CHAPTER 8 Liberty's Unfinished Business: How to Eliminate Political Barriers to Global Entrepreneurship

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Introduction: Economic liberty inspires global entrepreneurship

It is hard to start a business that works. Most people do not attempt it. The reasons are complex, but the World Bank's *Doing Business* (2017) report finds only a handful per 1,000 adults worldwide start new ventures.

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Alexander S. Kritikos (2014: 1) notes just how rare it is: "Even in innovation-driven economies, only 1–2% of the work force starts a business in any given year." In addition, given that most who try do not succeed, woe is compounded when failures are due to excessive regulation by governments. Some signs in wealthier countries seem discouraging with respect to boosting entrepreneurship; for example, the US Census Bureau recently found startups in America at a 40-year low (Long, 2016).

It was never inevitable that humanity would figure out how to create wealth. However, it did, albeit not yet for everyone. Fortunately, in today's hyper-connected world, the pursuit of economic liberty has moved to the international level as economic freedom in any one country can influence policies in others, and as countries become more interdependent in their efforts to increase wealth. However, so too have the gravest threats to wealth creation given that so few carry the load. In this chapter, we make a 21st century case for completing *Liberty's Unfinished Business*: That business consists of affirming linkages between the regulatory climate and entrepreneurship, and then taking action to maximize global economic freedoms and, in turn, the prospects for entrepreneurship, wealth, and job creation. Most policymakers have bid good-riddance to the 20th century's dark age of central planning; but they must likewise reject planning's little brother—the presumptuous administrative state—before it takes root in emerging economies and those recently free of dictatorship. They must also uproot the administrative states in advanced nations experiencing declining rates of entrepreneurship.

Pioneering entrepreneurship and innovation economists Israel Kirzner and Joseph Schumpeter did not fret about entrepreneurship's "antecedents, institutional or otherwise" (Bradley and Klein, 2016: 215) when describing the centrality of the all-important judgmental role of an entrepreneurial prime mover with free will. Nonetheless, the linkages between regulation

presume their valuable assistance necessarily signifies agreement with my analysis or recommendations.

in a society and the presence of entrepreneurship and economic growth² appear to be as well documented as regression analysis and correlations allow. Researchers employ a great many (imperfect) proxies for both dependent variables (those quantities we want to say are gauges of entrepreneurship) and the innumerable independent variables that influence entrepreneurship. Naturally, the analytical enterprise suffers from left/right and partisan disputes, as manifested in questions over, say, regulation's impact on jobs and the concepts of market failure and agency "expertise" (controversies we'll address in our recommendations).

Cronyism meanwhile impedes both entrepreneurship itself and the measurement of it. Even where agreement exists that regulation affects entrepreneurship, we quickly realize that there are wildly different institutions and different categories of regulation, just as there are different categories of entrepreneur. Cultural attitudes matter to budding entrepreneurs, and those attitudes can be affected by many things, as the intercollegiate-consortium based (and encyclopedic, covering over 60 countries for nearly two decades) Global Entrepreneurship Monitor (GEM, 2017) describes. Impressions of how a society treats entrepreneurs, whether or not people believe entrepreneurs are respected, how the media treats them, whether or not becoming an entrepreneur is a good career choice, the status accorded being an innovator, and impressions of whether or not society makes it harder than necessary on entrepreneurs, can lead to the choice to bag it and work for someone else instead.

Naturally, we would like a working definition of entrepreneurship; yet of course there are different shades of meaning and emphasis. The entrepreneurship of being one's own boss is most obvious, as some see entrepreneurship as startup activity and the act of creation itself; others might include in the definition being an employer of others or even creativity and innovation on the part of going concerns. Still others might credit a going concern reacting to competition by keeping abreast of and surpassing it. There can even be entrepreneurial behavior by employees, activity that

² A September 2017 search of Google Scholar would have given you "about 159,000 results" http://bit.ly/2hhhIO1>.

also differs from country to country and culture to culture, as highlighted in the GEM. Indeed, "[w]hile research has grown considerably in the last two decades, there is still no consensus regarding the meaning of entrepreneurship" (Godin, Clemens, and Veldhuis, 2008). Of course, in classical liberal movement, the archetypal formulation by Israel Kirzner (1973) emphasizes the entrepreneur's alertness to the dispersed knowledge that classical economics tended to treat as perfectly known and assumed to be unimportant. Jim Blasingame of the Small Business Advocate, author of Age of the Customer, gives a solid definition useful for academics and practitioners alike: "An entrepreneur attempts to create a new product, service or solution while accepting responsibility for the results" (2012). Unfortunately, government regulation can both undermine responsibility and interfere with good results. Indeed, "political entrepreneurship" can negate the real thing.

Global regulators should recognize that as an institution, capitalism doesn't just make the world richer, but fairer and safer (Smith, 2016). While we acknowledge frequent rent-seeking by corporations, in its essence, the corporate configuration is one of the most democratizing forces yet devised (Smith, 2017). Indeed, it is arguably the prominent form of voluntary organization for allocating risk, fostering shareholder wealth accumulation, and enabling economic interactions between strangers (the latter mimicking the "connections" the well-off have always had and always will have in non-free societies; if you're well-known or rich or powerful, you can always transact). Despite disdain for capitalism among the millennials who will be leaders in short order, the institutions of economic freedom are necessary for entrepreneurship, prosperity and well-being, and for creating the level playing field statists claim to champion.

These assertions are not merely theoretical. Long-term trends toward more material wealth (and one hopes more freedom and liberty) show things objectively better than ever (Burkeman, 2017). "Until about 1800, the vast bulk of people on this planet were poor. And when I say poor, I mean they were on the brink of physical starvation for most of their lives," according to Joel Mokyr (quoted in Swanson, 2016). The World Bank (2016) classified less than 10 percent of the global population as living in extreme

poverty, compared to 37 percent in 1990 and 44 percent in 1981. No matter where one resides in the world, our grandparents or great grandparents had no refrigeration, no air conditioning—often no indoor toilet if you go back only two or three generations. Technologies in the hands of the poorest today would astonish our forebears. The first successful transatlantic cable carried eight to 17 words per minute, and it was expensive (Colburn, 2016). Today, for the price of connection, the Internet cheaply provides luxuries that prior generations had to pay for (news, maps, entertainment, networking, publishing). Such advantages may arrive even more rapidly in the developing world as these nations embrace wireless versions of the expensive wireline network infrastructures that western nations had to build.

By and large, "technology we take for granted was worth billions not long ago" (Kessler, 2016), and the hours of labor it takes to earn things like a washing machine or 2000 calories continually drop (Boudreaux, 2016). Thus real wealth, if not dividends or income streams collected, is gigantic in terms of the explosion of material conditions and life expectancies that had been abysmal before 1800 (Swanson, 2016). Such "externalities" of global wealth increasingly enrich everyone, but of course, interference matters, such as taxes and regulation that render the poor who do manage to build assets unable to invest creatively, start entrepreneurial ventures, or transfer that wealth to descendants, thereby aggravating income inequality.

In this chapter, we will highlight research pointing to well established (typically but not always inverse) connections between regulations and entrepreneurship, and the well-trod importance of institutions of economic liberty and their positive relationship to entrepreneurship. In the process, we cover a slice of the profusion of global governmental reports and academic and scholarly articles detailing current inquiry into measures and determinants of entrepreneurship. We also discuss limitations of modeling ("infinite" variables, the upending of the entrepreneurial landscape by networking and automation, and endogeneity) and other variables. We then make extensive observations and recommendations on why and how regulations and barriers to investment need to be reduced and reformed in order to improve incentives for entrepreneurs. More than anything, a framework of economic freedom within the rule of law, whatever other

root causes of entrepreneurship there may be, is needed to afford the best possible opportunity for those who take that all-too-rare and courageous step to be entrepreneurs. In making these recommendations, we explore the tensions created by inadequate institutions, the stubborn prevalence of rent-seeking, and the related insistence on the part of even those doing the measuring of entrepreneurship that regulation performs as intended rather than being undermined by unintended consequences (or that regulation can be largely counted on to "behave" rather than misbehave). Finally, our recommendations do not let the private sector off the hook; we spell out the business and entrepreneurial sector's own duty to defend economic liberty in the face of wide opposition and opportunism.

Conceptual linkages between regulation and entrepreneurship

We know that institutions matter. They have to, because the phrase returns over 200,000 Google search results. There rightly exists abundant interest in "how scholars can theorize and study the effects of institutions and institutional change on entrepreneurship, and the effects of entrepreneurship on institutions, at and across different levels of analysis" (Bradley and Klein, 2016). Regulation, specifically, "as an important part of the institutional environment, is a central aspect of the ecosystem for innovation and entrepreneurial engagement" (Zárate Moreno, 2015: 8). Indeed as Margareta Drzeniek-Hanouz of the World Economic Forum (2015) put it, "If you want to predict the prosperity of a country, just look at its institutions."

Anna Maria Zárate Moreno (2015) stressed the particular vulnerability of entrepreneurs to "administrative regulation that creates entry barriers," and quoted the OECD's *Entrepreneurship at a Glance*: "A combination of opportunity, capabilities and resources does not necessarily lead to entrepreneurship if opportunity costs (e.g. forgone salary and loss of health insurance) and start-up costs outweigh the potential benefits. The regulatory framework is therefore a critical factor affecting countries' entrepreneurial performance" (OECD, 2016). On the plus side, despite millennial support of the welfare state and large government programs, and

"Eurocrat" dreams of more regulation, "[a]cross Europe more voters would rather Brussels return power to the member states than increase its own" (Micklethwait, 2017). Similarly, a 2011 Gallup Poll found small businesses putting government regulation at the top of a list of complaints (Jacobe, 2011), while the latest National Federation of Independent Business's *Small Business Optimism Index* shows "soaring optimism, in not-insignificant part related to the Trump Administration's roll-back of Obama-era regulations?)" (NFIB, 2017). Of course, it is impossible to collect statistics and opinions from businesses that never formed thanks to regulation. This is one of our measurement problems in assessing the linkages between regulation and entrepreneurship.

Favorable institutions (rule of law and property rights preeminent among them) can enable and advance liberty and entrepreneurship/innovation—and poor institutions can curtail these values. For example, in Why Nations Fail: The Origins of Power, Prosperity, and Poverty, Daron Acemoglu and James Robinson (2012) demonstrate the power of political and economic institutions in contributing to economic success or failure (the North and South Korea contrast features prominently). There is an expansive literature on informal and formal rules, that is, norms, customs, taboos, and conventions, as well as constitutions, laws/regulations, and court rulings that provide the "constraints" that allow stable market economies to expand and urbanize (North, 1991). There is also a rich history of private institutions and rules as alternatives to governmental ones in influencing entrepreneurship. These include early stock markets evolving via entrepreneurial choices rather than planning and regulation, as Edward Stringham (2015) describes in Private Governance: Creating Order in Economic and Social Life, and voluntary and private ordering of the commons, as shown in work by Elinor Ostrom (Osorio, 2012).

With respect to the policy preconditions enabling sprightly entrepreneurship, and the cultural factors that lie even deeper, Joel Mokyr asserts that "culture is not independent of political and institutional circumstances" (Swanson, 2016). He gives the example of Europe's fragmentation relative to China, a condition which meant that those with radical ideas could "pack their suitcase and go across the border." Reformations occurred,

Mokyr notes, not just in religion but also in "astronomy, chemistry, medicine, mathematics and philosophy" that filtered down to the manufacture of everyday goods. The change, Mokyr continues, was the emphasis on everyday betterment: "Before the Industrial Revolution, learned people in Europe changed the agenda. They say, 'Look, we should study nature, but we should do so to improve our material welfare." Obvious now, not so much in 1600, notes Mokyr.

While most assert "institutions matter," the sentiment is not universal. Dierdre McCloskey emerges to say, no, it is "[n]ot Douglass North and his institutions," but rhetoric and the power of language and ideas to convert rude middle class material strivings into talked-about virtues, or, put another way, *Bourgeois Dignity* (2010).

