck of 52 cards, the astonishing implication is that every time you shuffle a deck of cards you are most likely making a new ordering of cards that has never been seen before, and is likely never to be seen again. In fact, even if every human who has ever lived on the Earth did nothing but shuffle cards 24 hours a day their entire life, and even unrealistically assuming they could shuffle the deck 1,000 times per second, we would have not even come close to making it through a fraction of the number of total possible arrangements of the deck throughout all of human history.

Now, returning to the economy, we clearly have more than just three letters and numbers, or 52 cards, with which to work. Instead, we have millions, or even billions, of different resources that could be combined into final products. With this many inputs to work with, the number of possible different final product combinations that could be produced is practically infinite (Romer, 2008).

Entrepreneurship is important because it is the competitive behavior of entrepreneurs that drives this search for new possible combinations of resources that create more value. A vibrant entrepreneurial climate is one that maximizes the

number of new combinations attempted. Some of these new combinations will be more valuable than existing combinations and some will not. In a market economy, it is the profit-and-loss system that is used to sort through these new resource combinations discovered by entrepreneurs, discarding bad ideas through losses and rewarding good ones through profits. A growing, vibrant economy depends not only on entrepreneurs discovering, evaluating, and exploiting opportunities to create new goods and services, but also on the speed at which ideas are labeled as successes or failures by the profit-and-loss system.

Countries with higher levels of economic freedom promote entrepreneurship by increasing the rate of experimentation—entrepreneurial trial and error. In countries in which everyone is allowed to try out their unique and crazy ideas for new products, there is a greater rate of business failure but, because of the higher level of experimentation, the odds of stumbling onto the one-in-a-million new venture like Microsoft or Apple are higher. *Table 2.1* shows the data for OECD countries on the relationship between economic freedom and the rates of entrepreneurial activity and business failures from Sobel, Clark, and Lee (2007). Those countries with higher levels of economic freedom have statistically significant higher mean levels of both entrepreneurship and business failures (at the 5% level of statistical significance).²

Table 2.1. Economic freedom, entrepreneurial activity, and business failure

Economic freedom	Total Entrepreneurial Activity Index	Business failures per 10,000 firms
Top half of sample (half with the most economic freedom)	7.51	116.70
Bottom half of sample (half with the least economic freedom)	6.74	67.58

Source: Sobel, Clark, and Lee (2007).

As the data show, higher economic freedom is associated both with higher rates of new business formation, and more business failures—a truly robust engine of creative destruction. A point worth clarifying is that it is much better to have a decentralized profit-and-loss system sorting through these new combinations than a government approval board or decision-making process. The reason is that the

2. The total entrepreneurial activity index is a measure of the proportion of the population engaged in entrepreneurial activities, so this increase is roughly equivalent to an increase of 1 percentage point of the population engaged in entrepreneurial activities.

incentives facing public officials are very different than those facing venture capitalists and entrepreneurs. While each venture capitalist and entrepreneur brings different motivations to the table, ultimately their success or failure is determined by whether their idea generates wealth. The same is not true for public officials in charge of handing out tax incentives or low-interest loans. They may have other concerns beyond creating wealth. For example, officials may be concerned about *where* a new business is located in order to maximize political support among voters. But there is no reason to think that this decision corresponds with the most economically advantageous one.

From society's perspective, the profits earned by entrepreneurs (and assessed by investors) represent gains to society as a whole. Because entrepreneurs must bid resources away from alternative uses, production costs reflect the value of those resources to society in their alternative uses. Thus, profit is earned only when an entrepreneur takes a set of resources and produces something worth more to consumers than the other goods that could have been produced with those resources. A loss happens when an entrepreneur produces something that consumers do not value as highly as the other goods that could have been produced with those same resources. For example, an entrepreneur who takes the resources necessary to produce a fleece blanket that sold for \$50 and instead turns them into a pullover that sells for \$60 has earned a \$10 profit. Since the prices of the resources used by entrepreneurs reflect the opportunity cost of their employment in other uses, the \$10 profit generated by the entrepreneur reflects the amount by which he/she has increased the value of those resources. By increasing the value created by our limited resources, entrepreneurs increase overall wealth in a society.

No one individual, or group of individuals, could be in charge of this entrepreneurial discovery process. There is nobody, not even those seemingly in the best position to know, who can predict which business opportunities are the most viable in advance. For example, Ken Olson, president, chairman, and founder of Digital Equipment Corporation, who was at the forefront of computer technology in 1977, stated: "There is no reason anyone would want a computer in their home". Today his remark sounds funny because we all have computers in our homes (indeed, now even in our pockets and purses!), but at the time even those in the infant computer industry did not see this coming. An even better example might be the story of Fred Smith, the founder of Federal Express Corporation. He actually wrote the business plan for FedEx as his senior project for his strategic management class at Yale. While we all know in retrospect that FedEx was a successful business idea, Smith's professor at Yale, one of the leading experts on business strategy, wrote on

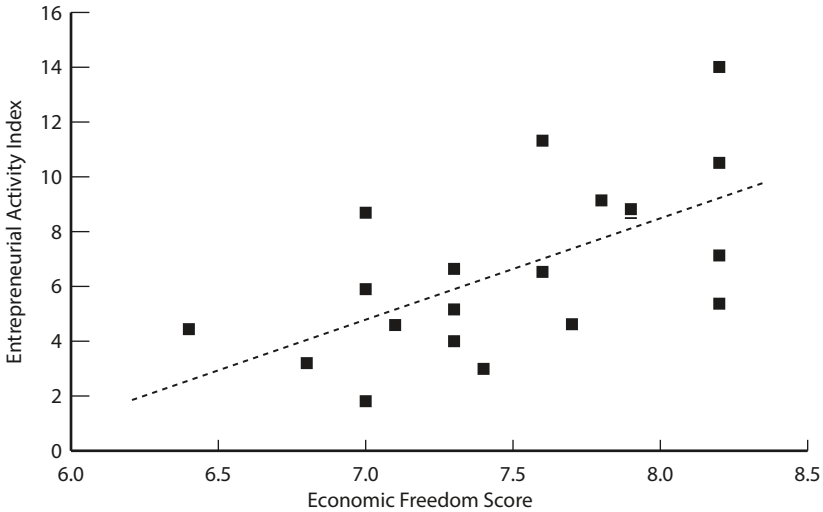
his paper in red ink: “The concept is interesting and well-formed, but in order to earn better than a C the idea must be feasible”. The point? Even smart professors, business leaders, and government officials cannot possibly pre-evaluate business ideas and identify those that will be most successful and those that will fail. A thriving economy is created when individual entrepreneurs have the freedom to try new ideas, risking their own assets, or the assets of their private investors, and the profit-and-loss system is used to decide their fate. To quote Nobel laureate W. Arthur Lewis: “[c]ollective judgment of new ideas is so often wrong that it is arguable that progress depends on individuals being free to back their own judgment despite collective disapproval ... To give a monopoly of decision to a government committee would seem to have the disadvantage of both worlds” (1955: 172).

