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Entrepreneurs and Regulations

Removing State and Local Barriers to New Businesses

By Chris Edwards

EXECUTIVE SUMMARY

The U.S. economy was damaged by the COVID-19 crisis in 2020. Output plunged and unemployment spiked. Mandated shutdowns, social distancing, and altered consumption patterns resulted in many businesses closing permanently and laying off workers.

To replace lost jobs and incomes, the economy needs entrepreneurs to fill the void with business startups. During the economic downturn a decade ago, the business startup rate fell and never fully recovered, which contributed to a slow recovery. Even before that, the startup rate had been trending down since the 1980s. That is troubling because startups play crucial roles in the economy. They create most net new jobs. They are a key source of innovation because new products are often pioneered by new companies. And they challenge dominant firms, which helps to restrain prices and expand consumer choices.

This report argues that state and local policymakers should slash regulatory barriers to startup businesses. State governments should repeal certificate of need requirements and minimum wage laws, liberalize occupational licensing and restaurant alcohol licensing, and fully legalize marijuana and hemp businesses. Local governments should reduce and simplify permitting and licensing rules for new businesses. They should also liberalize zoning rules for home-based businesses.

The report presents an Entrepreneur Regulatory Barriers Index, which uses 17 variables to rank the states on their barriers to startup businesses. The results suggest that the lowest regulatory barriers are in Georgia, South Dakota, North Dakota, Colorado, New Hampshire, Kansas, Indiana, Wyoming, Utah, and Ohio, while the highest barriers are in Rhode Island, Oregon, Nevada, New York, West Virginia, Washington, Hawaii, California, New Jersey, and Connecticut.

At the federal level, the Biden administration is likely to increase regulations on businesses and raise taxes, which would undermine entrepreneurial activity. But state and local governments should move in the opposite direction and repeal unneeded barriers to new enterprises and spur economic growth.

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TRENDS IN BUSINESS STARTUPS

In the United States, entrepreneurship and business dynamism appear to have trended downward in recent decades. One indicator of this is the decline in the startup rate for employer businesses, as calculated from the Census Bureau's "business dynamics" data.[1] Employer businesses have at least one employee other than the owner. The startup rate is the number of businesses less than one year old as a share of all businesses.

Figure 1 shows that the startup rate fell from more than 10 percent in the early 1980s to 8 percent in 2018.[2] In 2018, there were about 430,000 startups among 5.3 million employer businesses. In most years, the overall economy is growing and there are more firms starting up than shutting down.[3]

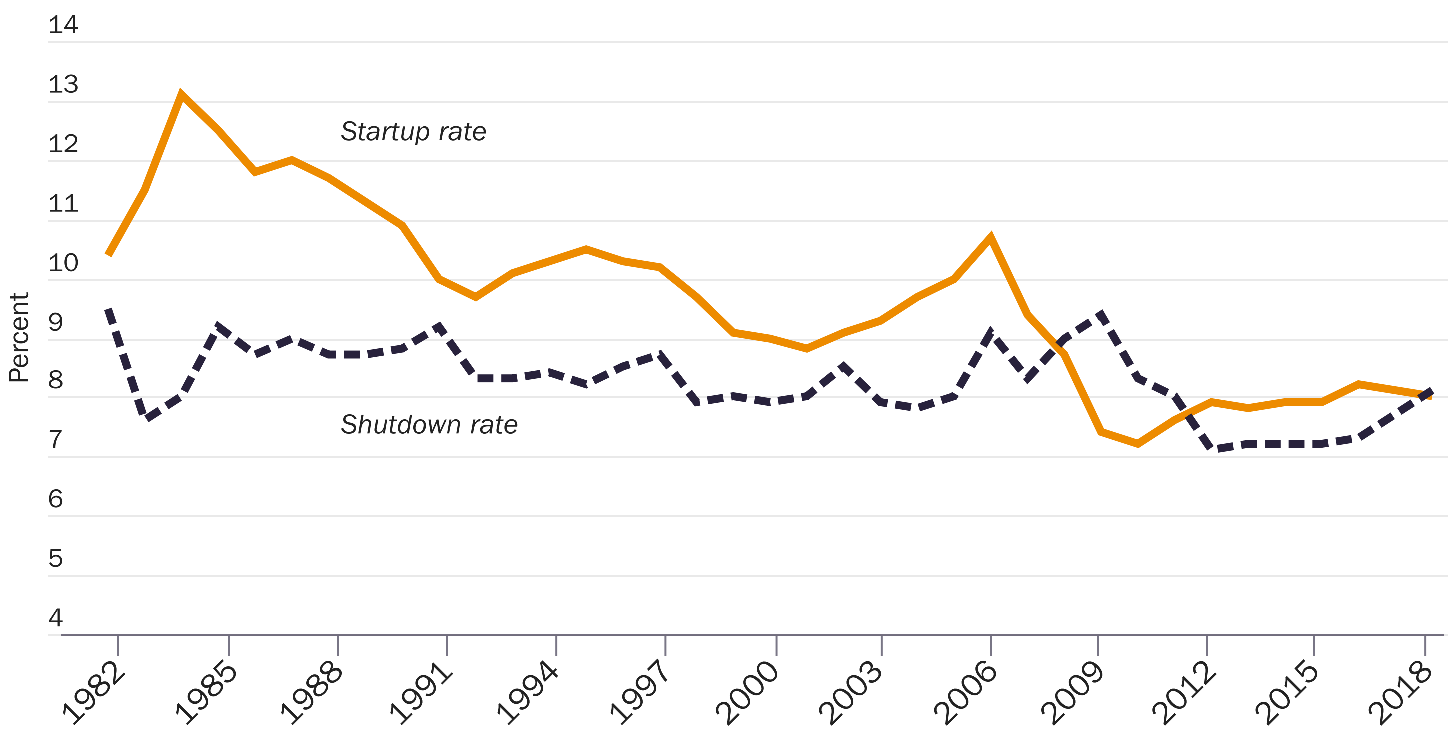
During the economic downturn a decade ago, the startup rate fell below the shutdown rate for several years. The startup rate did not fully recover from the decline, which is one reason why it took many years for the unemployment rate to fall to its pre-recession low. Economist John Haltiwanger noted, "One of the reasons we took so long to recover from the Great Recession is startups got clobbered and didn't come back."[4] A *Wall Street Journal* news story concurred, "The sluggish pace of new business creation in years after the recession officially ended contributed to a slow recovery and unusually high unemployment."[5]

Another measure of entrepreneurship is self-employment, which includes both businesses that have employees and those that do not. Self-employment was fairly flat during the 1990s and 2000s but over the past decade has trended down. Self-employment as a percentage of total private-sector employment fell from 14.1 percent in 2009 to 12.3 percent in early 2020 before the pandemic began.[6] This study uses "startup" broadly to mean all new business enterprises with and without employees.

Discussing the downward trend in startups, economists Germán Gutiérrez and Thomas Philippon noted, "In addition to the decline in the raw entry rate, there has been a decline in size of young firms: entrants are fewer, they start smaller and grow more slowly."[7] The

Figure 1

U.S. business startup and shutdown rates



Source: Congressional Budget Office, "Federal Policies in Response to Declining Entrepreneurship," December 29, 2020.

result is that small firms and young firms are playing a diminished role in the economy.

Between 1998 and 2017, the number of small firms (less than 500 employees) increased 7 percent, while the number of large firms (more than 500 employees) increased 23 percent.[8] Over the same period, total employment in small firms increased 10 percent, while employment in large firms increased 28 percent. Meanwhile, employer firms less than five years old fell from 38 percent of all firms in 1982 to 29 percent by 2018.[9]

In response to the COVID-19 pandemic, the economy plunged into recession in 2020 and many businesses shut down permanently. Smaller firms were hit harder than larger firms. By the end of 2020, small business revenues and the number of small businesses open were down about 30 percent from a year earlier.[10] The largest job losses occurred in the leisure and hospitality industry.[11] Many restaurants have gone out of business, including about one-third of the restaurants in New York City.[12]

As businesses were closing in early 2020, business startups were also falling. However, startups rebounded strongly in the summer before tapering off again in the fall, according to Census Bureau "business formation" data.[13] These data are based on applications for new employer identification numbers.