Likewise ensnared in the entrepreneurship debate, especially with respect to declines in entrepreneurship in wealthier nations, is the broader dispute over whether *homo sapiens* has already grabbed the low-hanging economic-growth fruit. This debate was typified in a Federal Reserve Bank of Richmond (Steelman and Weinberg, 2015) discussion of "gloomy" Robert J. Gordon's *Rise and Fall of American Growth* and Tyler Cowen's *The Great Stagnation*, in contrast to the "we've-only-just-begun" attitude of cornucopian economists like *Culture of Growth* author Joel Mokyr. Let us just say that whatever the root influences of institutions and culture, and whatever becomes of the stagnation debate, societies and entrepreneurship fare better with the institutions of economic freedom. Wise policies will open up opportunities for all, and allow people to learn, across borders and oceans, from one another's successes.

Fortunately, today's entrepreneurs largely operate in a world that wishes them the best, as seen for example in the European Commission's Eurobarometer surveys of social attitudes (e.g., European Commission, 2010), and in the aforementioned Global Entrepreneurship Monitor (2017). Entrepreneurs, in turn, anticipate creating jobs in the next five years at rates

³ For a treat, see the *Cato Unbound* (2010) exchange on this topic between McCloskey, Gregory Clark, Matt Ridley, and Jonathan Feinstein.

of between 44 and 46 percent (GEM, 2017: 9). Notable again is how developed, wealthier countries fare worse by some metrics.

The GEM survey measures:

- 1 *Societal values about entrepreneurship.* Generally, entrepreneurs are well-regarded by 60 percent or more in poorer and wealthier societies alike;
- **2** *Entrepreneurship as a career-choice.* An interesting contrast is that three-fourths of working age respondents in Africa consider entrepreneurship a good career choice, but less than 60 percent in Europe does.
- 3 *Self-perceptions about entrepreneurship.* A healthy 40 percent overall appear to perceive opportunities for entrepreneurship, with 22 percent across all economy types saying they intend to act. Europeans express the lowest intent to act.
- 4 *Phases/types of entrepreneurial activity*. Interestingly, the greater the level of economic development, the lower the "Total Earlystage Entrepreneurial" (TEA) activity. "[T]he average TEA rate for the factor-driven economies in 2016 was almost double that for the innovation-driven economies (17% compared to 9%)." In Latin American and Africa/Caribbean, "just under a fifth of working-age adults are engaged in early-stage entrepreneurial activity," while the rate for Europe is lowest of all, "in line with its low entrepreneurial intention rates."

⁴ The GEM uses World Economic Forum (WEF) classifications: (1) factor-driven (subsistence agriculture and extraction businesses dominance, high unskilled labor); (2) efficiency-driven (more efficient production processes and better product quality); (3) innovation (knowledge-intensive, expanded service sector) (p. 13).

Where entrepreneurship takes place varies across economies, something highly likely to be influenced by regulation, as well as other factors. "Around half of the entrepreneurs in factor- and efficiency-driven economies operate in the wholesale/retail sector compared to a third of entrepreneurs in innovation-driven economies. In contrast, 46% of entrepreneurs in the innovation-driven economies are in information and communications, financial, professional and other services—twice as many as in the other two development groups" (GEM, 2017: 10).

Employee "entrepreneurship" and where it happens is noteworthy, too. According to the GEM survey, "Entrepreneurial Employee Activity (EEA) is negligible in both the factor- and efficiency-driven economies; however, it accounts for a substantial portion of entrepreneurial activity in the innovation-driven group [highest in North America and Europe], reaching more than half the average TEA level in this group" (GEM, 2017: 8). Despite regulatory barriers to employment in the US, it turns out employees are important to innovation.

For regulators, an important finding concerns "The Divide between Subsistence and Transformational Entrepreneurship," which describes in its abstract "two very distinct sets of entrepreneurs" (Schoar, 2010: 57). Policymakers should recognize that "evidence suggests that ... only a negligible fraction of them transition from subsistence to transformational entrepreneurship" and that the two dissimilar groups respond differently to "policy changes and economic cycles." The challenge according to this line of research is that "most development policies aimed at fostering entrepreneurship focus on subsistence entrepreneurship in the hope of creating transformational entrepreneurs" (p. 57), which could backfire.

A related concept is that of opportunity-motivated entrepreneurial activity (OME) and necessity-motivated entrepreneurial activity (NME). One study (McMullen, Bagby, and Palich, 2008) looked at the effect on these of an assortment of 10 factors representing economic freedom, as well as gross domestic product (GDP) per capita for 37 countries. The study found OME and NME to be negatively associated with GDP per capita (this seems to conform with Europe scoring lower than Africa in some respects in the GEM survey, and with entrepreneurship rates being

lower in wealthier counties) and positively associated with labor freedom. Others results also find entrepreneurship to be sensitive to particular local circumstances: OME "was positively associated with property rights, while NME was "positively associated with fiscal freedom and monetary freedom." The authors concluded that "governmental restrictions of economic freedom appear to impact entrepreneurial activity differently depending on the particular freedom restricted by government and the entrepreneur's motive for engaging in entrepreneurial action."

Evidence: The more red tape and regulation, the less entrepreneurship and innovation

If getting things done requires too many steps, there will be fewer entrepreneurs. The counterintuitive examples one finds to the maxim that increases in regulatory restrictions reduce entrepreneurship may not seem as counterintuitive when rent-seeking and political predation are taken into account. This section assesses some of the literature's empirical evidence regarding the conceptual linkages between regulation and entrepreneurship (and characteristics of the entrepreneur and his economy) discussed above. We also address some problems in measurement, such as difficulties in holding constant moderating and mediating variables that can influence the empirical relationship between regulation and entrepreneurship. However, the attempt to measure matters for good governing. As the World Bank stated in *Doing Business* (2017), "[Hernando] de Soto's conjecture, which turned out to be right, was that measuring and reporting would create pressure for improvements in the efficiency of government."

A decade and a half ago, the prominent article "The Regulation of Entry" examined 85 countries, and found that freer countries tend to have less onerous business entry regulation:

Countries with heavier regulation of entry have higher corruption and larger unofficial economies, but not better quality of public or private goods. Countries with more democratic and limited governments have lighter regulation of entry. The evidence is inconsistent with public interest theories of regulation, but supports the public choice view that entry regulation benefits politicians and bureaucrats. (Djankov et al., 2002: 1)

The Djankov et al. study did not examine naked corruption, but rather "all procedures that are officially required of an entrepreneur in order to obtain all necessary permits and to notify and file with all requisite authorities" along with official costs and time (Djankov et al., 2002: 5–6). What are these sorts of procedures one might find required for startup? Headings from Djankov's highly detailed list (p. 11) illustrate:

- 1. Screening procedures
- 2. Tax-related requirements
- 3. Labor/social security-related requirements
- 4. Safety and health requirements
- 5. Environment-related requirements

Djankov et al. tell us: "For an entrepreneur, legal entry is extremely cumbersome, time-consuming, and expensive in most countries in the world" (p. 4), and that "better governments regulate entry less" (p. 5). The typical research tool in such studies is regression analysis (Gallo, 2015), the examination of what effects specific independent variables (like the list of procedures and permitting in Djankov) have on the dependent variable(s), which, for present purposes, would be some gauge or proxy of entrepreneurship (or often, innovation).

In a later related study, Klapper et al. (2006) found an inverse relationship between regulation and entry in European limited-liability firms in industries featuring high entry. More procedures resulted in fewer new businesses. Furthermore, Klapper et al. note that regulation induces larger entrants and lower productivity among incumbents (which conforms to a public choice interpretation of regulation being motivated by disadvantaging smaller firms rather than by public interest concerns):

We find that costly regulations hamper the creation of new firms, especially in industries that should naturally have high entry. These regulations also force new entrants to be larger and cause incumbent firms in naturally high-entry industries to grow more slowly. (pp. 591-592)

Calcagno and Sobel (2014), focusing on the relative sizes of firms, note the range of studies on business climate and the number of firms. They demonstrate that higher levels of regulation hurt precisely the smallest firms. Regulatory burdens could induce firms to stay smaller, such as through outsourcing regulated functions, and to maintain threshold sizes to remain officially exempt from regulations. On the other hand, regulation may cause establishments to be somewhat less small, to the extent it operates as a fixed cost.

Consistent with such findings, Bruce et al. (2009) examined the effect of US state business activity metrics (such as annual counts of firms, establishments, and employees, the dollar value of payroll expenses, and annual births and deaths of establishments) on gross state product between 1988 and 2002. They tested linkages between state entrepreneurial activity and overall business conditions while "account[ing] for the simultaneity of business activity and overall growth." Such business conditions would include both tax-related concerns and regulation, and the study found all such elements matter to entrepreneurship. As one might surmise, "overall economic growth is faster when the net birth rate of new small firm establishments is positive." In the wake of these and other pioneering reports, Bailey and Thomas (2015), remarking that "the institution that theoretically matters most for the creation of new firms is regulation of entry," sought an estimate that doesn't just get at the "effect of regulation of entry on naturally high-entry industries only" but rather a "better estimate of the absolute effect of regulation on new firm creation and employment growth by industry" (p. 4).

Bailey and Thomas find that a half-percent reduction in firm startups results from a 10 percent increase in regulatory intensity (as measured by

the RegData index⁵) over a 1998–2011 interval (p. 11). The authors find no statistically significant effect on firm deaths, supporting the familiar notion that incumbents benefit while new firm births decline (p. 12). The researchers also found that regulation deters hiring at a magnitude similar to that of the decline in startups (p. 13).

Perhaps most well-known is the wide-ranging annual World Bank (2017) *Doing Business* report,⁶ with roots in Djankov and colleagues' work, which ranks nations on business climate with respect to "regulation that affects small and medium-size enterprises, operating in the largest business city of an economy" (p. 1). The report also presents "quantitative indicators on the regulations that apply to firms at different stages of their life cycle" (p. 13). Embracing Hernando de Soto's basic contention that disclosure matters when it comes to holding officials accountable, the report underscores the dramatic effect the number of steps involved in starting a business can have on a comparative basis. In Argentina compared to the country of Georgia, for instance:

... it takes 14 procedures to start a new business, double the global average of just seven. So it is perhaps unsurprising that there are only 0.43 formal new businesses per 1,000 adults in Argentina. By contrast, in Georgia—where three procedures are sufficient to start a business—there are over 5.65 formal new businesses per 1,000 adults. (World Bank, 2017: 1)

There are 11 core quantitative measures of business regulation examined in *Doing Business* (see table 1).

Nations now seek to do better, and "compete" with one another on fostering an entrepreneurial environment: "*Doing Business* has recorded over 2,900 regulatory reforms across 186 economies since 2004. Europe

^{5 &}lt; http://regdata.org/>

⁶ The report "relies on four main sources of information: the relevant laws and regulations, *Doing Business* respondents, the governments of the economies covered and the World Bank Group regional staff" (World Bank, 2017: 13).

Table 1: What Doing Business Measures—11 Areas of Business Regulation That Are Incorporated into the "Ease of Doing Business" Ranking

Indicator set	What is measured
1. Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company.
2. Dealing with construction permits	Procedures, time, and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system.
3. Getting electricity	Procedures, time and cost to get connected to the electrical grid, the reliability of the electricity supply and the transparency of tariffs.
4. Registering property	Procedures, time, and cost to transfer a property and the quality of the land administration system.
5. Getting credit	$\label{thm:movable collateral laws and credit information systems.}$
6. Protecting minority investors	Minority shareholders' rights in related-party transaction and in corporate governance.
7. Paying taxes	Payments, time, and total tax rate for a firm to comply with all tax regulations as well as post-filing processes.
8. Trading across borders	Time and cost to export the product of comparative advantage and import auto parts.
9. Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes.
10. Resolving insolvency	Time, cost, outcome, and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency.
11. Labor market regulation	Flexibility in employment regulation and aspects of job quality.

and Central Asia has consistently been the region with the highest average number of reforms per economy; the region is now close to having the same good practices in place as the OECD high-income economies" (World Bank, 2017: 1). Currently sub-Saharan economies' *Doing Business*

rankings are improving at a rate triple that of OECD established wealthy economies, likely attributable to "a doubling in the number of countries in Sub-Saharan Africa that are engaged in one or more business regulatory reforms—a total of 37 economies in this year's report" (World Bank, 2017: v.). Overall, "[a] record 137 economies around the world have adopted key reforms that make it easier to start and operate small and medium-sized businesses."