Far too often governments attempt to adopt the wrong policies to promote entrepreneurship—such as state-run venture capital funds, government-funded or subsidized business incubators, economic development authorities, or new employees within the education system aimed at expanding entrepreneurship education within schools and colleges. Unfortunately, these policies expand the government sector, thereby resulting in a decline in the economic freedom score of the country (or state).³ To encourage entrepreneurship, policy should instead focus on reducing the burdens on entrepreneurial start-ups and tolerating business failures—precisely those policies consistent with economic freedom. *Figure 2.1* shows the relationship between the level of entrepreneurial activity in OECD countries and their level of economic freedom from Sobel, Clark, and Lee (2007). As is clearly visible in the figure, those countries with higher levels of economic freedom and smaller governments are those that have the highest rates of entrepreneurial activity.

Often overlooked is the importance of the rule of law for promoting a robust entrepreneurial climate. The “rule of law” refers to governance by predictable rules that are not dependent on the whims of currently elected politicians. When undertaking the construction of a skyscraper, for example, long-term contracts that govern financing and liability are critically important. This type of entrepreneurship therefore depends on the ability to undertake long-term contracting in an environment within which future disputes can be predictably settled under the previously agreed upon rules. Attempting to plan in a society in which rules are constantly changing is not easy, and it frustrates the ability of entrepreneurs to promote productive economic change.

3. See Landes, Mokyr, and Baumol, 2010 for examples.

Figure 2.1. Economic freedom and entrepreneurial activity in OECD countries, 2002



Source: Sobel, Clark, and Lee, 2007.

Because entrepreneurs frequently create new products that require new interpretations of existing statutory and common law (or the creation of new law), it is the *predictability* of the dynamic application of the law into new areas that matters most in attracting entrepreneurs to an area and supporting innovation within an economy, a point first recognized by Dove and Sobel (forthcoming). Innovations like the internet create a need for applications of law into the digital arena, while innovations like the automobile require new applications of precedent from existing laws that applied to horses and buggies. Similarly, medical innovations in cloning and stem cells create a need for entirely new areas of law to be developed. Therefore, what matters most to an entrepreneur is the *predictability* with which a jurisdiction's laws will be applied into these new areas. For entrepreneurs to be willing to make large up-front investments in research, development, and manufacturing facilities, they need to be fairly certain how the existing laws in the geographic area in which they locate will be applied and interpreted into the new areas related to the innovative good or service produced by the entrepreneur.

The wide variation in how states and countries are applying existing laws to driverless automobiles is one such example. Despite the fact that cars have had cruise control for decades, and that airplanes use auto-pilot, and that the liability issues are clearly settled in those cases, many jurisdictions insist on treating driverless cars as a completely different and entirely new area of law and, hence, subjecting

them to unnecessary legal uncertainty. Jurisdictions with good dynamic application of the rule of law, such as Nevada, allow for a straightforward application of existing law in those other areas to driverless cars and create a more certain legal environment within which entrepreneurship can take place and flourish.

As a second example, consider the recent innovations in the process of hydraulic fracking in shale formations to extract oil and gas. Some US state governments, such as Pennsylvania's, explained that all existing drilling laws applied to this new technology and simply passed a few new paragraphs of law to clarify how it applied. Other state governments, such as West Virginia's, treated the new technology like an entirely new industry, putting it on hold and going through a long negotiated process of outlining an entirely new set of rules and taxes to be applied. As a result, the shale industry boomed early in Pennsylvania, while it was slow and reluctant to develop in West Virginia.

One of Adam Smith's insights in his famous 1776 book, *An Inquiry Into the Nature and Causes of the Wealth of Nations*, is that specialization and the division of labor (key sources of productivity, wage, and income growth) are limited by the size or "extent" of the market. When consumer markets are larger in size, smaller specialized stores can survive that could not survive in a smaller marketplace. A small town population, for example, may be able to support two general purpose pet stores, each carrying a broad line of products. In a large city, however, a dozen or more pet stores can flourish, with a greater extent of specialization. One store, for example, might specialize in snakes and other reptiles, while another specializes in birds. Increasing the size of the markets to which entrepreneurs' goods and services sell increases wealth by allowing them to specialize more narrowly in areas where they do best. One primary way government policies can therefore promote more specialization and wealth creation is by having policies that enable entrepreneurs to sell and compete in larger national and global marketplaces and, hence, expand their customer base. To compete in these markets businesses ought not be hampered by unreasonable taxes and government regulations that raise the cost of doing business. In addition, policies consistent with free trade—those that make importing and exporting easy and without unnecessary costs and regulations—also enable entrepreneurs to produce more wealth through greater specialization.

Another reason policies consistent with free trade promote entrepreneurship is that they subject domestic firms to greater foreign competition. This greater competition forces domestic firms to try harder to innovate and reduce costs so as to be competitive on a global scale. Areas that restrict free trade end up with domestic

firms that cannot compete effectively on a global level due to higher costs and less innovative products. Free trade also better allows domestic firms to use low cost inputs into their production process. Sugar tariffs in the United States, for example, raise the cost of sugar, so domestic candy makers and soft drink makers use high fructose corn syrup as a cheaper alternative. By changing the input mix of domestic firms, these firms do not innovate in the same areas as their global competitors and often have inferior products. These are two additional reasons economic freedom, through free trade, promotes a healthier entrepreneurial sector. Ironically while many governments enact restrictions on free trade with the intention of expanding domestic industry, the empirical evidence shows that higher tariff rates result in fewer new entrepreneurial ventures. Estimates from Sobel, Clark, and Lee (2007) find that among OECD countries, each 1-percentage point increase in the average tariff rate in a country is associated with seven fewer new entrepreneurial ventures per 1,000 people in the population.