The startup rate rebound in the summer was likely due to the delay of some startups from earlier in the year, a rise in startups pursuing new online opportunities, and people being thrown out of previous jobs. Hardship is one driver of entrepreneurship.[14] The summer spurt in startups may have also stemmed from people registering fraudulent businesses to gain coronavirus-related disaster subsidies.[15]

CONCERNS ABOUT THE STARTUP DECLINE

The rate of business startups has improved since the drop in early 2020, but there is concern the long-term downward trend will continue. That trend has puzzled economists. The advance of information technologies and the shift toward services in the economy have reduced the costs of running many small businesses, which should have encouraged entrepreneurship. Even before the internet revolution of the 1990s, the personal computer revolution of the 1980s provided startups with tools that were previously only available to large firms, such as software for word processing, invoicing, and databases.

Economists do not fully understand the reasons for the downward drift in startups.[16] John Haltiwanger found that the startup decline before 2000 was concentrated in sectors such as retail trade and services where there was a move toward national chains and away from mom-and-pop stores.[17] That transformation likely increased productivity and thus was probably beneficial for the overall economy.

However, Haltiwanger and others have found that the startup decline after 2000 has been wider spread, which may suggest growing rigidity in the economy. Economist Steve Davis looked at the employment share of firms less than five years old and found that the "drop in the young-firm share is pervasive across broad industry groups and U.S. states."[18] Between 2000 and 2018, the young-firm employment share fell 60 percent in high-tech manufacturing, 56 percent in information, 53 percent in high-tech, 38 percent in services, 38 percent in manufacturing, 33 percent in construction, and 13 percent in retail.[19] Those declines suggest a fall in dynamism in the economy.

Ruchir Sharma, a top fund manager at Morgan Stanley, points to another factor suggesting a loss of U.S. dynamism: the rise of "zombie" firms, which are companies that have not earned enough profits over three years to even pay interest on their debt.[20] Government policies may be keeping zombies alive, which is a drag on growth because resources are not being reallocated to new firms. A rising number of zombies "lowers the productivity of rival companies—and blocks the entry of new companies—by raising labor costs and making it difficult to attract capital," notes Sharma.[21] The percent of publicly traded companies that are zombies rose from just a few percent

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in 2000 to 19 percent in 2020 before the COVID-19 pandemic started.

Other indicators of falling dynamism are declines in job reallocation rates (measured by job creation and destruction) and worker allocation rates (measured by hires and separations). Davis and Haltiwanger note:

> U.S. labor markets became much less fluid in recent decades. Job reallocation rates fell more than a quarter after 1990, and worker reallocation rates fell more than a quarter after 2000. The declines cut across states, industries and demographic groups defined by age, gender and education.[22]

What is causing the fall in dynamism? Davis and Haltiwanger suggest that it is a combination of demographic changes, shifting markets, and government regulations:

> Many factors contributed to reduced fluidity: a shift to older firms and establishments, an aging workforce, the transformation of business models and supply chains (as in the retail sector), the impact of the information revolution on hiring practices, and several policy-related developments. Occupational labor supply restrictions, exceptions to the employment-at-will doctrine, the establishment of protected worker classes, and "job lock" associated with employer-provided health insurance are among the policy factors that suppress labor market fluidity.[23]

The sections below discuss the importance of regulations to startups and economic dynamism. But nonpolicy factors also play a role. One factor is America's changing demographics. The Congressional Budget Office (CBO) found that "people between the ages of 35 and 54 are more likely to be entrepreneurial—and successful in their new businesses—than those of other ages, and their share of the workforce has fallen since 2000."[24]

Another factor is that young people appear to be starting fewer businesses today than in the past. A Small Business Administration study found that "At age 30, less than 4 percent of Millennials reported self-employment in their primary job in the previous year, compared with 5.4 percent for Generation X and 6.7 percent for Baby Boomers."[25] Similarly, the Kauffmann Foundation noted about 20- to 34-year-olds: "In 1996, young people launched 35 percent of startups. By 2014, it was 18 percent."[26]

The decline in startups may partly stem from financial factors. High levels of student debt today may make it harder for young people to access financing and dissuade them from launching businesses.[27] In polls, young people interested in entrepreneurship point to financial factors as a barrier.[28] Also, the decline in housing prices during the 2007–2009 recession appears to have undermined startups because home equity is often used as collateral for business loans.[29]

The climate of ideas influencing young people may also play a role. Some policy influencers of the young, including celebrities and political leaders, demonize businesses and profitmaking.[30] But other cultural factors are supportive of entrepreneurship. Numerous television shows, such as the reality series *Shark Tank*, portray startups in a positive light, and some technology entrepreneurs are widely admired. Also, programs in entrepreneurship have blossomed in American colleges in recent decades.[31]

Should we care about the level of startups and entrepreneurship?

Yes, for numerous reasons. New businesses are important for job creation. Looking at employer businesses, startups created 2.4 million jobs in 2018, which was 15 percent of gross jobs created that year.[32] However, the effect of startups is more striking when considering net jobs. Established firms both create and lose jobs, whereas startups only create jobs. In most years, startups create most net jobs because many established companies either shrink or shut down. In 2018, the 2.4 million jobs created by employer startups accounted for nearly all the 2.5 million net jobs created by employer businesses that year.

Startups revitalize local communities by creating jobs for people displaced by shrinking businesses. Some startups grow to become large and durable companies that propel the overall economy. Economist Ryan Decker and colleagues found that about 15 percent of U.S. companies grow more than 25 percent per year.[33] These top growers tend to be young companies, and they account for almost half of gross job creation, the authors find. In 1994, Amazon.com consisted of Jeff Bezos in his garage in Seattle, but today the company employs about one million people.

Startup activity fuels productivity growth because "newly established businesses are typically more productive than the firms that preceded them," reports the CBO.[34] Entrants in manufacturing industries have substantially higher productivity than exiting establishments.[35] Looking across industries or across jurisdictions, a larger share of employment in new firms correlates with higher productivity growth. Haltiwanger notes that a "high pace of job reallocation has been largely productivity enhancing. That is, it reflects jobs being reallocated away from less productive to more productive businesses."[36]

Startups are crucial for spearheading innovations and competition. In his research, former Harvard Business School professor Clayton Christensen highlighted the importance of disruptive innovations, which are new products that may start in a niche but eventually shake up and replace existing businesses and industries.[37] Such innovations are often pioneered by new companies, not by established ones. Established companies tend to focus on growing their current markets and may miss shifts in tastes and technologies that startups exploit.

For instance, IBM dominated the mainframe computer market in the 1960s but was slow to recognize the shift to minicomputers, which were pioneered by Digital Equipment Corporation (DEC) and other new firms in the 1960s and 70s. Then both mainframe and minicomputer firms missed the shift to personal computers pioneered by Apple and other startups in the late 1970s. Then Apple and IBM initially missed the shift to portable computers pioneered by Compaq in the 1980s.

Christensen found similar patterns of disruption by new companies in a diverse range of industries, including disk drives, steel mills, retailers, motorcycles, ships, transistor radios, and construction equipment.[38] Indeed, this pattern goes back at least to the 19th century.[39] As one study on innovation noted, "New firms are a key delivery method for bringing innovations to market, and they innovate in a qualitatively different manner from incumbents."[40]

In addition to pioneering new products, startups can shake up overly regulated industries. Uber disrupted the taxicab industry by reducing costs and increasing convenience. Hordes of financial technology (fintech) startups are reducing costs in the financial services industry with new lending, saving, and payments options. In the 1970s and 1980s, MCI disrupted the sluggish AT&T telephone monopoly, and FedEx partly pried open the letter market dominated by the U.S. Postal Service with the introduction of urgent letters that were outside of the Postal Service's legal monopoly.