Given its scope and depth, the *Doing Business* Index has become the basis of much global research on entrepreneurship:

Starting a business [that is, procedures, time, and cost involved] is the indicator set most widely used, followed by labor market regulation and paying taxes. These indexes typically combine Doing Business data with data from other sources to assess an economy along a particular aggregate dimension such as competitiveness or innovation. The Heritage Foundation's Index of Economic Freedom, for example, has used six Doing Business indicators to measure the degree of economic freedom in the world. Economies that score better in these six areas also tend to have a high degree of economic freedom. Similarly, the World Economic Forum uses Doing Business data in its Global Competitiveness Index to demonstrate how competitiveness is a global driver of economic growth. (World Bank, 2017: 22)

A particularly useful roundup of 13 empirical analyses (all published between 2005 and 2014) by Ana Maria Zárate Moreno (2015) notes over half (55 percent) used the World Bank's *Doing Business* regulatory indicators, and the "related" Djankov (2002) measures, as independent variables. Related economic freedom metrics also feature prominently in scholarly and public policy analyses. On the dependent variable side representing entrepreneurial activity (such as change in the number of firms, proportion of new firms, birth/death rates), Zárate Moreno (p. 5) notes that half employ the above-referenced Global Entrepreneurship Monitor (GEM)'s Total Entrepreneurial Activity (TEA) and incorporate its components linking entrepreneurship to opportunity and necessity.

Note that not every category of regulation is captured, even in the grandest of surveys. *Doing Business* appears to lessen emphasis on safety

and environmental regulations, which are major concerns in advanced economies (some might see "going green" as a luxury good). However, those regulatory classes that are surveyed lead to still deeper layers, like peeling an onion, and analyses can become extraordinarily detailed. For example, the "quality of judicial proceedings" metric under "Enforcing Contracts" in the *Doing Business* table above gets broken into several additional categories. As well, data on the World Bank's labor market regulation contains several sub-categories within the classifications Hiring, Working Hours, Redundancy, and Job Quality (the latter contains social policy goals favorably viewed by *Doing Business* (p. 161) that we will revisit shortly). *Doing Business* also gauges government hurdles to social as well as economic concerns like women getting hired or starting businesses (p. iv.) and whether they face additional requirements in starting new businesses; and progress in reducing income inequality (p. v.).

Naturally, not all are on board with the "explicit link made by Djankov et al ... between the speed and ease with which businesses may be established in a country and its economic performance" (van Stel, Storey, and Thurik, 2007). Some left of center academics are more inclined to blame big business and Chicago School economics' hands-off policies rather than regulation for declines in small business vibrancy (AAI, 2016). Typical in the public-interest spirit of regulation, for example, Alvarez, Amorós, and Urbano (2014) study 49 countries between 2001 and 2010 and find "a positive influence of government spending and entrepreneurship legislation on entrepreneurial activity," and that "regulations may have different impacts on entrepreneurship according to the country's economic development." This analysis still concluded, however, that "developing economies should rationally organize their formal institutions in order to remove unnecessary barriers and controls that obstruct entrepreneurship activities."

Other studies examine special cases of regulatory impacts on entrepreneurship. For example, a Goldwater Institute study (Slivinski, 2015) found a statistically significant inverse correlation between rates of low-income entrepreneurship/startup rates and occupational licensing burdens. This research was cited in a report on occupational licensing by President Barack Obama's Council of Economic Advisers (The White House, 2015),

showing that the recognition that regulatory zeal dampens entrepreneurship sometimes crosses the left-right boundary. Indeed, one sensible prophylactic response to escalating fears of automation is "eliminating excessive occupational licensing regulations that make it hard to start the sort of businesses—interior design, hair-dressing, beauty treatment—that are robot-resilient and provide a first step up the opportunity ladder" (Pethokoukis, 2015). In related research findings, "providers of occupational licensing training, namely, schools, are larger and seem to be more profitable in states with more stringent occupational licensing regulation" (Zapletal, 2014). Related to such findings, housing regulation, land use laws, and occupational licensing (among other things) impede mobility and thus economic growth, as well as employment and entrepreneurship (Schleicher, 2017). Relatedly, a 175-nation analysis of entry regulations by McLaughlin and Stanley (2016) finds regressive effects and artificial aggravation of income inequality.

Many researchers regard economic freedom broadly construed as playing the central role in entrepreneurship. Joshua Hall, Robert A. Lawson, and Saurav Roychoudhury (2015) assert that "the ability of people to freely trade, enter into contracts, and start businesses in a system of private property and the rule of law is crucial for productive entrepreneurship." As a wider measure, "[e]conomic freedom incorporates, and is broader than related concepts and measures such as the ease of doing business ... and the origin of a country's legal system [such as the World Bank index]" according to Bradley and Klein (2016: 212, fn. 1). These authors characterize economic freedom as "a summary measure capturing the freedom to engage in economic activity without undue restrictions or subsidies. The institutions, or 'rules of the game,' most strongly associated with economic freedom include property rights, the rule of law, open markets, and incentives to innovate." (Bradley and Klein, 2016: 211). The collaborative (Cato Institute, Fraser Institute, and dozens of other think tanks) Economic Freedom of the World report (Gwartney, Lawson, and Hall 2016) exemplifies this approach, wherein many dozens of underlying component data points contribute to assessments of economic freedom (and in turn rankings of nations) in five key areas:

- 1. Size of government: expenditures, taxes, and enterprises;
- 2. Legal structure and security of property rights;
- 3. Access to sound money;
- 4. Freedom to trade internationally; and
- 5. Regulation of credit, labor, and business.

Further study is likely to identify more reliably which specific regulations in which specific industries most impede entrepreneurship. Zárate Moreno (2015: 7) noted that, with respect to innovation, regulation's effects vary among sectors and industries, as well as over the short and long run. An illustration of this phenomenon for the US is provided by Patrick McLaughlin and Oliver Sherouse (2016), who examined the number of "restrictions" (as proxied by terms representing mandates or prohibitions expressed in the Code of Federal Regulations) to identify the top 10 most heavily regulated sectors by North American Industry Classification System. Their findings for the most heavily regulated are as follows:

NAICS	Industry Sector
Code	
3241	Petroleum and coal products manufacturing
2211	Electric power generation, transmission, and distribution
3361	Motor vehicle manufacturing
5222	Nondepository credit intermediation
5221	Depository credit intermediation
4811	Scheduled air transportation
1141	Fishing
5239	Other financial investment activities
2111	Oil and gas extraction
3254	Pharmaceutical and medicine manufacturing

Unsurprisingly, the global environment for entrepreneurship presents a mixed picture. According to the World Bank, "OECD high-income economies have on average the most business-friendly regulatory systems, followed by Europe and Central Asia" (2017: 6). On the other hand, there

has been a slowdown in some of these wealthier economies. In terms of the global "ecosystem" for entrepreneurship, "both the factor- and efficiency-driven groups report several unfavorable conditions. In factor-driven economies, R&D transfer, entrepreneurial finance and internal market burdens/entry regulations are highlighted as areas constraining entrepreneurship; in efficiency-driven economies, R&D transfer also features, as well as government policy, and taxes and bureaucracy" (World Bank, 2017: 11).

Academics have taken an interest in the boundary between scholarly research and practical entrepreneurial training, which should aid economic liberalization efforts. For example, Guatemala's Francisco Marroquín University, through the aforementioned Global Entrepreneurship Monitor project, maintains a research venture aimed at making evident the negative effect of over-regulation on the entrepreneurial process. Their efforts include furthering research into how labor market regulation and other growth constraints affect formal job creation in small and medium-sized enterprises (SMEs). In the United States, the University of Louisville's John H. Schnatter Center for Free Enterprise engages in "research and teaching that explores the role of enterprise and entrepreneurship in advancing the well-being of society."

Modeling sophistication notwithstanding, the ability to "measure" regulation and entrepreneurship will always be imperfect

The measurements of regulation we surveyed above are imperfect, of course. Even more fundamentally, no one knows (or can know) what the dollar cost of regulation is to the world's entrepreneurs, going concerns, and consumers. Certain burdens can be rather obvious (compliance paperwork, perhaps), but much is unseen, such as the cost of innovations sacrificed. Michael Mandel of the Progressive Policy Institute (Dearie, 2013: 108) observed that while individual regulations may well pass a costbenefit test, the cumulative effect could be that of "pebbles in the stream" that eventually clog the flow. An extensive OpenEurope study (Persson,

^{7 &}lt;http://gem.ufm.edu/>

^{8 &}lt; http://business.louisville.edu/schnattercenter/>

2009) found the cumulative cost of UK regulations introduced between 1998 and 2008 to be between £148 billion, or 10 percent of GDP, with 72 percent of those regulatory costs coming from European Union legislation. In the US, John W. Dawson and John J. Seater (2013) contend that rules affecting growth rates compound, and that Americans are less than half as rich as would otherwise be the case in the absence of much of the regulatory state. Another study, "The Cumulative Cost of Regulations" (Coffey, McLaughlin, and Peretto 2016), models regulations' effect on firms' investment choices using a 22-industry dataset covering 1977 through 2012, and concludes that the 2012 US economy was \$4 trillion smaller than it would have been in the absence of cumulative regulatory growth since 1980. Regulation affects not only current jobs but also the inclination for entrepreneurs to create them in the future. That complicates measurement, since nations cannot "lose" jobs that haven't been created, and thus cannot measure them as the real losses they actually are. Indeed, much of the regulatory enterprise is altogether immeasurable (Crews, 2017a), and unavailable to incorporate into studies of entrepreneurship.

This author employs a placeholder for US regulatory costs of \$1.9 trillion annually (Crews, 2017a). Interestingly, not counting the US itself, only six nations' GDPs exceed that amount, and US regulatory costs by this metric exceed the 2015 GDPs of neighbors Canada (\$1.55 trillion) and Mexico (\$1.144 trillion). Interesting also, given our concern with global economic freedom surveys, is that US regulatory costs exceed the GDP of the world's major economies ranked as most free by both the Heritage Foundation's *Index of Economic Freedom* (Miller and Kim, 2017) and the Fraser Institute and Cato Institute *Economic Freedom of the World* reports. (Of the top 10 most-free countries in these publications, eight are common to both.)

As distinct from the specific countable regulations published in a given category, one ought not to overlook "intervention" as a concept, that of government steering while markets merely row (the presence of the antitrust threat and public-private partnerships are examples). This concept is difficult to model. Furthermore, sometimes government mandates assume the form of "regulatory dark matter" (Crews, 2017c). These informal

decrees (like memoranda, guidance, notices, circulars, bulletins, administrative interpretations, and the like) are not captured in oft-studied independent variable sets, since countable regulations are not available to point to as a cause of stagnation. Indeed, regulation can profoundly redirect the market discovery process along new involuntary paths, as Bruce Benson describes in "Opportunities Forgone: The Unmeasurable Costs of Regulation" (2004), meaning discoveries which might have been made in the absence of the regulation may never occur. In the extreme, regulation can shift entrepreneurial activity to underground or shadow economies, further confounding measurement. Studies of such informal entrepreneurship globally are beginning to show that such underprivileged entrepreneurs are not lacking in ability or "spirit," but in legitimization (Williams and Nadin, 2010), and that "economic freedom promotes formal entrepreneurship relative to informal entrepreneurship" while increasing both overall. A recent analysis of Africa by Iain Murray and Daniel Press (2017), for example, stresses the importance of economic freedom but also a need to "legitimize beneficial but currently technically illegal activities" in a region where the shadow economy accounts for over half of both GDP and employment, and most new jobs.