The impact of regulation on entrepreneurship also merits discussion. Regulatory climates with numerous and burdensome regulations have three harmful effects on the entrepreneurial climate. First, they limit the number of experiments happening. With a higher hurdle and steeper costs of going into business, fewer new combinations of resources are attempted—fewer new startups are created—lessening the odds of finding those rare true success stories. Even at an early age, experimentation with selling and business is important for developing an interest in entrepreneurship for individuals. Lemonade stands and bake sales, for example, were historically typically activities children undertook to learn about entrepreneurship. Cities across the United States have taken serious measures to shut down precisely these types of activities due to health and regulatory concerns. Without the required (and expensive) business permits, and food and drug regulations and product labeling satisfied, police have shut down children's lemonade stands in states from Georgia to Iowa. With fewer children experimenting, fewer adult entrepreneurs are spawned.

In addition to limiting experimentation, regulations function as a fixed cost, distorting the size of firms and the viability of small entrepreneurial firms. As a simple example, consider that installing a handicapped ramp is equally expensive for a small restaurant and a larger one. For smaller firms, the compliance cost of regulations therefore is more burdensome as a share of their budget. With the multitude of regulations that must be satisfied, large firms with tax and legal departments have the advantage because they have the resources and knowledgeable staff

to comply, while small firms—especially startups—do not. Calcagno and Sobel (2014) find that as regulatory levels grow, it disproportionately affects smaller firms (those with fewer than 5 employees). Thus areas with more regulatory burdens end up with fewer new small firms in the marketplace; an engine of economic growth and prosperity is stalled.

The third and final reason why heavy regulation hurts entrepreneurship is that it forces firm owners and employees to devote a larger share of their time toward regulatory compliance and away from the internal activities of the business, such as product development and customer relations. With the recent significant increases in banking regulation in the United States, for example, senior bank employees now have to spend more time complying with regulations and regulators, and, hence, have less time left to spend on the internal operation of the real business functions of the bank [see Allison (2013)]. Thus, higher regulations lead to increased time spent on compliance by firm owners and employees, leaving less effort to be put into business development and expansion.

This section has outlined the economic understanding of for-profit market entrepreneurship, and considered how policies consistent with economic freedom are both necessary and beneficial in promoting entrepreneurial innovation. Low levels of government spending leave more resources available for entrepreneurs in the private sector, low taxes on business owners and capital allow higher returns to entrepreneurial ventures and capital formation, reasonable regulations lessen the burden on entrepreneurial trial and error, a strong rule of law enables the long-term contracting necessary to undertake and finance entrepreneurial ventures, and free trade allows for greater specialization and higher incomes.

3. Understanding the entrepreneur—an agent of change

Until this point, we have restricted our discussion to only one half of the equation—entrepreneurship within the private, for-profit, sector. While historical definitions of entrepreneurship rest on the role of the entrepreneur in creating and managing a for-profit business in the market sector, the modern economics literature offers a broader understanding of the activities of entrepreneurial individuals.

Every society has a large number of *potential* entrepreneurs—creative individuals. However, not all of them choose to employ their talents to open new businesses in the marketplace. Like all other individuals they allocate their talents to where they each receive the highest return. There are many alternative activities an entrepreneurial individual may choose to pursue.

At a fundamental level, entrepreneurial individuals can choose to devote their labor efforts toward either private-sector wealth creation, or securing wealth redistribution through the political and legal processes (for example, lobbying and lawsuits), as has been stressed recently by Baumol (1990, 1993, 2002) and Sobel (2008a). This decision is influenced by the corresponding rates of return—or profit rates—of these alternative activities. Institutions providing for secure property rights, a fair and balanced judicial system, contract enforcement, and effective limits on government's ability to transfer wealth through taxation and regulation, reduce the profitability of unproductive political and legal entrepreneurship. Under this incentive structure, creative individuals are more likely to engage in the creation of new wealth through productive market entrepreneurship.

In areas with little economic freedom, these same individuals are instead more likely to attempt to manipulate the political or legal process to capture transfers of existing wealth through unproductive political and legal entrepreneurship—activities that destroy overall wealth. This reallocation of effort occurs because the institutional structure largely determines the relative personal and financial rewards to investing entrepreneurial energies into productive market activities rather than investing those same energies instead into unproductive political and legal activities. For example, a steel entrepreneur might react to competition by trying either to find a better way of producing steel (productive entrepreneurship) or by lobbying for subsidies or tariff protection, or filing anti-trust actions (unproductive entrepreneurship).

To understand this distinction better, consider the difference between positive-sum, zero-sum, and negative-sum economic activities. Activities are positive sum when net gains are created to society. Private market activities are positive sum because both parties gain in voluntary transactions. When you purchase a pizza, you value the pizza more than what you otherwise would have bought with the money you pay for it, while the pizzeria values the money it receives from you more than it did the pizza. Government actions that transfer wealth, regulate, subsidize, or protect industries from competition are not positive sum. One party's gain (for example, the subsidy) is offset by another party's loss (for example, the taxes). However, because securing the transfer requires an investment of resources in, say, lobbying, the overall impact on the economy is negative (Tullock, 1967). Magnifying this reality is the fact that others will devote resources to political lobbying on the “defensive side” of transfers to protect their wealth from being seized (Wenders, 1987). The resources devoted toward securing (and fighting against) zero-sum political transfers have a cost; we have more lobbyists and thus fewer scientists and engineers.

Unproductive entrepreneurship is unproductive because it uses up valuable resources in the process of capturing zero-sum transfers. Entrepreneurs exploit profit opportunities not only within private markets but also within the political and legal arenas. Thus, differences in measured rates of *private-sector* entrepreneurship are partially due to the different directions entrepreneurial energies are channeled by prevailing economic and political institutions, through the rewards and incentive structures they create for entrepreneurial individuals.

While this idea has mostly captured attention in the literature since Baumol's (1990) exposition, and he is often credited with the origin of the idea, the basic idea in reality dates back to the works of Bastiat and Hayek. In his 1850 pamphlet, Bastiat noted:

Man can only derive life and enjoyment from a perpetual search and appropriation; that is, from a perpetual application of his faculties to objects, or from labor. This is the origin of property.

