Chapter 1

Regulation and Entrepreneurship: Theory, Impacts, and Implications

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This chapter examines the impact of regulation on entrepreneurship. Doing so requires a basic understanding of both the role of regulation in a competitive market economy and how the democratic political process (that ultimately sets regulatory policy) affects which types of regulation are enacted. Specific applications to the size, quantity, and quality of new establishments and innovations are discussed in this chapter.

Entrepreneurship is a key source of economic growth due to the ongoing process of innovation it embodies. Approximately one-half of the differences in national economic growth rates among countries is explained by differing levels of entrepreneurial activity.[1] The actions of entrepreneurs create not only jobs, income, and wealth, but also new goods and services that improve consumer well-being. Over the past century, for example, medical innovations have improved life expectancy by approximately 30 years in the United States—and those years have been rendered more comfortable thanks to entrepreneurs such as Willis Carrier and Candido Jacuzzi, who invented modern air conditioning and soothing hydrotherapy pumps for bathtubs, respectively.

Explaining the critical role entrepreneurs play in economic development has been an important part of the work of scholars such as Joseph Schumpeter, who describes how entrepreneurs search for new

combinations of resources. Guided by the profit and loss system entrepreneurs unleash a process of "creative destruction" in which new goods and services replace old ones.[2] Other authors, such as Israel Kirzner, explicitly focus on the entrepreneurial discovery process as integral to the market process.[3]

The fact that good economic policies are essential for economic growth has been recognized since the time of Adam Smith, the father of modern economics. One of the key reasons for this relationship is that good policies help to promote entrepreneurship.[4] Regulation of business has the potential to significantly affect the entrepreneurial process. Because of this, regulation can have serious consequences for the economic health and prosperity of a nation, and understanding this relationship can lead to better economic policy.

The Role of Regulation in Free Market Capitalism

What, then, is the proper role of government regulation? Adam Smith put it best: "Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism, but peace, easy taxes, and a tolerable administration of justice; all the rest being brought about by the natural course of things."[5] What Smith meant was that for a market economy to function properly, property rights must be well-defined and enforced and individuals must be held accountable for any damages they cause to the person or property of others without consent.

One major point of common confusion involves the difference between "regulation" and the role of the legal and judicial system. Criminal laws concern issues such as theft and murder, and civil laws normally protect the private rights of citizens and offer legal remedies in disputes related to contracts, torts, property law, family law, and so forth. If, for example, a firm sells a defective product that injures a consumer, the issue is usually handled under the legal and judicial system and does not involve what economists normally consider or measure as "regulatory policy," which is enacted as part of the system of statutory law created through the democratic political process.

By *regulatory policy* or *regulation*, then, scholars usually mean the *additional* rules that are adopted through the democratic political process

to govern private decision-making, going beyond what would normally be considered the basic protections of life, liberty, and property, and compensation for unwanted third-party harm. To differentiate between regulation and these normal civil and legal protections that are necessary for the functioning of a market economy and should be in place, for the remainder of this discussion I will call normal civil and legal protections "the rule of law." Thus, *the rule of law* hereafter refers to the basic protections of legal rights against harm caused by others.

What, then, are some examples of what economists mean by *regulation*? Some countries, for example, have regulations that stipulate the maximum number of hours per week employees may work. In France, for example, the legal length of the working week is 35 hours, and employees may not work for more than 4.5 hours without a break. Many countries (and even subnational governments) have legal minimum wages and mandated worker benefits. Certain types of businesses often operate under rules related to accessibility for people with disabilities and to hours of operation. Other government rules may require the preferential use of local companies in sourcing. Ridesharing services such as Uber and Lyft and travel-lodging services such as Airbnb are now subject to widespread bans, limitations, and specific rules. Some alcoholic beverages cannot be sold on certain days of the week, at certain times of day, in certain types of stores, or with certain levels of potency. The adult recreational purchase and use of drugs such as marijuana are restricted in some locations but not in others, as are gambling and prostitution. Regulations also include bans on cigarette smoking, plastic bags, straws, and plastic-foam containers.

While the normal legal protections I've termed *the rule of law* involve preventing violations and compensating victims in cases where one party harms another against the second party's will, in contrast, regulatory policy generally interferes with voluntary contracting in cases were no third-party harm or violation of rights has taken place. Regulation bans, prohibits, or restricts the extent or conditions under which voluntary agreements (or trades) take place.