An infinity of variables influence entrepreneurship

The prior discussion emphasized *independent* variables like procedures and permitting complexity and economic freedom measures. There are likewise countless ways to select *dependent* variables, our measures of entrepreneurship. The OECD's *Entrepreneurship at a Glance 2016*, for example, lists the following indicators (some highly developed in the literature, some less so since, such data is not collected everywhere) "for measuring the state of entrepreneurship" (OECD, 2016: 10):

- A. New enterprise creations
- B. Enterprise exits
- C. Bankruptcies
- D. Self-employment
- E. Outlook and prospects of job creation

- F. Enterprises by size
- G. Employment by enterprise size
- H. Value added by enterprise size
- I. Turnover by enterprise size
- J. Compensation of employees by enterprise size
- K. Labor productivity by enterprise size
- L. Birth rate of enterprises
- M. Death rate of enterprises
- N. Survival of enterprises
- O. Employment creation and destruction by enterprise births and deaths
- P. High-growth enterprises rate
- Q. Incidents of traders
- R. Trade concentration
- S. Exports and imports by enterprise size
- T. Market proximity
- U. Exports and imports by enterprise ownership
- V. Self-employment by gender
- W. Self-employment among the youth
- X. Earnings from self-employment
- Y. Inventors by gender
- Z. Perception of entrepreneurial risk
- AA. Venture capital investments

Like the OECD *Glance* data, one can find related projects attempting to capture entrepreneurial activity (the dependent variable). One example is the United Kingdom's Office of National Statistics' "Trends in Self-Employment" report. Others include the Eurostat-OECD entrepreneurship indicator program (EIP) which began in 2007 to "collect internationally com-

^{9 &}lt; https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2001to2015>

parable statistics to enable the 'measurement' of entrepreneurship," and the non-profit World Economic Forum's *Global Competitiveness Report*. 11

Putting "measurement" in quotes makes sense in the EIP or any other program. As regulatory cost measurement is imperfect, so too is gauging causality. Authors generally freely acknowledge limitations (note the appendix compilation in Zárate Moreno (2015), for example). While startups/births are a major examined variable, correlations that could be proposed and tested as independent variables affecting entrepreneurship indicators on a list like the OECD's *Entrepreneurship at a Glance* seem unlimited. Even the OECD's list of indicators alone exceeds the number of letters in the alphabet. Further, the regulation of entrepreneurship proceeds from many fronts: state, local, national, and international. Once one pulls a thread, there is no stopping, hence the perpetual calls for "future research."

Complexity in measuring regulation's effect on entrepreneurship is further heightened by the preeminence of the formal legal environment and escalation of litigation, as economies grow wealthier. One study (Dixon et al., 2006) outlined categories of laws and regulations affecting small business, including:

- Corporate law (liability exposure, organizational form, such as LLC or not);
- Securities law and regulation (concerns such as bankruptcy rules);
- Environmental protection (compliance variables such as equipment and monitoring, statutory applicability, enforcement stringency and prevalence of negotiated agreements);
- Employment law (administrative agency enforcement stringency, court enforcement policies and the litigation environment, costs of workers' compensation/unemployment insurance, regulation of employment contracts);

^{10 &}lt; http://ec.europa.eu/eurostat/web/structural-business-statistics/entrepreneurship/indicators>

^{11 &}lt;a href="https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1">https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1

Health regulation (variation in coverage requirements and premium costs).

The US Congress and overseas bodies alike respond to such concerns with exemptions for small business and other analysis and mitigation of regulatory effects (see for example United States Senate, 2017). Regulation's effects will vary at the individual, firm/industry, group, and national levels, and then cross-nationally. Measurement complications arise from mere state and local differences in the US. "Although federal regulation applies in the same way in all states, each state's economy includes a unique mix of industries. As a result, federal policies that target specific sectors of the economy will affect states in different ways" (McLaughlin and Sherouse 2016: 3). For example, federal financial regulations would matter more to New York than Virginia (p. 4). One might presume an international corollary to this principle, that the ability to set up shop in nations with superior manufacturing environments, more lax antitrust regulation, or more friendly privacy policies all would have an impact.

Personal characteristics matter in the study of entrepreneurship

Like the country (and industry) characteristics so much under exploration, characteristics of the entrepreneur him or herself also influence the association between regulation and entrepreneurial activity. Just a handful of entrepreneurs often transform society when it comes to subsistence versus innovation, as noted earlier. Free will belongs there somewhere, something reflected in the different behaviors among siblings raised in the same home environment (Harris, 2009) and the chicken or egg question of whether an entrepreneur is born or made. A firm's early years depend on momentum and speed and the "energy, focus and flexibility of their leaders" (Dearie, 2013: 109). As we've established, "[t]here are many available aggregate measures of entrepreneurship, such as the number of start-ups

¹² In this report, Mercatus scholars describe the use of the Center's RegData catalog to create a federal regulation and state enterprise (FRASE) index, capturing "relative impact of federal regulation among the states" (p. 5).

and the percentage of the population that is self-employed" (Bradley and Klein, 2016: 216), "but these do not necessarily capture abstract concepts of alertness, judgment, and innovation."

Who finally takes the entrepreneurial leap and what influences them? Noting the already "burgeoning" nature of the literature on the "influence of regulation of product and labor markets on GDP growth, TFP [total factor productivity], investment, and employment using macro data," Ardagna and Lusardi (2008) took advantage of the earlier days of the GEM micro dataset to study "how a country's regulatory and legal environment affect individuals' decisions to engage in new entrepreneurial activity." They look at "regulation of entry, regulation of contract enforcement, and regulation of labor" noting that regulation can have both public-interest and public choice motivations." Their research finds that "individual characteristics, such as gender, age, and status in the workforce are important determinants of entrepreneurship," and that "social networks, self-assessed skills, and attitudes toward risk," along with regulation, play roles:

Consistent with the public choice model, we find that regulation acts as a detriment to entrepreneurship, particularly for those individuals who become entrepreneurs to pursue a business opportunity. In our empirical analysis, we estimate the effect of regulation via its impact on individual characteristics. Regulation has the greatest impact on the effects of social network, business skills, attitudes toward risk, and working status. Specifically, regulation attenuates the effect of social networks, business skills, and working status on entrepreneurship while it strengthens the impact of attitudes toward risk. We find also that several individual characteristics—gender, age, and education—are important determinants of entrepreneurship, though their effects differ across types of entrepreneurship. For example, the estimates of education are positive and statistically significant for individuals who become entrepreneurs to pursue a business opportunity, while they are negative and statistically significant for those whose entrepreneurial activity is simply remedial. This finding further

highlights the importance of being able to distinguish between types of entrepreneurs. (Ardagna and Lusardi, 2008: 4)

Related work (Ardagna and Lusardi, 2009) strongly indicates that remedial entrepreneurship—that engaged in when no other options exist—is "accentuated" for the disadvantaged by entry regulation. For example, "women are more likely to enter into entrepreneurship in countries with higher levels of entry regulation, but mainly because they cannot find better work," something pronounced in "less financially developed" countries. Appropriately, avenues for future research on gender and other aspects continue to be noted as datasets like GEM expand and improve in usefulness (Sánchez-Escobedo et al., 2016).

The networked economy and automation upend entrepreneurship dynamics

We noted the changing nature of work via the sharing economy and automation and networking above as one in the profusion of variables affecting entrepreneurship, but it is worth separately reflecting upon this phenomenon. These changes have been revolutionary, even since the seminal entrepreneurship studies of the early 2000s that undergird so much current scholarly research.

The point is, revolutionary developments like instantaneous communication and handheld devices doubling as libraries of all human knowledge have democratized the availability of information and access to skills one might need to engage in entrepreneurship (or to carry out duties as an employee or contractor). Notable for example, is how some in the developing world skipped over telephone landline infrastructure straight to the smartphone. If the smartphone had not come upon the scene, we would be having a different discussion entirely with respect to developing nation entrepreneurship, yet this seems unappreciated in the literature. In a sense there is vastly more tangible and intangible raw material available than there had been for those who came before, since the wealthy developed world never had the technological advantages that developing nations now have; these "inputs" to the entrepreneurial and production processes,

one might say. That doesn't necessarily make things easier; timing and resources matter and one likely can't build a search engine or PayPal now as the time for such one-time innovations has now come and gone (not to re-litigate first-mover advantages and "lock-in" here (Liebowitz and Margolis, 1995)). Still, entrepreneurs will increasingly respond to counterparts worldwide. An economy starting from a lower base of poorer institutions can grow faster and improve entrepreneurship (Bradley and Klein, 2016: 215) relative to others; perhaps part of the reason would be cross-fertilization, learning from the institutions of others, enabled by technology.

Trade is one of many potential determinants of entrepreneurship, as is unprecedented proximity to markets. Indeed, if one is comparing decades rather than year to year, the rise of eBay, Alibaba, and Amazon Associates in concert with the shipping container revolution demonstrated in *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger* (Levinson, 2016) put entrepreneurship in a new realm. Are those in China selling aftermarket chrome auto trim over eBay appreciated in entrepreneurial studies? We have a global economy transformed not just by the intangible Internet, but also by something as humble as a container combined with cheaper manufacturing and automation. Automation, in fact, has led to calls for Guaranteed Minimum Income (or Universal Basic Income) allegedly to ease social turmoil in the face of predictions that "currently demonstrated technologies could automate 45 percent of the activities people are paid to perform" (Chui et al, 2016).

Accelerated creative destruction doesn't just happen to the powerful, but to the mom and pop and individual enterprises (Segran, 2017). Many are understandably ambivalent about technology-driven contract or remote work, just as others would prefer full-time work but are relegated to part-time by regulation that makes employers reluctant to hire. Scholars studying entrepreneurship will increasingly need to isolate trends influenced by regulation on the one hand, and the changing networked/automated economy on the other.

Endogeneity, or causality that goes both ways

Are entrepreneurs creating the growing economy, or is the growing economy enabling entrepreneurs?

Metrics seeking to explain entrepreneurship may not capture precisely what one expects. "[E]ndogeneity problems between innovation or technological change and regulation persist," asserts Zárate Moreno (2015: 7). That is the technical way of saying cause and effect can potentially run both ways. For example, regulation affects firm startups and sizes; but firms also affect regulations (which we will note again in recommendations on averting rent-seeking). Some dependent variables might be employed by scholars as independent variables. Nyström (2010), for example, describes how "the regulatory quality and amount of business regulation may also be influenced by the amount of entrepreneurial activities in the society since policymakers and bureaucrats tend to respond to changing conditions in the society." Also, Bailey and Thomas (2015: 4) note that "studies suffer from the problem that healthy economies usually score well on a number of different institutional variables, making it difficult to isolate the specific effect of a particular variable."

In another manifestation of endogeneity, the political power of those inclined toward laissez-faire in entrepreneurship likely affects institutions, as does, unfortunately, growth in rent-seeking in pursuit of suppression of competition. Some studies link regulatory intensity to industry decline—implying that regulation is the cause and declining productivity is the effect. But in some instances it may be the reverse, such as the familiar case of declining industries supporting regulation that shields them from competition from innovators, which ultimately feeds back to declining productivity. There remains the familiar longstanding "unholy alliance of anti-market intellectuals and rent-seeking businesses" (Smith, 2012). One can conceive, however, of liberalization-oriented lobbying spawning entrepreneurship. Those one-time entrepreneurs may eventually embrace zero-sum lobbying, but one can hope.

So clearly, studying regulation's effect on entrepreneurship means looking at imperfect empirical relationships. One takeaway is that regression models cannot be the only tool policymakers employ. But we mustn't despair; if the classical liberals among us believed economies could be modeled, we would be socialists and central planners instead. I noted earlier that costs of regulations and interventions cannot be precisely measured. We can likewise comfortably acknowledge that we cannot precisely measure the effects of regulation on innovation and entrepreneurship. However, imperfect measurement is not necessarily a failure; it is a feature, not a bug.