But also he may live and enjoy, by seizing and appropriating the productions of the faculties of his fellow men. This is the origin of plunder.

Now, labor being in itself a pain, and man being naturally inclined to avoid pain, it follows, and history proves it, that wherever plunder is less burdensome than labor, it prevails; and neither religion nor morality can, in this case, prevent it from prevailing. (Bastiat, 1850 [2007]: 5)

Similarly, according to Hayek:

Having seen what I have of the world, it appears to me that the proportion of people who are prepared to try out new possibilities that promise to improve their situation—as long as others do not prevent them from doing so—is more or less the same everywhere. It seems to me that the much-lamented lack of entrepreneurial spirit in many young countries is not an unchangeable attribute of individuals, but the consequence of limitations placed on individuals by the prevailing point of view. For precisely this reason, the effect would be fatal if, in such countries, the collective will of the majority were to control the efforts of individuals, rather than that public power limits itself to protecting the individual from the pressure of society—and only the institution of private property, and all the liberal institutions of the rule of law associated with it, can bring about the latter. (Hayek, [1968] 2002: 19).

As is clear, both of these authors make the same point—in societies governed by bad rules, creative people devote their time and talents in ways to generate income for themselves outside of the market sector—through political and legal plunder. Thus, a more complete understanding of the role of economic freedom in promoting *productive* entrepreneurship and prosperity requires a broader definition of entrepreneurship than simply applying the idea to for-profit activities in a business within the marketplace. In reality, entrepreneurial individuals are agents of change—individuals who come up with new ways of doing things and implement them. These activities are not limited to the for-profit marketplace business sector.

For example, there are “academic entrepreneurs” who come up with new programs and implement them within the educational system, “social entrepreneurs” who come up with new non-profit foundations, “military entrepreneurs” who come up with new battlefield strategies, “sports entrepreneurs” who come up with new ways to play their sport, “political entrepreneurs” who come up with new ways of manipulating the political system for gain, and “legal entrepreneurs” who come up with new ways of litigating cases.

As one simple case in point, American football had been played for decades prior to anyone attempting a forward pass. In the 1876 game between Yale and Princeton, Yale’s Walter Camp threw forward to a teammate as he was being tackled, resulting in a touchdown. Despite protests by the opposing team, the referee actually tossed a coin to make his decision and allowed the touchdown to stand. Walter Camp is an entrepreneur, albeit not in the for-profit market sector creating a business.

Another example is the case of the gerrymandering of political districts. A brainchild of Massachusetts Governor Elbridge Gerry, it was the first time political district boundaries were significantly manipulated to alter the outcomes of elections. The first use of the filibuster in the US Senate in the 1830s is another example of political entrepreneurship. While these are examples of people within the political sector thinking creatively to get ahead, the more appropriate examples are of private individuals finding new ways to redistribute wealth to themselves through the political process. Holcombe (1999) discusses one such example. In the late 1800s, the union veterans of the US Civil War were able to become the first group to receive large-scale selective transfers through the federal government. Once they opened the door, it made it easier for other groups to seek selective transfer funding that benefited their narrow groups, paving the way for the modern American welfare state.

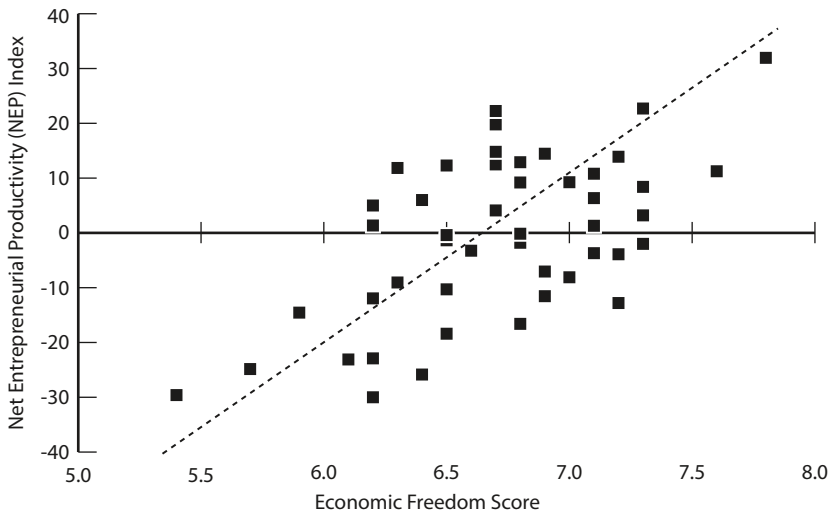
In the legal arena, creative attorneys frequently come up with new ways of litigating cases. One such example is the case of medical monitoring damages in the

state of West Virginia. When the environmental spillover effects from a business's activities result in physical injury to non-consenting third parties, courts have long allowed damages to be awarded to the injured parties, including damages for monitoring of their medical condition. However, in all cases the person filing the claim was required to show that actual physical injury was present. In 1999, the plaintiff's attorney litigating the case of *Bower v. Westinghouse* [206 W.Va. 133, 522 S.E.2d 424 (1999)] was able to argue creatively that individuals who showed no physical injury should be given damage awards for future medical monitoring *in case* they started developing problems (Leddy and Yanni, 2009). The legal brilliance of the precedent is that it provides lump-sum payments to large classes of uninjured parties living near a business even when there is no evidence of actual physical harm, with no restriction that the money actually be spent on the medical monitoring. Now jokingly known as the "Ford F-150 rule" because large groups of individuals have spent their checks on new pickup trucks, the creative thinking of one attorney has opened the door to many new lawsuits representing class actions of uninjured parties to seek transfers through the legal process from surrounding business entities.

Back to the bigger picture. What is important in a society is the proportion of entrepreneurial individuals who spend their time and talent creating wealth through engaging in productive, wealth-creating market entrepreneurship, rather than trying to secure wealth through unproductive, wealth-destroying political and legal plunder. Higher levels of economic freedom increase the returns to productive market entrepreneurship and lower the returns to unproductive political and legal entrepreneurship. Areas with higher economic freedom, therefore, will have not only higher rates of measured market entrepreneurship, but also lower levels of unproductive political and legal entrepreneurship.