In a 2020 report, the CBO found that "entrepreneurship in the economy has declined significantly over the past four decades."[41] This is a matter of concern because "new firms provide innovative products and services, improve the productivity of the workforce, and ensure competition in the marketplace."[42]

The lesson for policymakers is that they should remove barriers to the birth of new businesses. Regulations are a major barrier, as discussed in the following sections.

INTERNATIONAL COMPARISONS

Despite the fall in startup activity and dynamism in recent decades, the United States still has a strong entrepreneurial culture. Nonetheless, comparisons to other countries show that there are areas for improvement.

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> "The United States does quite well on levels of entrepreneurship, but only middling on regulatory barriers to startups and business growth."

The Global Entrepreneurship Index (GEI) "is a composite indicator of the health of the entrepreneurship ecosystem in a given country."[43] It is based on 14 measures of the quality and depth of each country's entrepreneurial ecosystem, such as measures for education, financing, and public attitudes toward risk taking. The index places the United States number one in the world. The GEI report focuses on the environment for high growth companies, not mom-and-pop startups.

The Global Entrepreneurship Monitor (GEM) is an effort by a consortium of international think tanks and academics.[44] Based on survey data, GEM estimates the percentage of adults in each country owning a business less than three and a half years old. The United States ranks 10th best out of 50 countries.

GEM also evaluates each country's climate for entrepreneurship. In public polls, researchers ask respondents if they agree with the statement, "In my country, it is easy to start a business." Some 70 percent of U.S. respondents agree, which ranks America at just eighth out of 50 countries.

GEM also asked 36 experts in each country to rate their nation on "framework" conditions for entrepreneurship. These include the availability of financing, taxation, regulatory barriers, levels of education, and cultural attitudes toward entrepreneurs. The United States ranked 10th out of 54 countries.

The World Bank publishes an annual study on the ease of doing business in 190 countries.[45] Countries are ranked based on dozens of regulatory factors that affect the ability to start and grow businesses. The United States ranked sixth best in the world in 2020 for ease of doing business. However, the World Bank ranks the United States at just 55th place for ease of launching a new business. This rank is based on the time and costs of legal and bureaucratic barriers that entrepreneurs face when launching a startup. The calculations are done for hypothetical companies specified by the World Bank.

As part of its World Governance Indicators, the World Bank publishes a regulatory quality measure, which measures "regulations that permit and promote private sector development."[46] The United States ranks just 24th best in the world, behind Australia, Canada, France, Germany, the United Kingdom, and numerous other high-income countries.

Studies by the Organisation for Economic Co-operation and Development (OECD) find that U.S. regulations on businesses are at least as heavy as European regulations on businesses.[47] Examining trends in the OECD data over recent decades, Germán Gutiérrez and Thomas Philippon find that "European countries have substantially improved their regulatory process while the US has not."[48]

In sum, the United States does quite well on levels of entrepreneurship, but only middling on regulatory barriers to startups and business growth.

REGULATIONS ON BUSINESSES

Governments impose various sorts of regulations on businesses. Some regulations are imposed across all industries, such as rules related to labor, accounting, safety, environment, and advertising. Other regulations are specific to industries, such as agriculture, energy, transportation, and financial services.

Regulations are rules that require actions or that restrict or ban actions. To comply with regulations, companies must spend on equipment and procedures, must pay wages and benefits set by government rules, and must hire experts to navigate all the rules. Regulations consume the time and energies of business leaders, and they create barriers to innovation and competition. Many regulations create benefits, but those benefits should be considered against all the costs they entail.

The federal government imposes regulations on businesses related to occupational health and safety, environment, wages and overtime, health and retirement benefits, family leave, workplace harassment and discrimination, disability, immigration and employment eligibility, labor unions, privacy, antitrust, truth in advertising, foreign trade, and many other areas. The federal government imposes further regulations on specific industries. It has about 260 agencies that impose regulations, and there is overlap between the rules.[49] A startup with a new health app for smartphones, for example, may have to deal with regulations from four different federal agencies.[50]

The overall volume of federal regulations has increased over the decades. Federal regulations now span 186,000 pages, up from 138,000 in 2000 and 71,000 in 1975.[51] Federal agencies usually impose more than 3,000 new regulations or "final rules" each year, as published at www.federalregister.gov. The annual direct cost of accumulated federal regulations on the economy has been roughly estimated at $2 trillion.[52]

State and local regulations are imposed in addition to federal regulations, and the overall volume and costs of these regulations are less understood.[53] State governments impose business regulations related to health care, the environment, workers compensation, occupational licensing, minimum wages, and other activities, and they have a large role in regulating certain industries, such as utilities and alcohol. Local governments impose regulations related to land use, zoning, business permitting, and other activities. All three levels of government regulate in some areas, such as green building codes.[54]

How important are regulations to small businesses? In a March 2020 survey, the National Federation of Independent Business (NFIB) asked small business owners to rate the importance of 75 different economic issues for their firms. After the cost of health insurance, finding and retaining good employees, and taxes, the biggest issue was "unreasonable government regulations."[55] The organization's surveys since the 1980s consistently find that regulations are one of the "most important problems" faced by small businesses.[56]

Regular polls by CNBC also show that regulations are a top concern of small businesses. In the fourth quarter of 2020, small business confidence plunged to the lowest level since 2017.[57] When asked which factors will have a negative effect over the next year, 49 percent of small business respondents said government regulations, which is up from 26 percent in the first quarter of 2020.[58] The shutdowns and restrictions of 2020 appear to have increased fears of government regulatory power.

Policymakers have long expressed concerns about the effect of regulations on small businesses. The Regulatory Flexibility Act of 1980 and subsequent statutes and executive orders require federal agencies to assess the effect of their proposed rules on small businesses.[59] Agencies must determine whether the effect of a rule is likely to be "significant" and affect a "substantial number" of small businesses. If so, agencies must consider less burdensome alternatives. After the federal rules were passed, many states passed similar reforms.[60]

Despite such efforts, regulations often harm startups more than large and established businesses in at least three ways: disproportionate cost burdens, economies of scale in compliance, and entry barriers.

First, regulations can increase costs for small businesses more than large businesses. Minimum wage laws are an example. Smaller firms are hit harder because they tend to pay lower wages.[61] In 2019, for example, average wages in establishments with fewer than 100 workers were $976 per week, which compared to $1,914 per week for establishments of more than 1,000 workers.[62] Almost half of minimum wage workers are employed at businesses with fewer than 100 employees.[63]

Minimum wages particularly affect startups because they are usually small businesses with very lean budgets. Entrepreneurs often "bootstrap" their startups, meaning they scrape together funds from friends, family, and credit cards to pay expenses, and they earn little in their first few years of operation. A 2017 analysis of 2,143 technology startups estimated that half of the company founders earned an average $5.61 an hour their first year.[64]

Economist Xiaohui Gao examined data on state minimum wages and startup survival

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rates by state from 1982 to 2014. She found that "a 1% increase in the minimum wage is associated with a 3.5% decline in the survival rates of startups."[65] The problem, she concluded, is that "new and young firms tend to have a workforce with a higher proportion of minimum-wage workers. They often tend to operate on thin or even negative profit margins, leaving them exposed to mandated increases in labor costs in their incipient years."[66]

The second regulatory disadvantage for startups is economies of scale in compliance. To launch a startup, entrepreneurs need to learn an array of general business regulations as well as regulations specific to their industry. They do not have in-house experts to guide them, as large firms do. Regulations may require investments in machinery, business processes, and compliance officers. Large firms can spread such costs of compliance across a greater volume of sales.