Another important point is that in free markets, individuals in their private dealings may impose restrictions—*private regulation*. Even

before local government bans on cigarette smoking, for example, many restaurants did not allow smoking. Some neighborhoods have homeowners' associations that ban short-term property rentals for profit. These types of restrictions that occur in the private sector are part of a normal competitive market economy, one in which some restaurants may not allow smoking while others may choose to allow it, and consumers' dollars represent votes that determine which businesses will be profitable and survive given the rules they have chosen to adopt.

But what I mean by regulation in this chapter is government regulatory policy, in which restrictions on voluntary choice are chosen and imposed by the political process, applied uniformly across a geographic-political jurisdiction in addition to any existing privately adopted rules and the rule of law.

The Public Interest versus Public Choice Views of Regulation

Now that I have defined *regulation* for the purposes of this chapter, I will turn to a careful consideration of the environment in which rules replacing or restricting private choice are decided upon and enacted—the democratic political process.

In which cases should the voluntary choices of individuals be replaced by government mandates? The traditional arguments for such interventions answer that regulation is justified in cases when the choices individuals might make are in some regard immoral, societally or culturally wrong, unfair or costly to certain groups of individuals, or harmful to the person making the choice or to others that may be affected. Examples of such choices include drinking too much alcohol or drinking it on the day that should be devoted to religious worship, committing suicide, selling one's body for money, recreationally altering one's mental state with substances that reduce personal productivity, or having rules that (even inadvertently) disadvantage one group of possible consumers over another.

Yet another avenue of argument maintains that while the rule-of-law protections may work in terms of providing after-the-fact compensation for harms done, more can be done to prevent the harm from occurring

in the first place. For example, under a rule-of-law system a drug manufacturer that sells a dangerous drug can be held accountable for any actual harm caused, and this risk of punishment may deter future incidents, but this doesn't change the fact that someone has been harmed.

According to these views, the government can and should interfere in private decisions to improve the overall functioning of society. Some argue that these types of restrictions in certain cases are good for the individuals whose behaviors are restricted. Parents, for example, often place rules on their children "for their own good," because children may make decisions that, with hindsight, they will later regret. The view that the government may perform a similar role for otherwise rational adults is often termed *paternalism*.

The view that the government should use regulatory policy to restrict private choice when doing so "helps" society and the individuals in it—that is, when the benefits of the intervention outweigh or justify the potential costs—is known as the *public interest* view of regulation.[6] Those who adopt this view show a willingness to, for example, slow the rate of entrepreneurship or economic growth if this would achieve some desirable social goal in the process.

The problem with this view in practice, however, is that these regulatory restrictions are decided upon within a democratic political process—one in which individual voters, special interest groups, lobbyists, bureaucrats and government employees, and elected legislators or representatives each have their own private interests and incentives that influence which rules are proposed and adopted. Often, for instance, restrictions on Airbnb rentals are favored and pushed through by heavily funded lobbyists representing the hotel industry, while restrictions on Uber and Lyft are similarly imposed not in the interest of consumers, but in the interest of seeking votes and campaign contributions from the local taxi industry. Employees of the Drug Enforcement Administration or local police whose jobs and funding may depend on the war on drugs may have a vested interest that influences decisions about marijuana policy.

This view—that outcomes of the democratic political process may not always be the policies that are in the overall public interest, but rather

the ones designed to benefit narrow special interest groups—is known as the *public choice* view of regulation. The field of public choice, pioneered by Nobel laureate James Buchanan, attempts to apply the basic principles of economics to understand the decisions made within the political process.[7] By using the same tools economists use to understand how consumers or business owners may make decisions in their own interests, scholars have recognized ways in which these tools also apply to individuals in their public-sphere activities. Someone who steps into a voting booth or a job in government does not magically transform into a fundamentally different person—people operating in the public sphere still desire to make decisions that further their own self-interest.

Thus, certain activities may be banned or regulated not because these restrictions help society, but because the restrictions benefit certain individuals or organized special interest groups—often at the expense of others. In this public choice view, widespread use of government regulations become less desirable. Regulatory-making bodies and agencies may be captured by special interests who then use them against the public good to limit competition and transfer income or other private benefits to themselves at the expense of others.[8] Firms are often able to manipulate and use regulations to limit competition and attack competitors.