While measures of unproductive entrepreneurship across countries are not available, it is possible to estimate them across the U.S. states. Sobel (2008a) shows that states with higher economic freedom scores both have more productive private sector entrepreneurship *and* less unproductive entrepreneurship. He constructs an index of "net entrepreneurial productivity" that grows with the proportion of entrepreneurial talent allocated to the private sector, and falls with increasing political activity or lawsuit abuse.⁴ *Figure 2.2* shows the clear, and strong, relationship between the economic freedom scores of US states and their levels of net

4. The index is basically the difference in the state's ranking relative to other states on measures of productive entrepreneurship minus its ranking on measures of unproductive entrepreneurship.

Figure 2.2. *Economic freedom and the productivity of entrepreneurship, 2001*

Source: Sobel, 2008a.

entrepreneurial productivity. Higher levels of economic freedom therefore not only promote the good types of entrepreneurship, but also lower the destructive types of entrepreneurship.

4. Economic freedom, the productivity of capital, and crony capitalism

Human and physical capital, when employed productively by entrepreneurs, are engines of wealth creation. Human capital refers to the education and talents of individuals, while physical capital refers to man-made resources such as machines that go into the production of other goods and services. The ability of capital to generate wealth depends on how productively it is allocated by entrepreneurs.

Gwartney, Holcombe and Lawson (2006) postulated that countries with higher levels of economic freedom—specifically, those countries that rely chiefly on the market to allocate investment into physical capital, should be able to generate a higher level of productivity and wealth for any given level of investment. They test their hypothesis and indeed find that the contribution of investment in physical capital to economic growth is higher in countries with more economic freedom.

Expanding on that idea, Hall, Sobel, and Crowley (2010) apply the same concept to human capital. Considering the contrast between productive and unproductive entrepreneurship, they postulate that the returns to investments in

human capital (for example, schooling) should be higher in countries with more economic freedom. Not only do they confirm this hypothesis, they actually find that in countries with very low levels of economic freedom the returns to schooling are negative—implying that higher levels of education destroy wealth. This finding suggests that, in these societies, as people become better educated, they simply use these talents to manipulate the political and legal systems for wealth transfers. They become more effective rent seekers.

Economic freedom improves the productivity of both human and physical capital in a society. Therefore, with any given level of entrepreneurial effort or level of investment in physical capital, societies with more economic freedom generate more wealth and economic growth from those investments.

A closely related issue is “crony capitalism” and the use of selective incentive policies by governments. There is a difference between what economists call capitalism and what some might consider “business-friendly” policies. When government gives subsidies or tax breaks to specific firms or industries that lobby but not to others, this practice is at odds with the institutions, or rules of the game, consistent with capitalism and economic freedom. When it becomes more profitable for companies and industries to invest time and resources into lobbying the political process for favors, or into initiating unjustified lawsuits, we end up with more of these types of destructive activities, and less productive activity. Firms compete in the government decision-making process for tax breaks rather than in the marketplace for consumers’ patronage. They spend time lobbying rather than producing.

In addition, by arbitrarily making some industries more (or less) profitable than others, government distorts private-sector economic activity. For growth, market-determined returns (profit rates) and market prices should guide investments, not government taxes and subsidies. Capitalism is about a fair and level playing field for everyone. This does mean lower overall levels of taxes and regulations—ones that are applied equally to everyone.

Business subsidies may visibly create jobs, but the unseen cost is that the tax revenue or other resources necessary to fund these subsidies generally destroy more jobs than are created. They result in a *net* reduction in economic activity. The problem, politically, is that these losses are not as visible. When every taxpayer has to pay, say, \$1 more in taxes to fund some multi-million-dollar subsidy, the resulting reduction in consumer spending is spread out over the entire economy, causing job losses in multitudes of other businesses, and a reduction in consumer well-being. But because each individual loss is small, these losses go unnoticed. Government

subsidy programs can, thus, create jobs in the relatively few favored industries, but only by destroying jobs in numerous unfavored industries. And because the favored industries will generally be less efficient than are the unfavored ones, the overall economic impact is negative. When business interests capture government's power, things can go just as bad for capitalism as when government power is held in the hands of groups less friendly to business. For example, when companies persuade government to use the power of eminent domain to take property from others, or use lobbying or connections to get special tax favors, subsidies, or exemptions for their business, this policy climate is not conducive to capitalism either.

Economic progress, growth, and development are not about having business take over government policy making. Unconstrained democracy is a threat to capitalism regardless of who is in power. Progress is not about turning policy over to a specific industry; instead it is about being competitive across the board to attract many new types of businesses in different locations. It is about an environment in which small rural entrepreneurs have maximal opportunities to compete and thrive in the global marketplace that is now becoming more connected to them through the Internet. It is about creating more wealth across the board.

Government officials often cite the necessity to offer these credits to entice firms to locate in particular jurisdictions. However, the main reason such incentives are necessary is the high taxes that already exist in these areas on these types of firms and the appropriate solution is to lower the taxes that prevent the jurisdiction from being competitive in the first place. These incentives would not be necessary if the tax structure were less burdensome.⁵

When governments give favors to some businesses (or groups) but not others, it unfairly distorts the competitive market process as unsubsidized firms must now compete with the politically favored, subsidized firms for employees, resources, land, and consumers. All firms should have a good business climate, without having to devote time, effort, and resources toward political lobbying and favor seeking to get it. Unlike the large companies who receive selective incentives from governments, many businesses—including small entrepreneurs—simply do not have the political power even to begin negotiating a better business climate. The resources devoted toward offering these special favors to big businesses would be better spent making across-the-board, broad-based tax reductions that apply to

5. Recently in Illinois, for example, when the corporate income tax was raised across the board, subsidies had to be given to specific high-profile firms to get them to stay in the state.

all entrepreneurs and businesses. But when governments engage in this type of activity it promotes an environment of favor seeking and fosters a higher level of unproductive entrepreneurship. Society is not only poorer because of the resources withdrawn from the productive sector as each group spends time and effort to get a political favor, but also because it necessitates that other groups now spend time and talent to get similar favorable treatment. This is why broad-based policies that are fair and equally applied to all outperform environments where policies are selectively applied.