Unleashing entrepreneurship: Recommendations for policymakers

The bureaucratic reflex treats every matter as a public policy concern, when the task instead is asking, "What can I do to take myself further out of the economic picture?" The role of policymakers, as Peter Klein puts it, is "don't constrain entrepreneurs with bad policies, but don't try to subsidize them either. Let the market sort it out" (Mariotti, 2014).

Laissez-faire is the exception, however. For example, governments often seek to boost entrepreneurship by trying to attract venture investment funds, under the assumption that "more venture capital will cause an increase in successful entrepreneurial activity" (Kreft and Sobel, 2005). This tends not to work; Kreft and Sobel find instead that "entrepreneurial activity causes an inflow of venture funding, and not vice versa." The lesson is that "economic development policies should focus on creating an environment attractive to individual entrepreneurs, rather than on attracting venture capital."

The United States—now only 242 years old—became richer than the rest of the world in a historical blink of an eye. Policymakers know how that remarkable achievement occurred, and know that it can be sustained by embracing the institutions of liberty that allow entrepreneurialism to flourish. What halts economic booms? Matt Ridley's four "Ps": piracy, predation, parasitism, or plunder (Cato Unbound, 2010). The path to expanding economic freedom is not complicated: Repeal or amend laws that sustain a particular objectionable regulatory enterprise or program; and abolish, downsize, reduce the budgets of, and deny appropriations

to regulators, sub-agencies, and programs that pursue regulatory actions not authorized by elected legislative bodies. Such solutions are resisted, of course; as Schumpeter's work notes, once the intellectual class is seduced by the state, restraining Leviathan is difficult (Smith, 2017).

A flawed presumption prevails that regulation "works." But fixed regulations bind us to the past; they can impoverish, and sideline entrepreneurs. For many market failures invoked to justify government intervention, one can often find some political and bureaucratic failure instead. It is a government failure, not a market failure, when rent-seeking occurs; when price regulation creates shortages; when Internet neutrality regulation undermines communications infrastructure; and when endangered species regulation harms endangered species. The benefits regulators seek to command into existence are also forms of *wealth* that require markets—and entrepreneurs—to flourish. Examples include financial stability, food safety, privacy and cybersecurity, access to broadband, and environmental amenities. Such benefits can be undermined by political regulation, just as political regulation can decrease dollar wealth.

Friendly rivalries among nations to boost entrepreneurship are long underway and healthy. Nations can and do learn from one another. As Bradley and Klein (2016) assert, "there is much variation within countries and over time. As a result, there are opportunities for studying institutional evolution and change, and examining causal relationships between firm and industry characteristics and institutional characteristics at multiple levels." Across the globe, however, maximizing entrepreneurship will often mean limiting government and halting over-delegation of legislative power to unaccountable regulators. In the US, House Speaker Paul Ryan's "Article I" task force report is a recent candid acknowledgement by politicians that they hadn't been living up to such ideals of economic and social liberty. We need better measurement, but also a deliberate unwinding of the excessive administrative state where it exists, and the refusal to erect

¹³ IronLawofRegulation.com, *Theory and Evidence on Competing Hypotheses* http://ironlawofregulation.com/>.

¹⁴ See https://abetterway.speaker.gov/>.

it in developing realms where it does not. Rent-seeking notwithstanding, business, too, has a role in legitimizing widespread economic liberty.

Policymakers must expand rule of law and democratic accountability, starting with better regulatory disclosure and predictability

To provide entrepreneurship its best possible footing, policymakers' preeminent task is to expand institutions of liberty that allow free enterprise to flourish. Unfortunately, after the Progressive era's imposition of rule by experts, extending those institutions into new realms (such as airsheds, spectrum, watersheds, and large-scale private network ownership) has been set back decades. Capitalism and liberal ideas are relatively young, so perhaps it is too much to have expected the legitimization of laissez-faire in a "pre-historic" year like 2018. As nations attempt to control taxes via institutions restraining the state, the hidden taxes of regulation also need control, greater disclosure, and especially greater democratic accountability (Crews, 2015, 2017a). Providing better predictability and reporting on regulatory costs and trends in ways that help to prioritize regulatory cost minimization is probably the easiest step for policymakers.

In an examination of the effect of federalism (devolving regulatory activity to the lowest governmental level that can internalize costs/externalities) on entrepreneurship and innovation, Dove and Sobel (2017) call for stable and predictable regulation. They note the variability in legal risks and therefore the disproportionate impacts firms can face both in geography and in type of business regulations from various jurisdictions (such as environmental regulation, corporate law/chartering, banking/financial regulation, antitrust, each of which has a deep body of research the authors cite). The lesson for both business and policymakers is that predictability matters for increasing transnational competitiveness. "Because entrepreneurs constantly create new products that require new interpretations of existing statutory law (or the creation of new statutory law)," Dove and Sobel "argue that 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."

We have known for a long time that such predictability matters to entrepreneurship. The OECD's 1998 Better Regulation Task Force publication noted similar basic principles (transparency, accountability, targeting, consistency, proportionality). 2010's *Better Regulation in Europe* stressed lessening complexity; for the UK in particular, "[a]n effective balance has been achieved between policies to address the stock and flow of regulations" with success "on two key fronts—simplification of existing regulations through the reduction of administrative burdens on business, and ex ante impact assessment of new regulations" (OECD 2010: 38). OECD dialogues on simplification and measurement of regulation continue today. 15

The reports we have surveyed in this chapter, such as the indices of economic freedom and the World Bank and GEM reports, all continue to improve. The GEM recommendations (pp. 34-35), for example, include reforming the regulatory environment to ease new business registration and operation, reducing bureaucracy and red tape, and easing access for SMEs to prepare business documentation (human resources, insurance) via web resources. Assorted government hand-holding elements lurk, such as recommendations to offer advice and education to budding entrepreneurs and to offer government programs, mentorship, incubators, microfunding, government seed capital access, incentives for technology ventures, IT infrastructure investment and the like. Examples include the European Commission's "Entrepreneurship 2020 Action Plan," 16 which asserts that "[t]o bring Europe back to growth and create new jobs, we need more entrepreneurs," and calls for "removing existing administrative barriers"; but the report raises red flags with such declarations of intent as "supporting entrepreneurs in crucial phases of the business lifecycle." In the wrong hands, such "support" means interventions, favors, and subsidies, not the economic freedom counseled here.

¹⁵ See http://www.oecd.org/regreform/events-publications.htm>.

¹⁶ See http://ec.europa.eu/growth/smes/promoting-entrepreneurship/action-plan/>.

Everyone has their villains list as far as regulations, bureaucracy, and red tape are concerned, such as OpenEurope's Top 100,¹⁷ and the traditional US New Year's Day list of craziest regulations. Examples of documenting said red tape (apart from US examples noted earlier) include OpenEurope's "Measuring a Decade of EU Regulation (Persson, Booth, and Gaskell 2009). With these and others disclosures, governments can set about breaking up the regulatory burden into manageable pieces and reducing it, and providing more certainty and predictability to entrepreneurs. The following provides some universally applicable options.

Break the Regulatory Elephant into Bites

Regulations past: Implement a regulatory reduction commission and task it with reviewing the entire federal regulatory edifice and preparing a comprehensive package of cuts, to be voted up or down in expedited fashion; undertake oversight hearings, reviews and sunsets of legacy rules.

Regulations present: Implement freezes/moratoria on regulations; cut numbers of rules issued by agencies; systematize review and sunsetting for each new rule; supply the public with an annual Regulatory Transparency Report Card (a summary paralleling fiscal budget disclosures) that includes costs, counts, and flows in the various classes of regulations (social economic, environmental, health/safety, and paperwork); implement pay-go (rule-in, rules-out procedures); codify cost analysis.

Regulations future: Avoid regulating altogether; require legislative votes on costly or controversial rules; experiment with regulatory cost budgeting. (Crews, 2011)

Such steps are underway. The Netherlands and the United Kingdom both set up autonomous, non-governmental bodies to review regulation (the Regulatory Reduction Committee in the Netherlands and the Better

¹⁷ For example, Open Europe's "100 most burden some EU-derived regulations:" < https://openeurope.org.uk/intelligence/britain-and-the-eu/top-100-eu-rules-cost-britain-33-3bn/>.

Regulation Commission in the UK). Both set goals to reduce regulatory burdens by 25 percent for four-year periods, which appears to have been achieved with some success. (See the OECD "Better Regulation" reports for the UK and the Netherlands. ¹⁸)

Related to sunsetting and available for borrowing from the UK experience is a "one in, one out" procedure, and more recently, a "one in, two out" procedure. ¹⁹ Like the reduction commission, this idea holds bipartisan appeal; proposals exist from the left and right. In the United States, Sen. Mark Warner (D-Virginia) suggested a one-in, one-out reform, recommending the offsetting of every new rule via the elimination of one somewhere else within an agency itself or elsewhere (Warner, 2010). "One in, one out" amounts to a status quo regulatory "budget," or a freeze at current cost levels, with the caveat that cost neutrality depends on what ultimately goes in and what comes out.

Finally, technology can help standardize, automate, and eliminate redundancy in compliance data reporting burdens required from the various agencies (White, 2017), as well as assist in agencies carrying out their own disclosure. The government of Australia is one pioneer in so-called "standard business reporting." All these steps can boost entrepreneurship.

Measure, reduce, and forbid "regulatory dark matter"

When researchers count regulations, assemble trends, or input data into models, one of the increasingly significant means of regulating in today's world may be missed. Some of the barriers to entrepreneurship are not countable in obvious ways, and thus are omitted from economic models. In the United States, for example, along with the laws from Congress and the rules from agencies that are subject to public notice and comment, there are many agency sub-regulatory proclamations that end up having

^{18 &}lt; http://www.oecd.org/gov/regulatory-policy/betterregulationineuropeeu15countryfinder.htm>

¹⁹ See https://www.gov.uk/government/policies/reducing-the-impact-of-regulation-on-business.

²⁰ See < http://dictionary.sbr.gov.au/>.

real force and effect. These go by various names: guidance documents, memoranda, notices, bulletins, circulars, Dear Colleague letters, and more. Examples included Obama-era Labor Department "Administrator's Interpretations" on franchising and on independent contracting (since revoked by the Trump administration), and the high profile transgender restrooms skirmish (over a "Dear Colleague" letter from the Justice Department and the Department of Education). There are thousands of such guidance documents in the US, and, one presumes, internationally. This off-thebooks-regulation phenomenon is poised to grow. The Internet-of-Things, for example, may allow regulators to regulate from afar by mouse click (your car emits too much, or your drone is too low; see for example Dorrier, 2015) rather than bother with notice-and-comment rulemaking. Solutions to dark matter range from banning it altogether, to reporting on it in the fashion just described for regulations. In yet another area for future research, scholars and policymakers should study the extent to which the phenomenon exists globally and account for its effect on entrepreneurship, and, by all means, lessen its abuse.

Incorporate specific targets for regulatory reductions

In boosting entrepreneurship, administrative, "good government" reforms are no substitute for embracing genuinely limited government, accountability, and economic freedom. Nevertheless, they can help increase the likelihood that we or our descendants achieve these ends. Therefore, one important step in regulatory reductions is to have targets. Even without a specific target, Ronald Reagan brought both numbers of regulations and pages in the Federal Register (the US's daily depository for rules and proclamations and other bureaucratic miscellany) down by over a third, but both edged back upward later (Crews, 2016). Without Congress acting, Donald Trump has effectively frozen regulation in the US, but congressional action will be needed to make that permanent. In a recent analysis, James Broughel (2017b) stressed the importance of goals in the example of British Columbia, which in 2001 sought to cut regulatory requirements by one-third within three years, and bested that target. Similar campaigns

should be tested globally—and nations should compete in meeting targets that improve the entrepreneurial climate.

Beware the tension between rent-seeking and regulatory "quality" aspirations

Undermining the institutions of liberty are the institutions of disruption, whether accidental or deliberate. These can manifest in old-school rent-seeking, in abuse of the "precautionary" principle, in political exploitation of the regulation and jobs/entrepreneurship linkage, and even in the priestly pursuit of regulatory "quality."