In contrast to the rule of law, which prevents individuals from taking from one another, overzealous and overreaching regulations may become an instrument of plunder in which rules are imposed to transfer income and benefits to those who have the most political connections, clout, or votes.[9]

The best way to conclude this section is by discussing the "bootleggers and Baptists" theory, made famous by noted economist Bruce Yandle.[10] Yandle noted that in many cases individuals' and groups' private justifications for government regulations are hidden or masked in public interest motives. In other cases, two very different groups have private interests that simply align to pose a powerful political force. From the name of the theory you may have assumed—correctly—that Yandle was referring to bootleggers' and Baptists' shared interests in policies regarding alcohol prohibition. During Prohibition, bootleggers benefitted from the regulations restricting the production and sale of

alcohol. Moonshiners who distilled hard liquor, and the mobsters and bootleggers who transported and distributed it, were benefitting from the restrictive policies and were just as much in favor of keeping them in place as those who supported prohibition on moral grounds (the "Baptists," in Yandle's terms).

Thus, while a current regulatory policy may at first seem to be imposed for public-interest or moral reasons, the real underlying reasons are likely private economic benefits. For example, a lobbyist representing the taxi industry, in an effort to ban Uber, may find it effective to publicize rare cases in which Uber drivers have committed crimes rather than simply arguing that Uber's business model lowers the profitably of the taxi industry.

This reality should lead a careful thinker to consider that many regulations imposed for seemingly social reasons may, rather, be in place because of the private interests they serve at the public expense. Looking at the larger picture, however, one needs to carefully consider the true public benefits and costs of regulations when deciding which regulations may or may not be warranted.

The Cost of Regulation

The last general consideration that must be clarified before a discussion can begin about the specific impact of regulations on entrepreneurial activity regards the potential measurement of the costs of regulations. The noted 19th-century economic philosopher Frédéric Bastiat was well known for his forceful arguments that the true costs of government actions often far exceed what is obvious and visible.[11] The "unseen" or "secondary" effects, often referred to as "unintended consequences," play an important role in computing the true costs of regulations—the costs that must be weighed against any potential benefit.

In many cases, these unintended consequences of regulation simply result in the actual costs of a regulation being greater than what was anticipated. For example, local bans on alcohol sales (i.e., in "dry counties") are usually associated with obvious costs such as lost tax revenue and fewer eating and drinking establishments. However, an often-overlooked cost is that these regulations result in more individuals driving

to neighboring counties to purchase and consume alcohol, leading to increased drinking-and-driving fatalities. In some cases, a regulation may be passed that in hindsight creates costs so much higher than anticipated that its passage would not have been justified to begin with if the true costs had been known.

One might think that such inefficient regulations would simply be overturned once their costs are known (as was done when the federal alcohol prohibition was repealed). But there is a well-documented bias in political action against such changes. Regulations, once imposed, are often hard to remove or change, even if they are later outdated, unnecessary, or inefficient. For example, they may create vested-interest groups that benefit from the inefficient rules and fight for them to remain in place. Noted economist Gordon Tullock called this the "transitional gains trap," and illustrates it at work in the political support to keep in place inefficient agricultural subsidies and taxi medallions.[12] In other cases, bad or outdated regulations remain on the books simply because they are not on the political radar; they go unnoticed amid the many new high-profile items on the political agenda. This is why it is strongly desirable to have normal procedures in place to review existing regulations, or mandatory sunset provisions that cause newly adopted regulations to expire at some time in the future.[13]