In the United States, the federal government's response to the 2008 financial crisis and recession included an unprecedented increase in the number of government subsidies, grants, and contracts given directly to *specific* private businesses. For example, in October 2008 the Troubled Asset Relief Program (TARP) authorized \$700 billion in expenditures to purchase assets and equity from more than a dozen financial institutions. Also in late 2008, the Federal Reserve's "Maiden Lane Transactions" set up limited-liability companies with nearly \$100 billion to aid JPMorgan Chase, Bear Stearns, and AIG. In early 2009, the American Recovery and Reinvestment Act (ARRA) began spending over \$840 billion, which included many tax benefits, contracts, grants, and loans, and entitlements, going to thousands of specific private companies.

As a result of this major increase in government involvement, companies have rushed to make sure their interests are being heard in the political process that allocates these government favors. According to the Center for Responsive Politics, total expenditures on lobbying the federal government rose by over 20% from 2007 to 2010 (after adjusting for inflation) to more than \$3.5 billion. Lobbying by the finance, insurance, and real-estate sector alone has been over \$450 million per year since 2008, and the industry is now represented by approximately 2,500 individually registered federal lobbyists. In addition to increasing its lobbying activities, the finance, insurance, and real-estate sector has also increased political donations given directly to federal political campaigns. These donations are made largely through PAC contributions, rising from \$287 million during the 2006 election cycle to \$503 million during the 2008 election cycle and \$319 million during the 2010 election cycle. Some of the industrial sectors to which ARRA money is specifically targeted, such as energy, have seen the biggest increases in lobbying activity, with a 66% increase in federal lobbying expenditures between 2007 and 2010. The industry now spends over \$450 million annually on lobbying and is represented by over 2,200 registered federal lobbyists. Similarly, the energy sector has increased its

donations to federal political campaigns, raising them from \$51 million during the 2006 election cycle to \$81 million during the 2008 election cycle, and \$76 million during the 2010 election cycle.

Political connections or, more precisely, government grants, contracts, and bailouts, are becoming increasingly important in determining which firms succeed and which fail. These policies followed in the United States over the past decade have resulted in a significant decline in the economic freedom score of the United States. This reduced economic freedom has fostered an environment in which businesses invest significantly more resources in lobbying—unproductive entrepreneurship. The result is that fewer resources are devoted to productive entrepreneurial endeavors such as research and development efforts to generate new products and innovations.

5. Foreign aid and dead capital—the importance of property rights

Private property rights that are well defined and enforced are an important component of economic freedom. In the least developed countries, the lack of these rights is a significant factor limiting entrepreneurship. Financing for new entrepreneurial ventures is critical. In most societies, individual entrepreneurs can mortgage their assets, such as homes or cars, using them as collateral to secure loans to provide equity for their new businesses. But in many countries with low levels of economic freedom, property rights are informal at best. Without proper titles, deeds, and identification systems, individuals may own assets such as a home, but be unable to collateralize them to take out loans. This lack of collateralization holding back the ability of entrepreneurs in such countries has been a major research area of Hernando de Soto (2000, 2006). While some people in the United States actually complain about the large number of businesses offering auto-title loans, they instead should feel extremely lucky this opportunity exists so easily. According to de Soto (2006), in Tanzania, for example, pledging moveable property such as a car as collateral for a loan takes 297 days on the mainland, while on the semiautonomous part of Tanzania known as Zanzibar, such pledges do not exist. This lack of the ability to collateralize assets is a major hurdle to entrepreneurial financing.

In efforts to help ailing, less-developed economies, the developed world has given billions in foreign aid to governments. Not only do such government-to-government transfers (as the late economist Peter Bauer called them) not solve the fundamental problems with the institutions in these countries, they often prop up

corrupt political leaders, leading to few incentives for internal economic reform. Even worse, according to Coyne, Sobel, and Dove (2010) foreign aid results in aid recipients investing resources in establishing networks and relationships that maximize the amount of aid received. Once these networks are in place, they can have the counterproductive effect of making change toward liberal market and political institutions that much more difficult given the rent-seeking nature nurtured by the foreign aid. Large inflows of foreign aid, just like large amounts of government spending in any area, lead to business firms learning effectively how to compete for government favors, rather than learning how to compete in the marketplace. Thus, foreign aid often promotes the harmful types of unproductive entrepreneurship in these countries and builds human capital in favor seeking.

Creating an environment within which individual entrepreneurs generate wealth has been difficult for less-developed countries. But the solution is not foreign aid that promotes government favor seeking by individuals. The solution is reforms that promote economic freedom through greater use of private ownership rights—secure and defined property rights that allow for collateralization. The rise of the internet and private microlending to small entrepreneurs in less-developed countries, through organizations such as Kiva.org, has shown significant potential. But until significant reforms to promote economic freedom are undertaken, the wealth generating creativity of billions of entrepreneurial individuals in these less-developed countries remains harnessed and underused. The vast majority of measured entrepreneurship in such countries simply reflects “necessity-driven” entrepreneurship in which individuals must grow their own food, make their own clothes, and undertake household production because of the lack of private-sector job opportunities.

6. Updated evidence on economic freedom and entrepreneurship rates

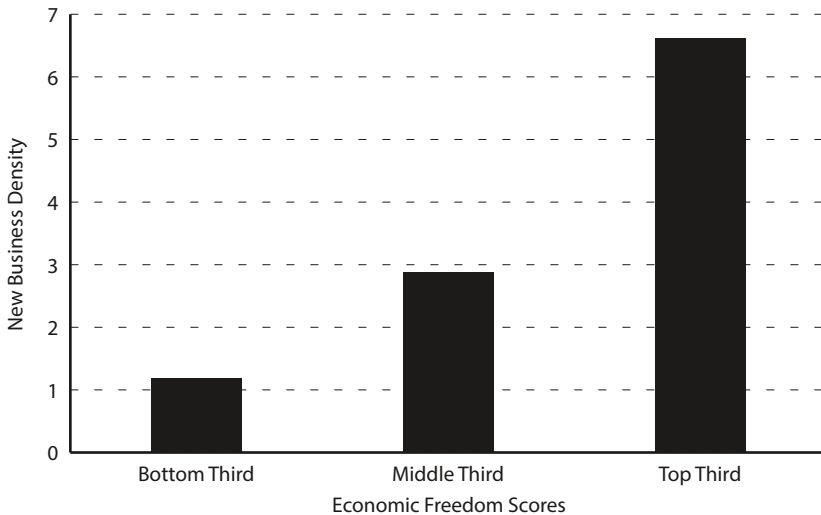
Using the most recent economic freedom ratings and most recent data on entrepreneurship rates, this section presents new evidence on the relationship between economic freedom and rates of entrepreneurial activity both across countries and across US states.