Basic rule of law functions are vital, but endlessly debated is the statutory and regulatory framework that evolves atop that foundation. Advanced societies have, alas, long been seduced by the idea of regulatory "expertise," such that good government and rent-seeking too easily clash in the formation of institutions suitable for sustained liberty and entrepreneurship. A central bank, for example, is an expert "institution" viewed with suspicion. On the third attempt, the United States got its Federal Reserve System (Bernanke, 2008), an entity to this day that escapes blame for the business cycle downturns it was established to prevent. It also remains unaudited (Nelson, 2015). "Institutions" also include government-sponsored enterprises (GSEs) like Fannie Mae and Freddie Mac that figured in America's housing crisis. The administrative state itself (anchored in the 1946 Administrative Procedure Act) is most assuredly an institution, guarded by the "New Deal fundamentalism" (Gasaway and Parrish, 2017) preventing challenges to its authority and democratic legitimacy.

Indeed, poor political and legal institutions indirectly lead not just to poorer or lower rates of productive entrepreneurship, but actually channel energies into unproductive and destructive entrepreneurship (Sobel 2008). A classic modern example of regulation-induced "entrepreneurship" is highly paid regulatory compliance officers in financial services; the wrong kind of white-collar job growth, one might say. There are many of these folks employed, but they are a cost of doing (the same) business, not an indicator of added wealth.

The public interest defense of regulation is that it is vital to establish a level playing field, while the public choice conclusion is that regulation tilts that field. With respect to the role of entry restrictions and international trade barriers in reducing entrepreneurship, Sobel, Clark, and Lee (2007) found that while "entrepreneurs benefit from unrestricted free entry into markets, they have a time-inconsistent incentive to lobby for government entry restrictions once they become successful." As they appropriately assert, "[b]ad institutions yield to these [protectionist] demands." Still, despite regulatory capture, some liberal observers maintain that intervention is good for entrepreneurship and job creation. Meanwhile conservatives praise antitrust and heavy government investment (Crews, 2010).

Arguably, the technology sector has remained comparatively less regulated, allowing greater entrepreneurship. In a wide-ranging discussion of "imposed" versus "organic" regulations, and of how regulations crowd startups into less-regulated areas at the expense of vitality in others, John Chisholm (2015: 322) notes: "There are hundreds of thousands of start-ups in mobile apps but relatively few in pharmaceuticals, aviation, construction, consumer banking, and medical devices. Why?" Unfortunately, the light-touch tech regulatory climate is changing given the likes of Internet neutrality campaigns that would undermine telecommunications investment and the connectivity entrepreneurs need (Bolema, 2017). The latest development here in the US is that the 2015 effort by the Federal Communications Commission under President Obama is in the process of being reversed by the Trump Administration. But the ultimate outcome is unclear. Like the antitrust policy the US unwisely exported to Europe (Crews, 2014), so, too, the "no blocking, no throttling" anti-property rights regime of Internet "neutrality" is embraced in Europe (European Commission, 2015). Worryingly, Silicon Valley is beginning to appear less regulation averse than previous generations of entrepreneurs (McArdle, 20117).

Indeed, 36 years after revealing the Baptists and Bootleggers alliance (Yandle, 1983), something as simple as alcohol remains mired in rent seeking globally. This is found from Lithuania's "strictest in the European Union" regulations on consumption (Vilnius Students for Liberty, 2017) to the tamping down on entrepreneurial craft breweries in the southern

US where "the number of breweries is negatively associated with higher campaign contributions from big breweries" (Gohmann, 2016; see also John Locke Foundation, 2016). The craft breweries are then forced to organize and fight back, from petitions (craftfreedom.org) to lawsuits (Morrill, 2017). If the ancient practice of fermenting grain is something entrepreneurs must fight regulators to do, it is easy to see why modern predatory practices like "competition policy" and "antitrust" get traction with the professional administrator class and rent-seekers, and it is easy to see why the technology sector is increasingly vulnerable. That is a problem for entrepreneurs.

Realities of rent-seeking notwithstanding, the notion that regulation remains objective, above the fray, public interested, persists. For example, a significant emphasis in the entrepreneurship literature is the effects of regulatory "quality" on countries' entrepreneurial outcomes. The notion that parties can agree what quality is, or that quality is a central achievable feature of political regulation, is taken for granted. So in that spirit, efforts are unhesitatingly made to "explore the relationship between "better" regulation [in terms of consistency, transparency, accountability, targeting and proportionality] and innovation and entrepreneurship" (Zárate Moreno, 2015). A problem is that even the best regulation cannot impart quality if disciplines other than political or administrative ones are required (such as competition-driven processes like insurance, liability, or warranties/guarantees), or if, as it says there, benefits sought are forms of wealth rather than features easily molded by bureaucrats. Firms are subject to discipline from competitors, suppliers, consumers—a variety of stakeholders. Furthermore, cost-benefit analysis, presumably needed to assure quality, rarely happens for individual regulations in the US, and never at the aggregate level anymore (Crews, 2017a).

Fortunately, studies employing the *Doing Business* database have tended to conclude that regulation exhibits public choice rather than public interest results. In addition, we can certainly acknowledge that assuring regulatory quality does play a legitimate role properly construed. For example: "Over time, *Doing Business* has evolved from focusing mainly on the efficiency of regulatory processes to also measure the quality of business regulation. *Doing Business* not only measures whether there is, for

example, a fast, simple and affordable process for transferring property but also whether the land administration has systems in place that ensure the accuracy of the information about that transfer" (World Bank, 2017: 2). That is, "*Doing Business* measures the quality of regulation by focusing on whether an economy has in place the rules and processes that can lead to good outcomes" (World Bank, 2017: 6). This version of "quality" makes sense.

However, "quality" is not likely to be so constrained, as the World Bank is on board with the philosophy of goal-oriented political regulation as a high ideal. "Doing Business scores reward economies that apply a risk-based approach to regulation as a way to address social and environmental concerns—such as by imposing a greater regulatory burden on activities that pose a high risk to the population and a lesser one on lower-risk activities. Thus, the economies that rank highest on the ease of doing business are not those where there is no regulation—but those where governments have managed to create rules that facilitate interactions in the market-place without needlessly hindering the development of the private sector" (World Bank, 2017: 14).

Still further, *Doing Business* exhibits a strong inclination toward progressive social-economic regulation purportedly aimed at leveling the playing field between classes and sexes but that can be vulnerable to abuse. For example, the World Bank intones (p. v.), "regulation can also be used as an intervention when market transactions have led to socially unacceptable outcomes such as improper wealth distribution and inequality. Governments have the ability to design and enforce regulation to help ensure the existence of a level playing field for citizens and economic actors within a society. Business regulations are a specific type of regulation that can encourage growth and protect individuals in the private sector." In addition, "well-functioning markets—that are properly regulated so that distortions are minimized—are crucial. Governments play a pivotal role in establishing these well-functioning markets through regulation" (p. 1).

The caution for policymakers here is that social, safety, and environmental command policies are as vulnerable to political predation as economic regulation is. In this respect, today's most prominent tool for studying entrepreneurship, the World Bank report, is vulnerable to embracing

the presumption that governments are the source of the social/humanitarian values of individual well-being rather than a centuries-old impediment to individual rights and human flourishing. Again, institutions matter, and the track record of actual rather than *imagined* governmental institutions matters.

The viewpoint insisting that regulation spurs economic innovation is extremely resilient. Anna Maria Zárate-Moreno (2015: 5) reports on research finding that "regulatory complexity has a negative effect on the high growth entrepreneurship in low income countries, and positive effect on high income ones. To explain this, researchers hypothesize that 'the presence of complex regulations in richer countries may actually spur attempts by entrepreneurs to overcome administrative hurdles, and increase their motivation to fulfill their growth ambitions." Separately (p. 7), "[Knut] Blind reported on six separate regression analyses which found that nonrestrictive price regulation, and efficient enforcement of intellectual property rights [we noted a libertarian rift on this issue earlier] and a legal and regulatory framework that fosters competitiveness all have a positive effect on innovation. Blind also concluded that product and service legislation and environmental laws and compliance that are perceived to hinder business activity have a positive impact on innovation, confirming [Michael] Porter's Hypothesis for OECD countries." (The Porter conjecture is that "strict environmental regulations can induce efficiency and encourage innovations that help improve commercial competitiveness."21) One could more readily envision these "beneficial" results for individual firms or sectors, rather than economies as a whole; still, the regulation-as-springboard viewpoint remains widespread (Stewart, 2010). One sees this pro regulation, visible hand booster-ism everywhere still in the 21st Century. This default stance can create significant problems for entrepreneurial prospects in wealthier countries and countries that become wealthy, since, as other research finds, "less corruption, a characteristic associated with more developed countries, and rule of law tend to make the negative impacts of regulation more pronounced" (Zárate-Moreno, 2015: 5-6). Policymakers

^{21 &}lt; https://en.wikipedia.org/wiki/Porter_hypothesis>

should recognize that, to the extent regulation negatively affects entrepreneurship, it can be more of an "insult" where rule of law otherwise prevails.

Precaution, or regulatory risk-aversion, is another regulatory "quality" stance that can be counterproductive to entrepreneurship and health itself if deployed recklessly. In medicine, David R. Henderson (2015) writes of the importance of Kirzner's "entrepreneurial alertness" even in regulated medical field markets where regulation gets utterly in the way. While in the US user fees have decreased approval times for drugs and devices, Richard Williams (2015a, 2016) shows there has been little increase in medical product invention and innovation because the Food and Drug Administration has found ways to keep processes expensive and lengthy overall. Similarly, the global tendency to compel GMO labeling raises costs and reduces availability (Williams, 2015b), and outright opposition to GM crops costs lives (Ridley, 2014). The pharmaceutical market structure now almost appears to be one of firms specializing in regulatory compliance and outsourcing innovation to other firms (Shepherd, 2017). Similarly, European Union chemical REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) helps ensure minimal entrepreneurship in that sector. These outcomes hardly constitute regulatory "quality."

Acknowledge and avoid job losses induced by regulation

Accounting for the job losses induced by regulation is imprecise in the U.S. and likely worldwide, but doing so can aid in advancing entrepreneurship. The sensible idea that regulation dampens entrepreneurship must contend with the ever-present claim that regulation creates jobs or is neutral. While entrepreneurs will affirm that governments dis-incentivize employment, and despite (for example) US President Donald Trump's many references to "job-killing regulations," (e.g., The White House, 2017) it is all but official policy among governmental agencies and mainstream academics that regulations have little overall employment effect. It is claimed that regulations that displace employment in one area likely grow it in another. One much-cited study, "Jobs versus the Environment," intones, "increased environmental spending generally does not cause a significant change in industry-level employment." Rather, environmental spending renders a

"net gain of 1.5 jobs per \$1 million in additional environmental spending."

(Morgenstern et al., 1998). The book *Does Regulation Kill Jobs* is similarly cornucopian about regulating without end: "Leading legal scholars, economists, political scientists, and policy analysts show that individual regulations can at times induce employment shifts across firms, sectors, and regions—but regulation overall is neither a prime job killer nor a key job creator" (Coglianese et al, 2014).

Mainstream media salutes. In 2011, a Washington Post story assured readers: "Economists who have studied the matter say that there is little evidence that regulations cause massive job loss in the economy, and that rolling them back would not lead to a boom in job creation." Regulations may even have generally beneficial employment effects, the *Post* story says: "Firms sometimes hire workers to help them comply with new rules. In some cases, more heavily regulated businesses such as coal shrink, giving an opportunity for cleaner industries such as natural gas to grow" (Yang, 2011). In 2017, The Atlantic looked at environmental rules, asked "Do Regulations Kill Jobs?" and assured readers "the idea that regulations stunt job growth more broadly is not supported by research" (Semuels, 2017). Somewhat better, Cass Sunstein, the former director of the White House Office of Management and Budget's Office of Information and Regulatory Affairs under President Barack Obama, regards whether regulation can kill jobs an "empirical question" (Sunstein, 2014), and called for separate treatment of job impacts in the regulatory analysis phase. In that mode, Executive Order 13563 issued by Obama had called for assessing adverse effects on employment, but without great vigor (United States, 2011).