Frequently, these unintended consequences result not just in higher costs of regulation, but also in much lower (or nonexistent) benefits. In some cases, regulations may hurt the very groups or causes they were intended to help. For example, the employment provisions of the Americans with Disabilities Act were passed with the intention of lowering barriers to employment for people who are disabled. The legislation prohibits discrimination based on disability status and further requires employers to make reasonable accommodations for employees with disabilities. However, there is evidence that the Americans with Disabilities Act has harmed the employment opportunities for disabled Americans by increasing the cost of hiring disabled workers and making it harder to fire them, resulting in a decrease in the employment of disabled individuals.[14] Similarly, the Endangered Species Act created regulations allowing large areas around the nesting

grounds of the red-cockaded woodpecker to be declared "protected habitats," a designation that imposes stringent restrictions on the surrounding property owners. This unleashed a frenzy of destruction as landowners rushed to cut down trees in which woodpeckers might potentially nest, leading to a large decrease in the potential habitat for the birds.[15] More recently, researchers have found that bans on plastic grocery bags have resulted in at least a 25 percent increase in emergency room visits and deaths related to harmful *E. coli* and other bacteria from unwashed reusable bags.[16] Once you consider the harmful secondary effects, these regulations are significantly less beneficial than they might at first appear.

Regulation, Rent-Seeking, and "Unproductive" Entrepreneurship

Widespread regulation also works to lessen private-sector entrepreneurship indirectly by distorting the private returns (profit rates) to private-sector activity versus political activities. When regulation causes large changes in the wealth or income of individuals, these individuals are willing to spend resources to affect the political process and alter the course of action on the regulation in question. That is, a regulation that would make the XYZ company a monopolist in an industry by restricting competition would be very valuable to the company, enough so that the company might be willing to devote substantial resources to making sure the regulation gets enacted. Its efforts might take the form of political contributions, lobbying, or other means. There is now a large literature documenting the enormous amounts spent by individuals attempting to sway the political process in their favor, a process known as *rent-seeking* in the academic literature.[17] According to the Center for Responsive Politics, for example, in 2018 alone $3.46 billion was spent lobbying the federal government to influence legislation, and more than 11,000 registered lobbyists were doing the lobbying. This is in addition to the $3 billion in campaign contributions individuals and interest groups gave to support federal political candidates.[18] And this is just at the federal level; similar amounts were spent to influence state and local political actions.

There is yet another important cost policymakers should consider before they enact regulations—one that also has the potential to render regulations more costly than they appear at first glance. This is the fact that regulation directly results in a reallocation of entrepreneurial talent away from the private sector and toward activities that are innovative in the political arena.[19] Some members of society who could have become accomplished private-sector entrepreneurs instead become accomplished lobbyists or lawyers and spend their talents attempting to sway public policy in the direction they or their clients favor.

Simply put, the more government gets involved in the economy, and the more influence it has over the allocation of resources and flows of income, the greater is the incentive for talented individuals to devote their time and careers to the political sector (and consequently not to the private sector). Compounding this effect is the fact that high levels of government regulation and taxation generally lower the profitability of private-sector business activities and thereby further reduce the incentive to engage in private-sector entrepreneurship. Thus, more government influence and control over private actions through regulation reduces the relative return to becoming a private-sector entrepreneur and increases the return to becoming a public-sector entrepreneur (a talented and innovative lobbyist, for example).

Economists have constructed several overall indexes that measure the extent to which governments do (and do not) intervene in private markets across both states and nations. The most famous of which is the Economic Freedom of the World index, but there are also ones for states and other political jurisdictions. While the index includes more policy measures than just regulation, regulation is a major component of the index. As regulation grows, economic freedom declines.

In a 2008 study, I showed that states with higher economic freedom scores have both more productive private-sector entrepreneurship and less unproductive entrepreneurship.[20] I constructed 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. There was a clear and

strong relationship between the economic freedom scores of US states and their levels of net entrepreneurial productivity. Higher levels of economic freedom therefore not only promote the good types of entrepreneurship but also decrease the destructive types of entrepreneurship.

While measures of unproductive entrepreneurship aren't widely available at the international level, there is clear evidence of a similar relationship between more government regulation (as reflected in lower economic freedom scores) and lower rates of productive entrepreneurship. In a 2015 study I ranked countries by their level of economic freedom and computed average levels of entrepreneurship for each of three groups—countries with economic freedom scores in the top third of scores, countries with scores in the middle third, and countries with scores in the bottom third.

The third of countries with the lowest economic freedom scores in 2014 (indicating the most government regulation of business) had just slightly more than one new private entrepreneurial venture per 1,000 people, while the third of countries with the highest economic freedom scores achieved a rate of new venture formation of more than six per 1,000 people. So, for every 1,000 people in a country, there were roughly five more business start-ups in the least-regulated economies than in the most-regulated economies.