The most recent scores for economic freedom around the world were obtained for each country available from *Economic Freedom of the World* (EFW) (Gwartney, Lawson, and Hall, 2014). These data were matched with cross-country data on entrepreneurship rates from a joint effort of the World Bank and the Kauffman

Foundation (World Bank Group, 2013). According to the World Bank, the data collection was completed in June 2013 directly from 139 countries based on company registrations of new firms. Data are provided on new business entry density, defined as the number of newly registered corporations (private companies with limited liability) per 1,000 working-age people (aged 15–64). Once the matching was complete, there were 105 countries for which data were available on both variables. This is a significantly larger number of countries than has been examined in previous literature, which looked at OECD countries only.

How large are the differences in entrepreneurship rates by levels of economic freedom in 2014? To answer this question, the countries were then ranked by their level of economic freedom, and averages were computed for the data divided into three groupings. That is, the countries were broken down into the third having the highest EFW scores, the third in the middle, and the third having the lowest EFW scores (making for 35 countries in each grouping). *Figure 2.3* shows the differences in entrepreneurship rates across these groupings.

Figure 2.3. Entrepreneurship rates of countries grouped by lowest, middle, and highest scores for economic freedom, 2014



Sources: Gwartney, Lawson, and Hall, 2014; World Bank Group, 2013.

As can be seen in figure 2.3, the impact of economic freedom on entrepreneurship rates is strong. The third of the countries with the lowest economic freedom scores had just slightly more than one new private entrepreneurial venture

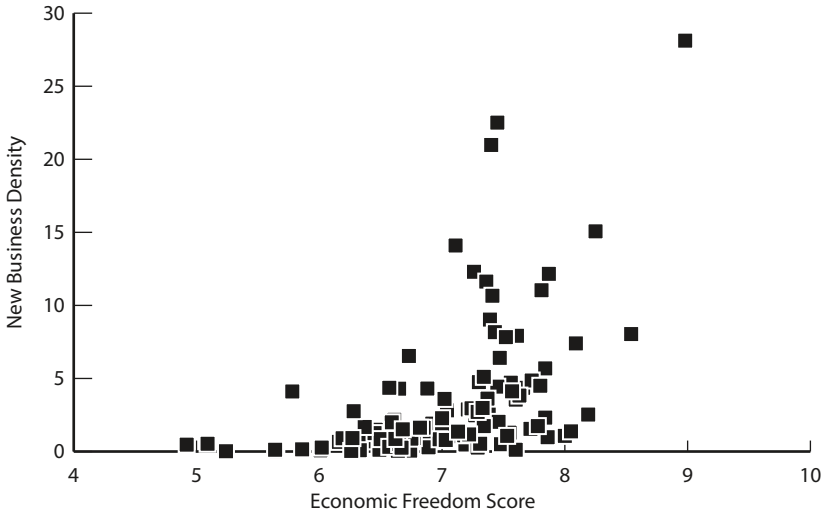
per 1,000 people (the actual value is 1.19) in 2014. Countries in the middle third achieved almost three new ventures per 1,000 people (the actual value is 2.89). But the third of the countries with the highest economic freedom scores achieved a rate of new venture formation of more than six per 1,000 people (the actual value is 6.63). In essence, each move to a higher third doubles the number of new entrepreneurial ventures.

As one might imagine, the extremes of the ratings were glaring. For example, the three countries in the overlapping dataset with the highest economic freedom scores (Hong Kong, Singapore, and New Zealand) averaged 17.1 new ventures per 1,000 people, while the three countries in the overlapping dataset with the lowest economic freedom scores (Democratic Republic of the Congo, Algeria, and Argentina) managed only 0.249 new ventures per 1,000 people (or alternatively stated, approximately one new venture per 4,000 people).

To further illustrate the data, *figure 2.4a* shows all 105 countries plotted with their associated levels of new business formation (per 1,000 people) and economic freedom scores. A simple linear regression using these data produces a coefficient of 3.33, with an associated *t*-value of 5.62 (significant at the 1% level) with an R-squared of 0.23. What this means is that each one-unit increase in a country's economic freedom score produces roughly a 3.33-unit increase in new business ventures per 1,000 people. Eyeing the data reveals that a non-linear estimation would be more appropriate and would result in a higher R-squared, although such an estimation would require excessive complexity for this chapter. Fortunately, the reality and significance of the non-linear relationship can be seen clearly in the figure. Basically, entrepreneurship rates are flat under an EFW score of about 7.0. Below that level, a country's institutions simply are not supportive of the entrepreneurial process. So moving from a very low score of 5.5 to another low score below 7.0 such as 6.5 would have little effect in promoting entrepreneurship due to the generally weak institutions. Once a country's institutions get above an EFW score of 7.0, however, increases in economic freedom result in increased entrepreneurship rates. While the EFW index tries to present the issue of socialism to capitalism on a spectrum, the result here indicates that countries with an EFW score below 7.0 simply fail to have an economy that features private entrepreneurship of any meaningful magnitude.

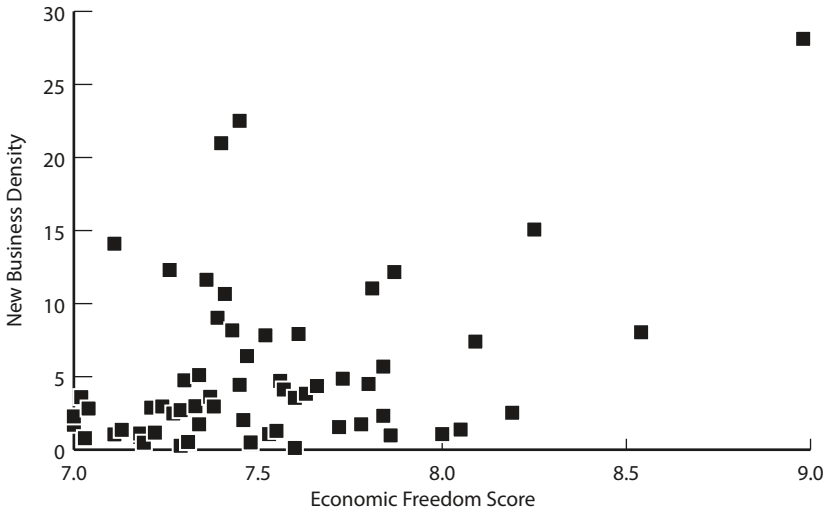
The relationship among those countries above an EFW score of 7.0 shows a much more linear relationship, as is shown in *figure 2.4b*. Countries among this group clearly improve their rates of entrepreneurship as they increase their economic freedom, even if only modestly.