In a study for the National Association of Manufacturers, economists Mark Crain and Nicole Crain measured regulatory economies of scale. For businesses of different sizes, they estimated the costs of federal regulations, including economic, tax code, environmental, health and safety, and homeland security regulations. They found that the per employee costs for small businesses (less than 50 employees) were 29 percent higher, on average, than the costs for large businesses (more than 100 employees).[67] In manufacturing, they found that the per employee regulatory costs for small businesses were 152 percent higher than the costs for large businesses.[68] A 2017 Chamber of Commerce study echoed these findings of relatively higher regulatory costs on smaller firms.[69]

Without a compliance staff to rely on, the time and energies of small business owners can be consumed by regulations. This was illustrated in a *New York Times* story about a family apple orchard in New York state.[70] Regulations on ladders, deer droppings, storage, fertilizers, hygiene, vehicles, training, immigrant workers, and other items are endless. The federal rules on pesticide spraying are over 10,000 words long. To comply with all the rules, the orchard keeps 13 detailed logbooks that track much of what every worker does. As a result of the growing regulatory burden, an expert quoted in the piece, said "More of our fruits and vegetables will be grown by large domestic producers who can afford to comply with the regulations—at the expense of smaller competitors—and by produce farmers abroad."[71]

The volume and complexity of regulations distract small business owners from success in the marketplace. Their focus becomes "management to prioritize compliance over growth and innovation."[72] About half of all new businesses fail by the fifth year, so entrepreneurs are in a desperate struggle to survive.[73] As a consequence, bureaucratic impositions that divert entrepreneurs' focus from the marketplace have a high cost.

The third sort of regulatory harm faced by startups are legal barriers to entry, which are often imposed with support from incumbent businesses. As discussed in the next section, certificate of need rules require that entrants to certain industries receive government approval, while occupational licensing requires that entrants to certain professions receive government approval. Under both regulatory structures, established firms use their political influence to protect their turf from newcomers.

Economist George Stigler developed the idea that interest groups would "capture" regulatory agencies, meaning that agencies would work on behalf of incumbent businesses.[74] Through regulations, incumbents use the government to retain monopoly power, dissuade entrants, and keep prices high. A classic example of capture was the Interstate Commerce Commission, which regulated railroads between 1887 and 1995. Economist Milton Friedman said that it "started out as an agency to protect the public from exploitation by the railroads," but eventually became "an agency to protect railroads from competition by trucks and other means of transport."[75]

Davis summarized some of the regulatory disadvantages faced by startups and small businesses:

> The burdens of regulation and regulatory complexity tend to fall more heavily on younger and smaller businesses for three reasons. First, there are fixed costs of regulatory compliance. . . . Second, there are one-time costs of learning the relevant regulations, developing compliance systems and establishing relationships with regulators. . . . Third, compared to smaller, newer and would-be competitors, larger and incumbent firms have greater capacity and incentive to lobby for legislative exemptions, administrative waivers, and favorable regulatory treatment.[76]

The larger the size and scope of government, the more policy levers are available to block entry. A study across 85 countries by Simeon Djankov and colleagues found that countries with heavier regulation of entry have higher corruption but not better-quality products.[77] The results, the authors argued, are consistent with the view that entry regulations tend to benefit politicians, not consumers.[78]

A number of studies have linked more regulations with less entry:

- A 2015 study by analysts Ben Gitis and Sam Batkins looked at estimates of federal regulatory costs by industry from 2003 to 2012 and found that cost increases tended to reduce the number of small businesses in an industry.[79]
- A 2018 study by economist Dustin Chambers and colleagues used a measure of federal regulatory restrictions by industry from 1998 to 2015 to estimate that as restrictions increased, the number of small firms in an industry decreased, but not the number of large firms.[80]
- A 2017 study by economists James Bailey and Diana Thomas examined levels of regulation and business startups across 215 industries.[81] They found that industries that were more regulated had fewer startups between 1998 and 2011.
- A 2019 study by Germán Gutiérrez and Thomas Philippon found that free entry to U.S. industries has stagnated the past 20 years.[82] They examined possible causes and concluded that "regulations drive down the entry and growth of small firms relative to large ones, particularly in industries with high lobbying expenditures. We conclude that lobbying and regulations have caused free entry to fail."[83]
- A 2020 study by economists Liya Palagashvili and Paola Suarez looked at 19,585 technology startups in the United States and Canada across industries. Their results "suggest that more regulated industries may exhibit lower rates of entry and that more regulated industries are associated with a greater likelihood of a startup closing."[84] They argue that it is more difficult for firms in industries with heavier regulation to attract risk finance.

When regulations reduce entry, it slows innovation. Since new technologies are often pioneered by new firms, the economy misses out on the compounding of advances over time when startups are blocked. Telecommunications deregulation in the 1980s allowed new firms such as MCI to create rapid advances in an industry that had stagnated under AT&T domination.

Economist Leora Klapper and colleagues used a database of 3.3 million firms across 21 European countries to study the effect of entry regulations on the growth of new companies. Their analysis found 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."[85]

Klapper and colleagues suggest

> If entry regulations indiscriminately screen out small young firms, which are the source of Schumpeterian waves of

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> creative destruction, then constraints on their emergence should have a chilling effect on incumbents and mute the disciplinary effects of competition, with older firms more likely to be lazy and less capable of enhancing productivity.[86]

Indeed, that is what their empirical analysis shows is happening. They conclude that "entry regulation has costs over and above the direct costs of compliance and enforcement," that is, the cost of slower growth in productivity and output.[87]

Studies have attempted to measure these broader growth costs of regulation. A 2006 study by Simeon Djankov and colleagues examined economic growth from 1993 to 2002 for 135 countries and found that countries that had a better regulatory climate based on the World Bank's "doing business" indicators tended to grow faster.[88]

Economists John Dawson and John Seater used the growth in the number of pages of federal regulations over the 1949–2005 period to estimate the effects of regulation on the macroeconomy.[89] They found that rising federal regulation has "caused substantial reductions in the growth rates of both output and total factor productivity."[90]

Similarly, economist Bentley Coffey and coauthors modeled how rising volumes of federal regulations appear to have slowed U.S. economic growth.[91] They found that if federal regulations had stayed fixed at the lower 1980 level, output would have been nearly 25 percent larger by 2012. These sorts of estimates are rough and the results should be treated with caution. But such results suggest that regulatory burdens can create large negative effects on living standards, not just some extra paperwork.[92]

STATE BARRIERS TO STARTUPS

All three levels of American government impose regulations on businesses, including regulations that create barriers to startups. This section focuses on selected state barriers to startups and the next section focuses on local barriers.

Regulatory barriers to startups differ between the states in at least three ways. First, the legal obstacles to opening businesses differ. Second, the costs of opening and running businesses differ because of regulatory mandates. Third, some states bar entrepreneurs from offering some products altogether—products that are legal elsewhere in the country.

Legal Obstacles

State governments impose certificate of need (CON) laws and occupational licensing rules. Both forms of restriction create legal obstacles to entrepreneurs seeking to open businesses.

Certificate of need or certificate of necessity laws require that businesses wanting to enter certain industries receive approval from a regulatory authority. A business must prove that there is a public need for its product or investment, which is an ill-defined metric and gives arbitrary power to authorities to deny entry. State CON authorities are often under the sway of incumbent firms, which tend to disfavor added competition.

Certificate of need laws were originally imposed on the railroad industry in the 19th century. Today, they are imposed in health care, utilities, pipelines, moving services, and taxi services.[93] In some cases, it is disturbingly easy for existing firms and their allies in government to keep new firms out of an industry for no sound reason.[94]

In health care, CON laws are imposed today in 34 states.[95] The laws block new investments in hospitals, clinics, surgery centers, nursing homes, ambulance services, imaging machines, and other sorts of facilities and equipment. New York state imposed the first state CON law on health care in 1964. Soon, 48 other states followed suit with encouragement and funding from the federal government.[96]

These laws were justified by the faulty idea that restricting supply by blocking entrants would reduce prices. In fact, experience over the decades has shown that CON laws undermine investment and innovation, while generally raising prices. The American Medical Association has criticized CON laws, saying that they fail to contain costs, impede patient choice, are anti-competitive, are susceptible to abuse, do not improve health care quality, and "represent failed public policy."[97] Economist Matt Mitchell reviewed academic studies that compare health care performance in states with and without CON laws.[98] The findings suggest that CON laws tend to reduce access to care and increase costs.