Policymakers should keep in mind that, from the entrepreneur's standpoint, jobs are not an end in themselves but an input; one that increases the cost of final goods or services compared to doing the same with fewer employees. As Bill Frezza (2011) argues, "[i]n any rationally managed business the payroll is a burden, not a benefit. Entrepreneurs and hiring managers only add staff if they think additional employees will produce more value than they consume. The challenge gets compounded when companies are forced to devote ever more of their employees' time to activities that deliver no benefit beyond keeping the expanding army of federal bureaucrats and regulators at bay." In today's wealthier societies, the sometimes lifetime liability that an employee represents compared to atwill relationships is a significant consideration, that likely influences their comparatively lower rates of entrepreneurship. Whether viewed as a dependent or independent variable, jobs are a *cost*. And if all jobs are already a cost, regulation-induced "jobs" are more so, since they are not services the producer required or that consumers demanded. The amount spent on each regulation-induced job is observable; but, as Frederic Bastiat says in *What Is Seen and What is Not Seen*, in reference to the broken window regarded as magically creating employment for the glazier, "[t]o break, to destroy, to dissipate is not to encourage national employment." ²² In the current regulatory job impact debate, "Society has lost the value" of the unnecessary "jobs" (to borrow the Bastiat phrasing).

All that said, from a social policy standpoint, we want more jobs, and we genuinely do make more of them feasible and desirable when we advance an economic liberalization and entrepreneurship agenda.

Regulation's defenders sometimes acknowledge that regulation can cause employment problems when there is recession, such that it might be harder for workers to relocate and/or find other employment, but default to slack demand as an explanation (Konczal and Steinbaum, 2016) and the "remedy" of more government spending (Kessler, 2013). Unemployment's possible linkage to the accumulated body of regulation rarely registers, except in politically driven instances like President Obama directing the Environmental Protection Agency in 2011 to back off \$1 trillion ozone regulations during the election cycle (CEI, 2011). In another reality check with respect to labor regulation, Seattle, Washington recently faced some blowback over minimum wage passions as jobs declined. The city got a taste of what economist Clifford Thies (1991, 2002) argues: If a price control merely moves price a little from its equilibrium level, there will be offsets. So, moderate minimum wage laws will appear to raise wages for lowwage workers, but there will be hidden effects in terms of reduced slack in scheduling that neutralize the effect. But, if the minimum wages moves

²² See < http://www.econlib.org/library/Bastiat/basEss1.html>.

price significantly from equilibrium, the market will not be able to neutralize it and reduced employment among the most vulnerable low-wage workers results. Similar situations exist with rent control (Gerlowski and Thies, 1990; Thies 1993), consumer goods and services regulation (Manger and Thies, 1988), and price gouging prohibitions (Giberson, 2012) that ensure shortages. Unfortunately, expansions of labor-related regulations are steady apart from minor retrenchments (an example was Trump's Department of Labor revoking Obama-era "Administrator's Interpretations" constraining independent contracting and franchising/joint employment).

Entrepreneur and investor John Chisholm (2015) writes of regulations' deterrent effect at key stages of entrepreneurship and job creation. These steps include getting started (worker status regulations and occupational licensing), innovation (resources being dedicated to R&D vs. being diverted to compliance), and business expansion. After an inflexible rulemaking is imposed, Chisholm explains, "[r]egulations stay fixed while advances in knowledge, technology and cooperation enable more dimensions of human needs to be satisfied that the regulation precludes." This is an example of the harm of "quality" regulation that the proponents of *Doing Business*-style surveys appear to downplay. Next, according to Chisholm, confusion sets in because "regulations are not clear, flat boundaries between what is allowed and disallowed but irregular and complex surfaces" (p. 322). The time and money barriers-to-entry mean only the well-connected can cope.

As Richard Williams (undated) explains: "From an economic perspective ... the total number of jobs can be a misleading measure of the costs and benefits of regulation. Bad policies can increase total jobs, and good policies can decrease total jobs." Regulation may increase the number of administrators engaged in activity unrelated to consumer demand for the product or service in question, or raise the number of employees actually required to develop the end product. Rent seeking, prominent in the mixed economy, resurfaces here. To the extent that regulation may boost employment in certain sectors via redirection, special interests ("green jobs") climb aboard. At the least, when regulations do "create jobs" or "cause" hiring, policymakers should account for this as a *cost* of regulation. Unfortunately, the political manipulation of employment will likely

intensify as automation and entrepreneurship both expand. One can predict that AI, robotics, and automation will be exploited by politicians to implement social and economic regulation, even if these innovations are not overly disruptive.

Dispel the presumption of administrative state expertise

Whether the matter at hand is health, safety, or economic regulation, regulators legitimize their role based on presumed expertise. Particularly given the prominence of regulatory dark matter or informal decrees, policymakers seeking to advance entrepreneurship should view regulation based on expertise, particularly of frontier technology sectors, with healthy skepticism.

The administrative state and the accompanying rule by experts was always controversial, but it is increasingly inappropriate to the modern era in which it undermines not just wealth creation but risk mitigation. Technology can render obsolete the market failure arguments that undergirded Pigouvian regulation, such as Federal Communications Commission regulation of airwave "scarcity" in the name of protecting the "public interest."

Worldwide, resources not privatized or integrated into wealth-creating institutions of the free competitive marketplace prior to the onset of the progressive era—airsheds, watersheds, lands, ocean resources, environmental entities, low-earth orbit—remain under control of the expert state. The desire to retain that control presents perhaps the greatest obstacle for tomorrow's entrepreneurship. For example, drones and driverless cars are arriving on the scene in an era in which governments have secured their control of airspace and roads. In other words, at just the moment the Internet and digital technologies stand poised to overcome the alleged market failure rationales used to justify airspace and roadway regulation, these sectors are being channeled into pre-existing public utility regulatory frameworks. When technology can, at long last, begin to allow superior tracking and allocate airspace and road-space, and when roads could be tolled and privatized, agencies take steps like impeding commercial drone deployment, and seeking to regulate vehicle-to-vehicle (V2V) and vehicle to infrastructure (V2I) communications in ways that would preclude the private sector from assuming the role. Similarly, with respect to emergent private space flight, the Federal Aviation Administration's regulation of "commercial space activities" will foster a rent-seeking bonanza. In addition, distortionary government investment in technology projects, displacement of private research (Crews, 2010), and having to compete with government are ongoing challenges for would-be entrepreneurs. For example, now that supersonic private commercial aircraft are on the drawing board, NASA is entering the field.

Entire *categories* of regulatory intervention, and not just agencies and their rule-of-the-day, need to be challenged internationally, because true expertise consists of moving endeavors from central regulatory control to competitive enterprise. However, policymakers seem to lack the vocabulary.

Alongside questioning such fallbacks as the market failure rationale, avoiding abuse of the precautionary principle²³ and embracing Permissionless Innovation (Thierer, 2016) should be a priority. Entrepreneurs cowering in a "Mother-may-I" posture helps enable regulators despite their lack of expertise. For one example, technology could lower costs and expand entrepreneurialism in medical care if the well-to-do could adopt an informed consent approach like that governing "qualified investors" in complex financial instruments, allowing the rich and well-informed to be "the white mice of the medical profession" (Smith, 2010). This would increase affordability and access for others. Regulators tend to erect precautionary barriers to Uber and Airbnb, payday lending, the flying cars that were invented decades ago, needed pesticides, and golden rice (unavailable decades after its discovery). By the time environmental groups and governments are done protecting charismatic megafauna like elephants and rare rhinos with regulation, there won't be any left; but entrepreneurial approaches could have saved them (DeAlessi, 2000). Indeed, regulatory barriers to entry ultimately limit which fields can even *have* entrepreneurs. Over-precaution means there cannot be a Bill Gates of biotechnology, as

²³ The precautionary principle is defined in Collins English Dictionary as "the precept that an action should not be taken if the consequences are uncertain and potentially dangerous." http://www.dictionary.com/browse/precautionary-principle

the Competitive Enterprise Institute's Fred L. Smith Jr. often notes, because each individual innovation requires a time-consuming regulatory stamp of approval, unlike writing software or creating an app for an iPhone or Android device. Of course, regulators attempt to hobble even the latter, already targeting augmented reality technologies (Crecente, 2017), for example.

Avoid antitrust regulatory adventurism

Tightly related to the above discussions on rent seeking and agency expertise, but worth special emphasis, is to resist antitrust rent-seeking/corporate welfare (Crews, 1997) and related intervention based on alleged inefficient technological lock-in or market power. Antitrust represents one of the largest, most visible, but widely condoned interventions into free markets. Regulators gain power and prestige from an imprudent century-old policy that is unfortunately gaining new strength in the age of Google, Amazon, and Facebook. Antitrust regulation's recent rise from the not-quite-dead represents a serious impediment to free competitive enterprise and entrepreneurship because of the greater damage it can do now in frontier sectors and on a global rather than national scale.

More probable than purported anti-competitive abuse on the part of private firms is coercive regulation that precludes new, unseen, or unpredictable avenues of competitive response, or prevents some entrepreneurs from becoming first movers. Geoff Manne and Joshua Wright (2010) explain the high social costs that accompany antitrust intervention in poorly understood innovations and innovative business practices. To remedy the harms of intervention, they propose "simple rules that minimize error costs," including per se legality for new product introductions, requiring direct proof of anticompetitive effects, eliminating treble damages, and per se legality for unconditional refusal to share intellectual property. Prohibiting competitor suits in predatory behavior cases is an overdue step (Boudreaux and Kleit, 1996) to begin putting the antitrust episode in the rear-view mirror.

Entire future categories of entrepreneurship, innovation, and wealth creation may be preempted or constrained by intervention in frontier sectors.

Largely by design owing to progressivism, most nations lack clarity in property rights in frontier sectors, network industries, and vast global "commons" such as spectrum. It will be catastrophic for entrepreneurship and wealth creation if governments worldwide steer, while markets merely row.

Embrace changes in the future of work

Social changes driven by technology and innovation in the sharing economy are accelerating and promise to have profound effects on entrepreneurship. However, those effects can be negative if regulators over-react. Korok Ray (2017) cites an ambitious projection of 40 percent of freelancing workers in 2020, compared to 25 percent in 2014. Some are thrilled with such changes; but there is discontent, evidenced in debates over the treatment of workers as employees or as contractors. Part-time workers seeking fulltime work with benefits may not yet share enthusiasm for either the "gig" economy (matching local buyers and sellers) or even the older outsourcing economy. However, the location-independent nature of tomorrow's working arrangements is real and is not going to reverse. Naturally, legitimate concern exists over the potential erosion of workplace benefits. But those benefits need not have been tied to employers by law in the first place, and could be provided in other ways. One example is the opportunity for benefits exchanges to arise (itself a form of entrepreneurship) that could disentangle benefits from the jobs to which they have been so tightly bound for so long (Ray, 2017). Iain Murray, in "Punching the Clock on a Smartphone App?" (2016), calls for rethinking laws that "tie social goals to the employment contract," and proposes that "rather than creating a government-mandated portable benefits vehicle, legislators should reform laws that create penalties on associations and businesses that attempt to provide such services" and "let workers and employers decide on their own terms about salaries, benefits, hours, vacation policies."

Progressives across the globe often condemn corporations. But, paradoxically, the progressives' own regulatory infatuations can compel entrepreneurs to adopt the corporate structure, "reinforcing the old management—worker divide" (Murray, 2015), when it would not otherwise be necessary given technology's potential easing of two-way contractual relationships.

The less unwise interference there is in future workplace arrangements by policymakers, the more work entrepreneurs will be able to create.

Prevent looming social-engineering threats to entrepreneurship and liberty

Automation, robotics, and worker displacement by technology are extraordinarily disconcerting for many, to say the least, and loom prominently on the horizon of the future-of-work policy concerns just covered. Labor force flexibility is the thing that matters most for healthy adaptation to automation (McCloskey, 2017). The problem for classical liberals is that even if the transition to automation is eminently achievable without societal upheaval and without central government expansion, that path may not be allowed by politicians seeking to exploit the relevant changes in technology.