Figure 2.4a. *Entrepreneurship rates and economic freedom for 105 countries, 2014*



Sources: Gwartney, Lawson, and Hall, 2014; World Bank Group, 2013.

Figure 2.4b. *Entrepreneurship rates and economic freedom for countries with an EFW score of 7.0 and above, 2014*



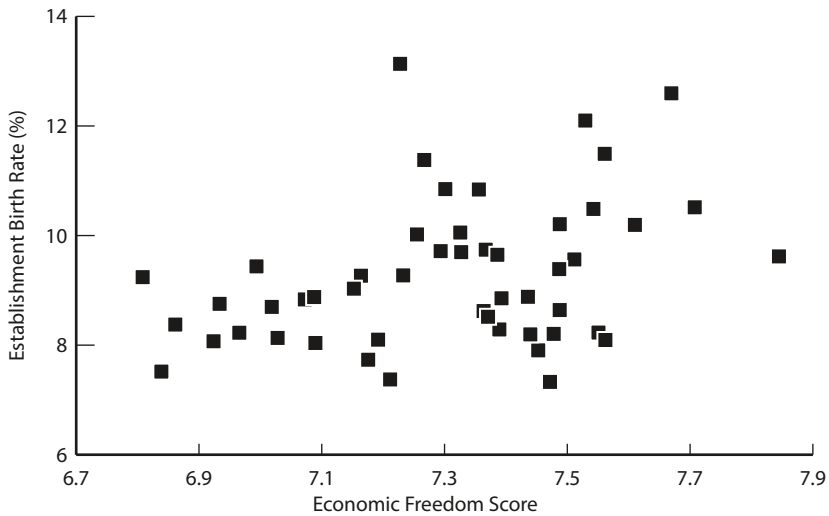
Sources: Gwartney, Lawson, and Hall, 2014; World Bank Group, 2013.

As mentioned earlier, the United States' level of economic freedom has fallen in recent years, from a peak of 8.65 in 2000 to 7.74 in the most recent report (using the chain-linked index). Using the above results as a guide, this 0.91-unit decline in economic freedom in the United States will result in a 3.03-unit decline in entrepreneurial ventures per 1,000 people among the working-age population. Using 2014 data, this implies that, for each of the preceding ten years, approximately 740,000 fewer new business ventures were launched in the United States than would have been launched had economic freedom not fallen in the 21st century from its level in 2000. Again, had the relationship been estimated using a non-linear model, this impact would have been even larger (approaching 1,000,000 fewer new ventures annually).

We move now to the US state level. The most recent economic freedom levels of the US states are obtained from Stansel and McMahon (2013). Data on establishment birth rates for the US states are obtained from the US Small Business Administration, Office of Advocacy (2014). *Figure 2.5* shows the relationship across all US states. Again, as in the case of countries shown before, the data show a clear positive relationship between economic freedom and productive entrepreneurship. States with higher economic freedom scores have higher rates of new ventures being formed. A simple linear regression produces a coefficient of 1.957 (with a statistically significant *t*-ratio of 2.63). This finding implies that for every one-unit increase in a US state's economic freedom score, the birth rate of new establishments goes up by almost two percentage points. Using the average state, that converts into approximately 2,600 new establishment births annually in the state for every one-unit increase in economic freedom.

Again, comparisons of the top three and bottom three states are striking. The three states with the highest economic freedom scores (Delaware, Texas, and Nevada) have an average establishment birth rate of 10.9% per year, while the three states with the lowest economic freedom scores (Mississippi, West Virginia, and New Mexico) have an average establishment birth rate of 8.4% per year, meaning they have establishment birth rates 2.5 percentage points lower each year than states with higher levels of economic freedom (or approximately 3,300 fewer new firms for the average state).

This section has shown that, using the most recent data available, the positive relationship between economic freedom and the rates of productive entrepreneurship remains strong and robust. Both countries and states with higher levels of economic freedom have higher rates of new venture creation—that is, productive entrepreneurship.

Figure 2.5. *Establishment birth rates and economic freedom in US states, 2013*

Sources: Stansel and McMahon, 2013; US Small Business Administration, Office of Advocacy, 2014.

7. Conclusion

It has long been established in the literature that areas with higher economic freedom are both more prosperous and have faster rates of economic growth. The important point made in this chapter is that an important medium through which economic freedom produces growth is productive entrepreneurship. That is, economic freedom produces growth because economic freedom promotes entrepreneurship, and this additional entrepreneurship produces economic prosperity.

This chapter discussed the relationship between economic freedom and prosperity through its impact on entrepreneurship. It also reviewed the existing literature on the topic, and provided updated empirical evidence on the relationship, which remains robust even in the post-great recession world.

From the discussion, it is clear that all component areas of economic freedom play an important role in fostering entrepreneurial activity. This chapter has outlined the specific ways in which the rule of law, regulation, government spending and taxation, and free trade affect the productivity of entrepreneurship. Even more important, however, is the fact that the overall level of economic freedom alters the balance between the rewards for productive and unproductive entrepreneurship. In short, more freedom generates more productive entrepreneurship and less unproductive entrepreneurship.

Entrepreneurship is a key source of economic growth and prosperity. A thriving entrepreneurial sector is enabled by good policies and institutions. The empirical evidence from both previous literature and the updated data presented here is robust and consistent—areas with higher economic freedom have greater levels of productive entrepreneurial activity.

Many states and nations have significantly misguided policies (such as government run venture capital firms, business development centers, and incubators) that are ostensibly intended to promote entrepreneurship but in the end only grow the size and scope of government. Such policies lower economic freedom and actually harm entrepreneurship. To promote and foster entrepreneurial activity requires policies and institutions that enhance economic freedom.

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