Regulation, Start-Up Activity, and Firm Size

When regulations make it more costly or difficult to open or run a business, we should generally expect they will result in fewer businesses.[21] Until recently, studies attempting to examine the impact of regulation on entrepreneurship did so either theoretically, on a case-study basis, or by using proxies for the level of regulation, such as enforcement agency budgets, page counts of regulatory codes, survey measures, procedure counts, or cost estimates.

One study, for example, finds that the Clean Air Act, in its first 15 years, caused a loss of almost 600,000 jobs and $75 billion in economic and business activity.[22] There is also evidence that when countries take steps to enact regulatory reform to lessen business regulation these efforts have substantial positive impacts.[23]

More recently, a new measure of regulation has appeared that may allow more extensive research on this issue in the future. The publication and availability of RegData now offers a comprehensive metric of US federal regulation by agency and by industry (classified using the North American Industry Classification System) going back to 1970, on the basis of a statistical computer analysis of words and phrases embedded in agency regulatory restrictions.[24] Using these new data, economists James Bailey and Diana Thomas have examined how levels of industry regulation impact firm births, firm deaths, and new hires, and have done so separately for small and large firms. Using the data for all firms, they find that a 10 percent increase in regulation leads to a 0.47 percent decline in firm births and 0.63 percent reduction in new-firm hiring, and they find that this relationship is even stronger and larger for smaller firms—which means that regulation hurts small business activity disproportionately.[25]

Regulation and Firm Size

While it is perhaps unsurprising that states or countries with more regulation have fewer new entrepreneurial ventures, what may not be so obvious is that higher levels of regulation also affect the sizes of firms—or, more precisely, the viability of businesses of differing sizes.

Most regulations function as "fixed costs," meaning that the cost of compliance is similar for both large and small firms. For example, the cost of installing one entrance ramp for people with disabilities is the same for a small diner with 10 seats as it is for a larger diner with 500 seats. Similarly, the time cost of permitting and paperwork involved in opening a business might be nearly the same for a small firm as for a large firm. The implication is that these fixed costs of regulations disproportionately affect small firms. As a proportion of their costs, dealing with regulations is less costly for larger firms than for smaller ones.

Using measures of US state-level regulatory enforcement costs, researchers have found that more state-level regulation is associated with a significantly lower proportion of establishments with only the owner working (no employees) or with one to four employees—in other words, small businesses.[26] These results suggest that one additional cost of the regulatory system, often overlooked, is its impact on

the efficiency of firm structure. By inefficiently influencing firm size, regulatory systems create additional costs within the economic system.

While regulations generally increase costs for all businesses, higher regulatory hurdles generally give a relative cost advantage to larger establishments, which can maintain internal tax and legal departments, as opposed to smaller firms that usually need to build external networks. Individual entrepreneurs simply have a difficult time dealing with the costs associated with these regulatory barriers by themselves. This effect of regulation has substantial implications for economic growth because it implies greater regulatory burdens lead to fewer small entrepreneurial start-ups. If there is less entrepreneurial experimentation in the economy, fewer business successes will be present in the marketplace, leading to slower economic progress and innovation.

This is particularly harmful because small businesses are disproportionately responsible for new innovations and growth. Several authors, including famous economists such as Joseph Schumpeter and William Baumol and noted Harvard Business Professor Clayton Christensen, have all stressed that while large firms are generally better at improving existing products (what they term "incremental improvements"), it is small firms that have pioneered most of the major new innovative goods and services in the economy (the "disruptive innovations").[27] By disadvantaging the small-business, first-time entrepreneur types, regulation can disproportionately influence innovation in an economy.

In the end, the best form of regulation is competitive markets with low entry barriers, an argument famously made by Nobel laureate Milton Friedman. When one firm is behaving poorly, new firms can come in and earn its customers if there is freedom of entry into industries (i.e., "contestable markets").[28] According to this logic, the worst thing regulation can do is make it more difficult or costly for competitors to enter industries and threaten incumbent firms that aren't doing a good job satisfying consumers at the lowest cost.