The Federal Trade Commission (FTC) has examined CON laws. Maureen Ohlhausen, the head of the agency in 2015, concluded that they "stand out as an example of regulation that squelches the beneficial effects of competition in health care markets without delivering valuable public benefits in return."[99] She noted, "By deterring new entry and creating artificial scarcity, CON laws likely are increasing health care prices."[100] For these reasons, she said, "there has been a lengthy, bipartisan consensus at the FTC that state CON laws should be repealed."[101]

In Vermont, entrepreneur Amy Cooper assembled financing and proposed to the government's Green Mountain Care Board in 2015 to open a surgery center focusing on five specialties.[102] After years of board deliberations, and after overcoming objections by incumbent providers in the state, Cooper's facility was finally approved but with tight restrictions. By then, however, conditions had changed, and Cooper sought to add different services to those she originally envisioned. That led to new rounds of haggling with the state board. Cooper took legal action against the board but ultimately lost in the state supreme court in 2020.[103] Cooper's facility finally opened after $11 million in investment, but the delays wasted valuable resources and the restrictions imposed by the board may undermine the facility's success going forward.

The Vermont board that restricted Amy Cooper's facility claimed that it was acting to "control costs," but Cooper aims to reduce costs for procedures such as eye surgery that are in short supply in the state.[104] CON laws undermine entrepreneurial efforts such as Cooper's, and experience shows they harm health care consumers. More than a dozen states have repealed their health care CON laws since the 1980s, and many states relaxed their laws temporarily during the COVID-19 pandemic. All states should repeal these illogical laws permanently.

Another state legal obstacle to startups is occupational licensing. State governments define the education, training, and testing needed for entry into many occupations—everything from doctors to travel agents, bartenders, florists, makeup artists, tour guides, animal trainers, hair braiders, manicurists, athletic trainers, bartenders, auctioneers, massage therapists, and many others.[105] Many licensed occupations are populated by small businesses, so licensing restrictions are restrictions on entrepreneurship.

The share of U.S. jobs requiring an occupational license increased from 5 percent in the 1950s to 22 percent in 2020.[106] The number of occupations requiring a license in at least one state has risen from about 30 in 1920 to about 1,100 today.[107] The share of workers needing licenses varies from 14 percent in Georgia to 27 percent in Nevada.[108] The states also differ regarding the costs and training required for needed licenses.

The rationale for occupational licensing is that it protects consumer health and safety. But economist Morris Kleiner reviewed academic studies and found there "is little evidence to show that the licensing of many different occupations has improved the quality of services received by consumers."[109] A report by the Obama administration concluded that "most research does not find that licensing improves quality or public health and safety."[110] A report by the Organisation for Economic Co-operation and Development found "there is very little empirical evidence of a positive link between the stringency of regulations and the quality of services."[111]

The large state differences in licensing requirements for many occupations suggest that

"The share of U.S. jobs requiring an occupational license increased from 5 percent in the 1950s to 22 percent in 2020."

> "The real motive behind occupational licensing in many cases is to reduce competition."

the rules are often not based on a rational analysis of health or safety.[112] Athletic trainers are not licensed in California, but in Nevada they must have a college degree, pass an exam, and pay $666 for initial licensing and $150 for annual renewals. Auctioneers are not licensed in about half the states, but in North Carolina they must have a college degree, pass an exam, and pay $450 for initial licensing and $250 for annual renewals. Heating, ventilation, and air conditioning (HVAC) contractors are not licensed in more than a dozen states, but in Nevada they must pass an exam and pay $1,135 for initial licensing and $600 for renewals every two years.

The real motive behind occupational licensing in many cases is to reduce competition. The state boards that enforce licensing rules in many states include members of the profession, who have an incentive to erect barriers to keep newcomers out. A report by the Federal Trade Commission found that while occupational licensing can sometimes serve a beneficial role in health and safety, it can also reduce labor supply, restrain competition, and raise prices.[113]

Occupational licensing imposes numerous costs.[114] The Obama administration report concluded, "There is evidence licensing requirements raise the price of goods and services, restrict employment opportunities, and make it more difficult for workers to take their skills across state lines."[115] Economist Stephen Slivinski found that licensing undermines entrepreneurship. In particular, those states that require licenses for a larger number of low-income occupations have lower rates of low-income entrepreneurship.[116]

How should policymakers reform occupational licensing? In many cases, licensing should be repealed, especially when there are no substantial health and safety issues. In 2020, Florida repealed licensing for interior designers, nail technicians, hair braiders, and boxing announcers.[117] Policymakers should perform cost-benefit analyses of all licensing requirements and repeal those that do not generate net benefits. But more simply, states should repeal licensing for occupations that are not licensed in numerous other states: Florida, for example, knew that it was okay to repeal licensing for interior designers because most states do not have such rules.

Short of full repeal, states should open their workforces to individuals licensed in other states, an approach taken in recent Arizona reforms.[118] Finally, states should reduce the costs of needed licenses and renewals, and they should replace mandatory licensing with voluntary certification when feasible.

Mandated Costs

A second way that state regulations affect startups is to raise the costs of opening and running businesses. Minimum wage regulations are a good example. As noted, smaller firms are hit harder by these rules because they tend to pay lower wages. Roughly half of minimum-wage workers are employed at businesses with fewer than 100 employees.[119]

Minimum wages are set at the federal minimum of $7.25 per hour in 21 states, but they are set higher in 29 states and in dozens of cities and counties.[120] In the first few months of 2021, 25 states and dozens of cities and counties increased their minimum wage rates.[121] About 60 percent of all workers live in states where the minimum wage is higher than the federal rate.[122]

Minimum wages are an important cost factor for industries that employ entry-level workers, and the COVID-19 pandemic particularly damaged these industries. A Bureau of Labor Statistics analysis found that "occupations with lower wages are more common in the shutdown sectors than elsewhere in the economy. . . . Consequently, shutdown policies disproportionately affect workers in lower paying jobs."[123]

In a 2019 study, economists Sudheer Chava, Alexander Oettl, and Manpreet Singh examined how minimum wage laws affect small business finances.[124] They used a large dataset of small business finances covering the years 1989 to 2013 and examined variations in state minimum wages. They found that increases in the minimum wage rate correlate with "lower bank credit, higher loan defaults, lower employment, a lower entry and a higher exit rate for small businesses."[125]

The escalation of state minimum wage rates in recent years is a misguided way of helping lower-wage workers. Some workers will benefit, but higher minimum wages will lead to fewer job opportunities for less-skilled workers. The CBO estimated that a federal $15 minimum would cost 1.4 million jobs.[126]

Over time, small businesses adjust to higher minimum wages by cutting low-skill positions, substituting machines for workers, reducing benefits, raising prices, and making other changes. But in the near term, a mandated wage increase is a blow to the finances of labor-intensive small businesses and startups.

States impose other labor-related costs on businesses that startups may need to pay for. Unemployment insurance is a federal-state program funded by employer taxes that vary by state. Every state except Texas imposes a workers' compensation program that requires businesses to cover benefits for workers who are injured on the job.

Five states—New York, California, New Jersey, Hawaii, and Rhode Island—impose mandatory short-term disability programs that cover workers who suffer nonwork illnesses or injuries.[127] Eight states impose mandatory paid family leave programs: California, Connecticut, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Washington.[128] And 12 states impose mandatory paid sick leave requirements on employers.[129]

Bans on Entrepreneurship

A third way that state regulations affect entrepreneurship is by banning products that are legal elsewhere in the country. Marijuana is a good example. Opening a recreational marijuana business is illegal in 32 states, but is legal in 18 states, assuming that legalization is finalized in South Dakota, which is uncertain at the time of this writing.[130] Legalization is creating opportunities for marijuana growing and retailing businesses, as well as for startups that provide the industry with equipment, financing, consulting, and other products. In Colorado, more than 3,000 businesses have entered the legal marijuana business in growing, retailing, and supporting activities.[131] In Oregon, actor Jim Belushi runs a 93-acre marijuana farm where he focuses on making high-quality products.[132]

With legalization, new businesses are finding ways to make the marijuana industry more professional, efficient, and innovative. There are technological advancements in the automation of cultivation, genetic research, lab testing, and product development. As one example, Bloom Automation of Massachusetts was launched in 2017 with venture capital funding and has developed robotic trimming machines for marijuana plants.[133]

In parallel to the development of the marijuana industry, entrepreneurship opportunities have opened following federal legalization of industrial hemp in 2018, when that year's Farm Bill removed hemp from Schedule I of the Controlled Substances Act. Industrial hemp comes from the cannabis plant but contains minimal amounts of the psychoactive ingredient tetrahydrocannabinol (THC). New businesses are exploring uses for hemp in clothing, fabrics, shoes, rope, plastics, paper, fuel, animal feed, and building materials. "Hempcrete" is growing in use as an eco-friendly, lightweight, and insulating building material.