Indeed, the future debate over entrepreneurship may be on a collision course with what might be justly regarded as the entitlement to end all entitlements. Tech CEOs, such as Elon Musk of Tesla, Sam Altman of Y Combinator, and Mark Zuckerberg of Facebook call for a Universal Basic Income (Gifford, 2017). Such a program, and the legitimization of it by such luminaries, is music to the ears of paternalistic progressives seeking to entrench entitlements more deeply into the global middle class. American socialist Bernie Sanders is "absolutely sympathetic" (Jauhiainen and Mäkinen, 2017), unsurprising as he also endorses single-payer health care, a wealth tax (Cramer, 2017), and anything that expands the state. The UBI's justifications contradict each other. Some, like Musk, think the UBI necessary to placate the restless unemployed, displaced by robots and with nothing to do. Others claim to believe a UBI would free up the mind and "unlock a huge amount of entrepreneurialism," like Slack CEO Stewart Butterfield. Similarly Mark Zuckerberg talks of experimenting with UBI to cushion risk in an unfair world (Harvard Gazette, 2017), and proclaims that "organizations think profoundly differently when they're profitable than when they're in debt" (Haselton, 2017). The flipside of that position is that need rather than comfort drives the hungry streak that underlies human action and entrepreneurship—such as Sergey Brin's use of credit card debt rather than free cash in Google's early days (Berlau, 2012). The UBI could crush

entrepreneurship, much like the pursuit of disability payments in the US (Joffe-Walt, 2013). Still, nations from Finland to Zambia (Aizenman, 2017) to the US (Browne, 2017) are experimenting with UBI, despite 20th century welfare statism's lesson that overall entitlement reform that reduces government rarely happens. Given history, eligibility and costs are sure to expand (Varadarajan, 2017).

It is reasonable to expect that voters collecting the UBI, while enjoying freedom from work, or while plugged into virtual reality goggles *Ready Player One*-style, will vote for politicians promising more such income, with predictable negative effects on entrepreneurship. Mobility of workers is a great thing, but international political pressures toward open borders while welfare statism abounds also bear upon the wisdom of guaranteed minimum income schemes and claims that they would save on traditional welfare costs.

Avoid regulatory harmonization and trade barriers that burden entrepreneurship

The tendency of regulators is to look overseas and adopt regulatory regimes such as antitrust, which seems to be one of the United States' worst "exports" (Crews, 2004). Policymakers seeking to expand entrepreneurship are instead free to liberalize downward rather than regulate upward. Herein we have called for a reframing of what counts as regulation: nations can expand economic liberty, and they can learn from and copy from one another. The key is to avoid regulatory harmonization that reduces freedom, and instead to liberalize to make things fairer and freer. We have noted programs such as one-in, one-out regulatory policies, adopted in the UK, Netherlands, and Canada, that are now part of Donald Trump's regulatory regime. Sound policy prescriptions to liberate entrepreneurship would include more such transnational efforts; the future need not be shackled to the regulatory mindset of the past.

In the report *Cutting the Gordian Knot*, making a case for UK separation from the European Union, Iain Murray and Rory Broomfield (2016) stress how healthy economic alliances trump political ones, and they highlight transnational deregulatory efforts that enriched nations that many could learn from. Examples include increased production and growth in

New Zealand after halting farming subsidies, and Iceland's healthy market-oriented management of fisheries. The authors also proposed a Royal Commission for Regulatory Reduction to examine the body of regulations and present packages of reforms before Parliament that would be considered under streamlined procedures. Similar proposals exist in the US, but they have not yet been enacted.

Critical is maintaining free trade, of course. For example, "[b]y leaving the EU, the UK would be able to reset its regulations in its own free-trade interests and open the UK to the global economy" as opposed to being hurt by Eurozone crises' escalating regulation (Minford, 2013). This new course would include unilaterally rejecting tariffs on imports even if the EU imposed them on Britain in the wake of Brexit, which would effectively lower food prices, among others, and therefore the cost of living, for UK consumers (Hall, 2017). There are also non-tariff barriers in trade that should be addressed, such as the EU's restrictive "sanitary and phytosanitary measures ... including the EU's restrictions on genetically engineered crops, a ban on the use of hormones in cattle, restrictions on pathogen reduction treatments in poultry, pork and beef," feed additives, and other barriers (United States, 2013). Other categories of regulation such as removing employment disincentives would also be important for entrepreneurship. Ongoing EU and OECD regulatory review projects can be used to escalate such transnational campaigns.

Forge do-er/thinker alliances

Every recommendation so far has involved policymakers, some aggressive, some milquetoast (but with the proviso that the latter pave the way for the former). This brief section aims at the entrepreneurs themselves. Many scholars cited in this chapter defend economic freedom, but that alone does not suffice. The entrepreneurial sector itself has a "duty" to defend free enterprise over the coercive and rent-seeking default. Important here is the work of Fred L. Smith Jr., founder of the Competitive Enterprise Institute,²⁴ on the necessary alliance between the world's "do-ers (the en-

²⁴ Disclosure of interest: I'm a CEI guy.

trepreneurs) and thinkers" in advancing economic liberty, and in influencing (or for that matter, becoming) policymakers. As Smith (2012) argues, "[p]roperly mobilized, forces for economic liberty can mount a vigorous defense of capitalism and possibly even recapture some of the ground they have lost over the last century. What Schumpeter failed to consider was that some intellectuals would resist the allure of statism. Indeed, many have."

Joseph Schumpeter (1942) wondered if capitalism could survive, and feared not; capitalism would be despised and attacked by the same intellectuals whose leisure to live as intellectuals was made possible by capitalism. Moreover, businesspersons would be reluctant to speak out in defense.

Consider how they [businessmen] behave when facing direct assault. They talk and plead—or hire people to do it for them; they snatch at every chance of compromise; they are ever ready to give in; they never put up a fight under the flag of their own ideals and interests.... [Rather than educating its] enemies, [business] allows itself... to be educated by them. It absorbs the slogans of current radicalism and seems quite willing to undergo a process of conversion to a creed hostile to its very existence. (Schumpeter, 1942: 161)

Examples of business self-assertiveness can sometimes be found, such as the Job Creators Network²⁵ and the global Entrepreneurs' Organization. Granted, business combinations do sometimes operate against the public interest, becoming and seeking to become rent seekers. But many have legitimate economic liberalization at heart. And occasionally, before major economic regulatory reforms (say, transportation deregulation in the 1980s in the US, or unfunded mandates and small business regulatory reforms in the mid-1990s), there come tipping points where rents become too costly to acquire, and the burden of regulation coalesces such that general, universal regulatory liberalization becomes in the interest of all (or if not all, most; or enough). Indeed, eventually, given the interconnectedness of business (supply chains, business customer networks) the regulatory

^{25 &}lt;a href="https://www.jobcreatorsnetwork.com/">https://www.jobcreatorsnetwork.com/

bell tolls for *all* businesses; the time comes when it becomes apparent to businessmen that regulation that affects their competitors will eventually boomerang and affect them too (Smith, 2012: 2017).

The cultural environment in which business operates is left-leaning and unfavorable to capitalism. The media reports itself as left; Harvard University is avowedly leftist. The campaign contributions media and academic circles make are overwhelmingly to leftist candidates. The media and academic classes often detest business, and argue that business-funded research or proposals must be biased, while, however, government research and subsidized National Public Radio are objective. They all (and sadly many tech entrepreneurs) embrace Corporate Social Responsibility (or CSR) as a way of remedying modern capitalism's alleged faults. However, capitalism is not broken; capitalism is an institution that has spread wealth and fairness more widely than any other has. The average person is an *owner* of businesses under shareholder capitalism.

Business needs to realize it is under assault. Capitalism (and its attendant entrepreneurship) need capitalists defending it, not from a "markets aren't as bad as you think they are" posture, but proudly from a patch of moral high ground, and using the vast, culturally significant methods of communication, marketing, and persuasion that business uniquely possesses (Smith, 2012: 2016). Noting that "[s]tatists have been far more aggressive in uniting both their economic and intellectual forces," Fred Smith (2012) urges marketing economic liberty: "If we accept the criticisms of the dominant intellectual class, capitalism will fade. ... For that reason, we must create a counter-reformation of classical liberal intellectuals and business leaders, who work together to promote legitimizing narratives about capitalism and instill its virtues in the hearts and minds of our global society" (Smith, 2012). The practice of entrepreneurship is legitimate and moral; and entrepreneurs and large businesses alike, with their vast cumulative resources, need to direct their communiques to Joan Citizen as well as Joan Consumer.

Regulators rather than market forces have long overwhelmingly directed some of our most economically distressed industries. Capitalism stands among the greatest democratizing innovations in human history, a way for individuals unknown to one another to work together to create unprecedented well-being. It needs to be defended as the precious institution it is. "A moral defense of capitalism needs to illustrate how capitalism not only makes people wealthier, but also advances other important values and concerns, such as fairness and justice. Failure to make that case leaves business vulnerable to attack by anti-market critics, demagogic office-seekers, and overzealous regulators (Smith, 2016). While policymakers (we hope) perform the tasks of entrepreneurial liberalization, business needs to get up from its crouching position and demand that capitalism be portrayed fairly as the moral, democratic institution that it is. As I've heard Fred Smith joke, "Business would win more battles if it fought any!"

Conclusion:

Louder Applause + Less Regulation = Greater Entrepreneurship

The book *Lessons from the Poor: Triumph of the Entrepreneurial Spirit*, edited by Alvaro Vargas Llosa (2008), demonstrates how regulations can contribute to worldwide poverty. John Chisholm, too, shows how important minimizing regulation's deleterious effects can be, particularly in the context of entrepreneurs:

Define any metric that you wish of potential entrepreneurs that combines ratings of such qualities as skill, passion, perseverance, self-confidence, ambition, and resources. Your metric will distribute the entrepreneurs along a [bell-shaped] curve. ... No matter how you define your metric, many potential entrepreneurs, especially at the low end of your rating scale, are being blocked by regulations. The numbers blocked each decade grow as regulations grow. The very men and women in society who find it hardest to provide for themselves and their families and live in self-sufficient dignity are blocked. (Chisholm, 2015: 308)

Downturns and stagnation are often aggravated by government intervention that perpetuates non-market-clearing prices for labor, goods, and services, as W. H. Hutt describes (Crews, 2008). The proper government role usually is not to "act," but to abstain from its own manipulation of wages and prices, which instead must adjust to market-clearing levels for recovery and entrepreneurship to resume. The wealth created by entrepreneurs forms the foundation for future entrepreneurs to establish even greater wealth and well-being. By now, scholars have adequately established that regulations negatively affect entrepreneurship, yet regulators continue to downplay deleterious impacts of their rules and often hope to improve rules' "quality." Clearly, a better appreciation of regulatory costs and the real-life responses of entrepreneurs to regulation, such as the inclination to start a business in the first place, or to hire part-rather than full-timers, should remain a priority. Policymakers need to become "entrepreneurial" themselves when it comes to rolling back the regulatory enterprises they oversee.

When reflecting upon entrepreneurial transformation versus subsistence, or the haves and have nots, an elephant in the room is the explosive growth of the United States in its early years. Over the past century-anda-half, America's GDP roughly doubled every 25 years. Then in the 1800s, isolated Japan industrialized in just a few decades. If the US, unaided, went from, to borrow the modern terms, subsistence to transformational beginning 200 years ago, others should be able to emulate that process where artificial barriers are not present but rule of law is. Equally important, developing nations that improve faster than today's rich, but regulation-bound and stagnant economies, teach lessons and are role models, too. There are lessons for all sides today in a world infatuated with regulations. In this chapter, we have noted numerous pressures that constitute barriers to entrepreneurship (such as economic, labor, and environmental regulation; "competition policy;" frontier sector regulation; rent-seeking; and more). Halting further encroachment of global over-regulation and maximizing economic freedom around the world to unleash entrepreneurship constitutes Liberty's Unfinished Business.

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