The Regulation of Entrepreneurial Inputs

An additional facet of regulation's impact on entrepreneurship is worth discussing—this is how it distorts choices regarding the mix of inputs

in the productive process. Normally, a business would select the combination of labor, capital, and land that minimizes the cost of production for its desired level of output. It would also choose the location, advertising strategies, and quality best suited to winning and satisfying its customers. Often, however, regulations either distort the relative prices of various options or restrict which choices can be made. For example, labor regulations regarding hours, benefits, and minimum wages distort the choices of entrepreneurs who must decide among labor and machinery and equipment.

One example case is the regulations that restrict businesses attempting to operate in the historic districts of cities. For example, the New York City Landmarks Preservation Commission placed an ordinary gas station within the bounds of its SoHo historic district when the district was drawn up, preventing or at least significantly complicating the owner's plans to redevelop the property into a mid-rise condo development.[29] The owner even needed city approval to install new doors on a shed on his property. Even though the gas station was no longer profitable, the historic designation prevented the resource from being properly and efficiently reallocated.

Regulation and Corruption

A final issue related to the regulation of entrepreneurial start-ups and of business more generally is that it creates opportunities for the corruption of public officials.[30] When a country (or state) imposes particularly onerous or burdensome procedures on those seeking to open a new business, entrepreneurs may find they can bribe their way through the process much more easily. In the literature this is often referred to as "greasing the wheels" of the regulatory process.[31]

Perhaps nowhere is the anecdotal and empirical evidence for this effect stronger than in post-socialist economies, which have some of the highest corruption rates in the world.[32] The recent headline-making admission of casino owner Sheldon Adelson that he likely violated US law by bribing Chinese officials provides a case in point, though admittedly an anecdotal one. The *New York Times* reports, "As with many lucrative business spheres in China, the gambling industry on

Macau is laced with corruption. Companies must rely on the good will of Chinese officials to secure licenses and contracts. Officials control even the flow of visitors, many of whom come on government-run junkets from the mainland."[33]

The general idea is that when the barriers to opening a business are high, being able to bribe political agents can ease the business start-up process. When government agents control the flow of licenses, contracts, or customers, the entrepreneurs who provide favors to these government agents are better equipped to successfully navigate the process of opening a successful business. In a nutshell, for many entrepreneurs around the globe, paying bribes can be viewed simply as a cost of entering an industry—equivalent to, say, having to purchase a business license. The problem, of course, is that government corruption is generally harmful and destructive to achieving economic growth and prosperity, and to the growth-generating process of entrepreneurship.[34]

Policy Reform

As this chapter has argued, government regulations often create significant costs and unintended consequences. The potential benefits of any regulation, proposed or existing, should be weighed against these costs. Careful consideration and requirements that cost-benefit analysis be performed on existing and proposed regulations are a step in the right direction, but those who prepare cost estimates must try to include the harder-to-see costs in areas such as lobbying, rent-seeking, and corruption. Enacting and enforcing sunset provisions is another step toward a more efficient regulatory code. It is also important for policymakers to ensure that regulations do not lessen competition, restrict entry, or create burdens so high they interfere with the ability of new small businesses to open.

Conclusion

The academic literature on regulation's impact on entrepreneurship suggests, unsurprisingly, that excessive regulation is harmful to the level of entrepreneurship, the productivity of entrepreneurship, and the level of innovation, and consequently to economic growth. The problematic

issue, however, is understanding the level beyond which regulation becomes "excessive" or "inefficient." Some may argue that achieving certain social, moral, or fairness goals is worth the cost of reduced entrepreneurship. While the values placed on these trade-offs are subjective, often regulations imposed with noble goals do not deliver the level of benefits expected because of unintended consequences or the inherent "public choice" shortcomings of the political process that give undue influence to concentrated special interest groups.

In the end, regulations are costly—more costly than they at first appear. The true benefit of each potential regulation needs to be weighed against the considerable cost regulations impose, and all regulations should be forced to prove their worth before they are adopted (or continued) as policy. Competition among firms, enabled by contestable markets, is the best form of dynamic regulation in an economy, and in order to function properly an economy requires a strong rule of law within which the life, liberty, property, and individuals' contracts are upheld and people are held accountable for damages to others. Regulations beyond this scope generally cause individuals and firms to devote resources toward attempting to influence government policy and often lead to the corruption of government officials.