In parallel with federal legalization, most states have liberalized their own hemp laws, although the industry is still excessively regulated in many states and still illegal in Idaho and Mississippi.[134] Nationally, about 20,000 hemp cultivation licenses have been issued and there are more than 3,000 brands of hemp-derived products in the marketplace.[135] In Florida, hemp was legalized in 2019 and within a year "the state's hemp industry already includes more than 7,000 retailers, 280 manufactures, more than 200 warehouses, 38 distributors and 15 processors."[136]

Colorado has enjoyed a boom in hemp startups. Paragon Processing opened a 256,000-square-foot hemp storage, processing, and

"Small businesses adjust to higher minimum wages by cutting low-skill positions, substituting machines for workers, reducing benefits, raising prices, and making other changes."

> "The craft beer, hemp, and marijuana industries illustrate how deregulation generates entrepreneurial opportunities. Deregulation allows the entry of more startup firms, and states with liberal rules enjoy industry growth."

research facility in Pueblo, Colorado, while Hemp Depot near Denver is one of the largest hemp firms specializing in seed genetics, planting, harvesting, wholesaling, and retailing. The state is host to many startups experimenting in hemp growing, harvesting, and product development.[137] The head of Hemp Depot noted that, while some major corporations are exploring hemp, they are "a lot more risk-averse" than the startups that moved quickly into the new industry.[138]

In some states, costly regulations are holding back hemp entrepreneurship. In New York, excessive regulations and high fees are frustrating farmers. Hemp processors in the state "must pay a $1,000 non-refundable application fee and a $4,500 license fee. For those who would only manufacture, a $500 non-refundable application fee and a $2,000 license fee are paid. Retailers must pay a $300 retail license fee."[139]

A major part of the hemp boom is the introduction of products infused with cannabidiol (CBD), which is derived from hemp plants. CBD is purported to have many health benefits and it enjoys growing use in cosmetics and other products. Martha Stewart has launched a CBD brand. Startups have flourished, but CBD's use in food is in a holding pattern because of federal regulatory uncertainty.[140] The CBD, hemp, and marijuana industries need more deregulation from the federal and state governments to sustain the entrepreneurial expansion.

The boom in these industries resembles the craft brewing boom after deregulation in the late 1970s.[141] Today's large craft beer industry was launched after a 1978 federal law that allowed states to legalize home brewing and subsequent state-level reforms.[142] The number of breweries in the United States has grown from less than 100 in 1980 to more than 8,300 today.[143] As craft beer production has grown, an industry of brewing equipment startups has sprung up alongside.[144]

States deregulated their beer industries at different paces and to different extents. Brewpubs were legalized by all 50 states in succession, starting with Washington State in 1982 and ending with Montana in 1999.[145] A statistical study by economist Kenneth Elzinga and colleagues found that the growth of the craft beer industry within states was partly driven by the legalization of brewpubs.[146]

States also differ regarding beer distribution. All states impose regulations creating quasi-monopoly wholesalers for beer sales. However, 35 states allow small brewers to self-distribute their beer to retailers to a limited extent.[147] The rules are complex and vary by state. A statistical study by economist Trey Malone and colleagues found that less regulation of both distribution and brewpubs is correlated with more small breweries in a state.[148] They concluded that "Allowing breweries to sell beers on-premises as well as allowing for breweries to self-distribute have statistically significant relationships with the number of microbreweries, brewpubs, and breweries."[149] Put more simply, "regulatory constraints negatively influence the generation of entrepreneurial activity in craft beer."[150]

In sum, the craft beer, hemp, and marijuana industries illustrate how deregulation generates entrepreneurial opportunities. Deregulation allows the entry of more startup firms, and states with liberal rules enjoy industry growth.

Comparing the 50 States

Researchers have constructed indexes to measure regulatory differences between the states.[151] Cato's regular *Freedom in the 50 States* report calculates a score for each state based on fiscal, regulatory, and personal freedom variables.[152] The regulatory part of the score includes measures for occupational licensing, minimum wages, and other items.

In 2015, the Pacific Legal Foundation published a small business regulatory index that compared burdens across the states.[153] The study included 14 variables thought to affect small businesses, including variables for labor markets, zoning, occupational licensing, and ease of incorporation.

Thumbtack.com takes a different approach to measuring state regulations. It publishes an annual survey of more than 5,000 small businesses on the "friendliness" of their state's business climate, including state and local regulations.[154]

Using a similar approach as these indexes, David Kemp and I have constructed an Entrepreneur Regulatory Barriers Index, the results of which are presented in Table 1. States that have the fewest barriers to entrepreneurs are ranked near 1 and those with the most barriers are ranked near 50.

The index is based on 17 variables for each state, which are detailed in the appendix. The overall rank is based on scores for the variables averaged across four categories:

- *Small business views of regulations*. Measured by the average score on three responses in the Thumbtack survey: the ease of starting a business, state and local labor and hiring laws, and state and local licensing laws.
- *Occupational licensing*. Measured by the share of workers subject to licensing and the average costs of licenses in each state.
- *Other entry barriers*. Measured by variables for CON laws, home-based businesses (cottage food laws), cannabis laws, and alcohol industry restrictions.
- *Regulation-created costs*. Measured by variables for minimum wages, land-use laws, lawsuit burdens, and various mandated labor costs.

The results suggest that the lowest regulatory barriers to entrepreneurs are in Georgia, South Dakota, North Dakota, Colorado, New Hampshire, Kansas, Indiana, Wyoming, Utah, and Ohio, while the highest barriers are in Rhode Island, Oregon, Nevada, New York, West Virginia, Washington, Hawaii, California, New Jersey, and Connecticut.

An important caveat is that the results are biased toward regulatory factors that can

"The lowest regulatory barriers to entrepreneurs are in Georgia, South Dakota, North Dakota, Colorado, New Hampshire, Kansas, Indiana, Wyoming, Utah, and Ohio."

Table 1
Entrepreneur regulatory barriers index ranking (rank of 1 is the least barriers, rank of 50 is the most barriers)

Rank	State	Rank	State	Rank	State
1	Georgia	18	Idaho	35	Iowa
2	South Dakota	19	Wisconsin	36	Michigan
3	North Dakota	20	New Mexico	37	Vermont
4	Colorado	21	Missouri	38	Maryland
5	New Hampshire	22	Minnesota	39	Maine
6	Kansas	23	Oklahoma	40	Montana
7	Indiana	24	Kentucky	41	Rhode Island
8	Wyoming	25	Alaska	42	Oregon
9	Utah	26	Mississippi	43	Nevada
10	Ohio	27	Florida	44	New York
11	Virginia	28	South Carolina	45	West Virginia
12	North Carolina	29	Alabama	46	Washington
13	Arkansas	30	Louisiana	47	Hawaii
14	Delaware	31	Tennessee	48	California
15	Texas	32	Pennsylvania	49	New Jersey
16	Nebraska	33	Illinois	50	Connecticut
17	Arizona	34	Massachusetts		

Source: See appendix for methodology.

> **"Entrepreneurs have been frustrated by the overkill and unfairness of pandemic-related regulations."**

be measured with available data. That said, the ranking here correlates quite strongly with similar rankings from other studies.[155] Another caveat is that entrepreneurship is affected by many factors in addition to regulations, such as tax levels and labor force quality.

The index provides a rough overall gauge of the regulatory environment faced by new business ventures. Of course, the regulations affecting any specific startup will depend on the industry, the number of employees, whether it is online or bricks-and-mortar, and other factors. Cannabis entrepreneurs should avoid states that have not liberalized their laws. Restaurant entrepreneurs should avoid states with alcohol license caps, as discussed below. Labor-intensive startups should avoid states with high minimum wages. Entrepreneurs in licensed occupations need to consider which states will accept their credentials if they want to move.

The pandemic of 2020 gave entrepreneurs new regulatory factors to consider. The crisis revealed how small business finances are vulnerable to abrupt and arbitrary exercises of power by state and local governments. During the pandemic, mayors and governors imposed rules that deprived businesses of revenues, micromanaged their operations, and imposed new costs. Entrepreneurs have been frustrated by the overkill and unfairness of pandemic-related regulations. Going forward, they will be thinking twice about whether to risk their investments in states and cities where officials exercise too much discretionary power.

LOCAL BARRIERS TO STARTUPS

Entrepreneurs need permits, licenses, and other approvals from local governments before they start many sorts of businesses. Startups may need approvals related to zoning, building renovations, health and safety, fire codes, waste disposal, alcohol, signage, parking, and other items. Launching an online business with no employees can be straightforward, but brick-and-mortar startups with employees are more complicated. Gaining approvals from local governments can be costly and take many months. Home-based business startups often run into local zoning restrictions.

Table 2 lists types of regulatory barriers faced by entrepreneurs. Local barriers examined here fit into the rubric, as do the state barriers examined in the last section. Permitting, licensing, zoning, and other regulatory structures may provide benefits, but they also create barriers to startup businesses.

Complexity of Permitting and Licensing

In New York City, a study by the city's comptroller found that small businesses are subject to more than 6,000 regulations, and that 15 city agencies issue 250 different licenses and permits.[156] Nearly a third of new businesses in the city report waiting six months or longer to obtain needed approvals to open, and businesses get little feedback from bureaucracies while they wait.[157] Of all the city's agencies, small business owners are most dissatisfied with the agency that handles building permits, inspections, and zoning issues.[158]

Bureaucracies do not seem to realize that time is money. The New York comptroller's study described an entrepreneur who wanted to convert a space he rented into an arts center.[159] To occupy the space, he needed approval on a waiver related to disability laws. He applied for the waiver and followed up a few times but ended up waiting eight months, all the while paying $3,500 a month in rent. When he pressed and finally got an official to look at his application, it was reviewed for just a few minutes and approved.

The bureaucracy of permitting and licensing varies across cities. To register a new business, it takes anywhere from one day in some cities to more than two weeks in others.[160] One study found that a "small construction company needs 14 procedures, 105 days, and $85,841 to obtain construction permits in Los Angeles, while it needs 19 procedures, 184 days, and $108,063 to obtain the same permits in San Francisco."[161] In San Francisco, the head of the city's small business commission complained that it takes 16 months just to open an ice cream store.[162]

Some approvals have sensible goals, such as ensuring fire safety, but others were imposed for harmful reasons such as limiting competition. Some were imposed decades ago for reasons that are no longer relevant.[163] And some licenses are just gratuitous revenue grabs—for example, it costs about $6,000 to get a sidewalk café license in New York City and about $2,000 to get a license for a rooftop solar panel.[164] The comptroller's report found that "installing rooftop solar systems requires navigating a dizzying array of permit applications, building code regulations, inspections, certifications, forms, and letters."[165] It makes no sense to impose barriers to investments that improve cities.

Startups in some industries require approvals from multiple governments. A craft brewing startup must submit a raft of detailed information to the U.S. Treasury Department and wait months to obtain a brewer's license, and the startup must also register with the Food and Drug Administration and, in some cases, the Department of Agriculture.[166] The startup will also need approvals from its state alcohol regulator. In California, breweries must register the pricing, packaging, and other details for each beer product and file with the government when products change.[167] California has 99 different state alcohol licenses, each with different annual fees that vary by size of the city.[168] A craft brewing startup must also deal with local approvals related to zoning, building renovations, health, safety, and other items.

New retail stores need to navigate a vast and growing maze of regulations for building construction and renovation. Local governments administer building codes adopted by local and state governments, which typically build on standards that are set in national model codes.[169] Over time, building code requirements have accumulated as more standards have been added for safety, fire, environment, energy efficiency, sustainability, accessibility, disaster resilience, and other goals. While these standards have benefits, they also raise costs and slow approval processes.[170] Building codes (and zoning regulations) create barriers to startups with innovative products such as tiny homes and shipping container homes.

The head of Honolulu's Department of Planning and Permitting said, "The building code back in, say, 1929 was only an inch thick. You could carry it in your back pocket. Today, you have a two- to three-foot stack of binders. The sheer volume of regulation has

"New retail stores need to navigate a vast and growing maze of regulations for building construction and renovation."

Table 2

Regulatory barriers to entrepreneurs

Regulatory barrier	Effect on entrepreneurs
1. Excessive numbers of permits and licenses	Consumes time and money and distracts entrepreneurs from marketplace challenges
2. Complex procedures and requirements	Raises risks of costly mistakes and forces entrepreneurs to pay for expert guidance
3. Bureaucratic delays	Undermines startup planning and consumes cash because businesses sit idle not earning revenues
4. Unreliable bureaucracies	Raises risks that investment will be wasted if approvals are denied or costs are higher than expected
5. Favoritism and corruption	Disadvantages independent entrepreneurs compared to incumbent businesses and insiders
6. Lack of government transparency	Creates uncertainty and masks unfair decisionmaking
7. Unreasonable bans and restrictions on business activities	Increases costs, reduces innovation, and fosters black markets

> "Local permitting and licensing is so complex in many cities that startups and other businesses hire 'expediters' to move their applications through the bureaucratic jungle."

increased dramatically, and every one of those regulations has added complexity and additional time to the process."[171] A recent audit of Honolulu's building permit process found that initial agency reviews of small commercial building permits are supposed to take 14 days but actually take 157 days on average.[172]

Land-use and zoning regulations can create delays and barriers for brick-and-mortar startups. A study by Wharton scholars looked at land-use and zoning restrictiveness across 2,450 jurisdictions, and sorted them by light, moderate, or high regulations.[173] The average time for project approvals was 3.7 months in the light jurisdictions and 8.4 months in the high jurisdictions, with approvals taking 18 months in some places. The study focused on housing projects but there may be similar variations in regulatory restrictiveness for other types of projects.

Even the seemingly simple step of getting a sign for a new business has become very bureaucratic. In many places, business signs must meet exacting specifications and need zoning approval, a building permit, and approval by an architectural board.[174] Sign regulations in many cities are dozens of pages long, and they have been increasingly micromanaged by officials, often based on arbitrary aesthetic views.[175]

When he was mayor of Chicago, Rahm Emmanuel tackled excessive regulations on small businesses and startups. He found that the city imposed 117 types of business licenses compared to just 40 in Phoenix.[176] In Chicago, "if a restaurant wanted to have patio seating and serve late night drinks, there were separate processes for zoning, late license hours, liquor license hours, health inspections, and construction permits."[177] The mayor pushed through reforms in 2012 that reduced the number of business licenses to 49.[178]

However, Emmanuel did not go far enough. In 2019, a Chicago alderman complained that "just about anything you want to do in Chicago comes with some kind of permit or license attached. . . . [But] many parts of the city's regulatory processes are mired in paper-only applications, in-person meetings at downtown offices (during work hours, on weekdays), and subsections of city departments with no publicly listed director or other staff contact that a constituent could reach out to with questions."[179] The problem, he said, is that "complexity comes with a real cost in terms of businesses that never open."[180]

Local permitting and licensing is so complex in many cities that startups and other businesses hire "expediters" to move their applications through the bureaucratic jungle. In New York City, "In the early 1990s, expediters numbered 300 to 400; today there are more than 8,300," reported the *New York Times*.[181] Nearly 40 percent of small businesses in New York say that they use expediters in dealing with the city.[182] In Miami, the head of one expeditor firm helping restaurant startups bragged: "Relationships are the most valuable thing. I can pick up a phone and make something happen."[183] In other words, startups need to pay for an expeditor to make something happen with their applications.

San Francisco has a byzantine bureaucracy for building permits. A report published by Berkeley's Terner Center found that "The city's permitting process is designed to give maximum discretion to the government to intervene in development decisions. This permitting process has dozens of stages, many of which can trigger discretionary review if a development raises a red flag."[184] Recent "audits of the Planning Department have shown project review often takes longer than one year."[185] In discussing these problems with developers, Terner experts noted, "There was only one factor on which all interviewees and focus group participants agreed: the most significant and pointless factor driving up construction costs was the length of time it takes for a project to get through the city permitting and development processes."[186]

What is the solution? Local governments should eliminate permits, licenses, and other approvals that are not crucial for health or safety. More property uses and project types should be shifted from "conditional" approvals needing special permissions to "by right" approvals, which would reduce bureaucratic and political discretion.[187] An Obama administration report on local housing development reform recommended more by-right development and noted that discretionary processes "can add significant costs to the overall development budget due to the delay and uncertainty they engender."[188] Bureaucratic discretion not only wastes the time of entrepreneurs and raises costs, it is also a key factor in spawning corruption, as discussed below.

Governments should increase transparency by posting contact information for agency employees online and creating portals with real-time updates for all applications. They should set up one-stop shops for business permitting so that entrepreneurs do not have to deal with multiple bureaucracies. The city of Gainesville, Florida, for example, created a one-stop "Department of Doing" aimed at speeding permit approvals.[189]

Cities should dramatically speed up processing times. In November 2020, San Francisco voters approved a ballot measure to change the "planning code for neighborhood commercial districts to increase permissible uses, eliminate public notification processes for new permitted uses, and require an expedited process for permits."[190] The law requires that business permits be issued in 30 days if certain conditions are met.[191] That is much-needed progress for a city infamous for red tape.

In 2012, Phoenix passed reforms to speed construction permitting by going to a self-certification model. It allows "architects and engineers who have been through city training [to] submit plans and be able to walk out with a permit, on the same visit. That includes all new construction up to 75 feet, all tenant improvements; civil permits for industrial, commercial/office, multifamily and residential; and historic preservation."[192] The city council member who spearheaded the Phoenix reforms observed that "unpredictability not only costs time, money and market share, it also discourages some would-be entrepreneurs from even starting. When you're a small business trying to build your dream on savings and credit cards, months-long hold-ups can be devastating. We've ended that."[193] Every American city should end that.

Restaurant Entrepreneurs and Alcohol Licensing

Business permitting and licensing is a challenge for startups in the restaurant industry, which is the largest industry for new businesses aside from professional services.[194] There are about 650,000 restaurants in the United States and about half are not part of chains.[195] Restaurants employ more than 12 million people. In 2020, the industry was hit hard by the pandemic and government-mandated shutdowns. A September 2020 survey found that more than 100,000 restaurants may close permanently.[196]

As the economy recovers, America will need restaurant startups to replace those that shut down. But startups will confront heavy bureaucracy in many cities. Permits and licenses are needed related to zoning, building renovations, food safety, alcohol, sidewalk tables, live music, valet parking, trash removal, and many other items. Before opening in New York City, a "restaurant may need to obtain as many as 30 permits, registrations, licenses, and certificates and could face as many as 23 separate inspections. All told, it takes business owners an average of 225 days—that's seven and a half months—to hang an open sign in their window," according to the New York City comptroller's office.[197] As many experts have noted, "A complicated permitting process penalizes new entrants while advantaging experienced business owners to navigate it."[198]

In 2019, Dennis Cantwell and Monica Wong signed a lease on a closed corner store in San Francisco and planned to open a small restaurant in the location.[199] They confirmed with the city that the location qualified for an expedited approval process. But then "six months after Cantwell and Wong moved forward, pooling their life savings and investing tens of thousands of dollars in loans and permits, a different planner at the planning

"Business permitting and licensing is a challenge for startups in the restaurant industry."

> "The high costs of alcohol licenses block entry of new restaurants, thus limiting competition. It also advantages large corporate chains over independent entrepreneurs."

department decided the department had previously misinterpreted the new law. They revoked the permits."[200]

What caused the change? A neighbor complained to the city that the planned restaurant did not meet the rules for expedited approval. Now Cantwell and Wong "would have to start the permitting process from scratch, including a process called neighborhood notification," in which the city notifies all nearby residents of the proposed project.[201] If anyone objects, the project could be halted. City officials can reject such complaints, but the process still adds six months or more to the process.

In this case, San Francisco's Board of Appeals stepped in to short-circuit the process and gave Cantwell and Wong's restaurant a green light. But the problems they ran into are common: long delays and discretion in the approval process create uncertainly for entrepreneurs. An article on Miami restaurant startups noted, "Many business owners sign leases and budget a certain amount of money for opening costs. When the open date is delayed, they have to shell out more money than they planned, and for longer without bringing in any revenue. They start dipping into the red before they've even opened their doors."[202]

In Los Angeles, an entrepreneur running for city council in 2019 wanted to fix the city's anti-business bureaucracy. Navraj Singh said that for one restaurant he started "he waited two-and-a-half years for the permits to go through. Meanwhile, he was paying rent each month."[203] The city acts "as if money grows on trees," he said.[204] (He did not win the council seat.)

Before Chicago made reforms, "the process of getting licensed was too confusing and it took too long to get an inspection. These issues put new restaurant owners in a bind: they had often signed a lease and built a financing plan around the restaurant opening on a certain date. Persistent delays in getting licenses and inspections pushed their scheduled opening and introduced greater fragility into their business plans."[205] The average restaurant in the United States only survives four and a half years, so it is a large risk for entrepreneurs to start paying rent on a property if it takes six months or longer before approvals are in place for them to open.[206]

Alcohol licensing is a large added layer of costs and uncertainty for startup restaurants. Restaurants usually need alcohol approvals from both their state and local governments. It is common in big cities for businesses to hire alcohol permit expediters to help secure licenses, and the process can take six months to a year.[207] The uncertainty of alcohol licensing creates large entrepreneurial risk: "If you're a new business, the thought of signing a lease and securing a property before you have a liquor license may seem scary and counterintuitive, but it is a requirement."[208]

State fees for alcohol licenses range from about $100 to more than $6,000. But there are 18 states that impose on-premise license caps, which limit the number of licenses for each municipality generally based on per capita formulas.[209] Such caps create shortages—often severe shortages—with the result that licenses sell on the secondary market for vastly inflated prices, often hundreds of thousands of dollars. The restrictions on hard alcohol licenses are typically more severe than restrictions for beer and wine licenses. In big cities, full liquor licenses can cost up to $250,000 in California, $750,000 in Florida, $400,000 in Indiana, $320,000 in Montana, and $975,000 in New Mexico.[210]

The high cost of alcohol licenses blocks entry of new restaurants, thus limiting competition. It also advantages large corporate chains over independent entrepreneurs. The high costs of licenses consume limited funds that entrepreneurs could otherwise use to invest in their businesses, and it often stalls the opening of restaurants. When licenses are costly and in short supply, it strangles economic development in cities. Tight alcohol license caps drive out restaurant entrepreneurs from cities and states, which can undermine broader revitalization efforts. These observations are based on news articles from coast to coast in states that impose alcohol license caps.

In York, Pennsylvania, "Hamir Patel opened his downtown York restaurant in 2018. By his estimate, it would take him another three or four years before he can afford to purchase a liquor license. . . . 'It does hurt us,' Patel said." Patel, the chef and owner of Hamir's Indian Fusion, says that "the cheapest license he has found has cost $350,000 to $400,000—a price he can't afford. Without a license, he believes he is suffering at least a 25 percent loss in potential revenue."[211]

In Newport, Rhode Island, one restaurant owner who paid $200,000 for his license said "Everyone knows that a liquor license is your barrier to entry. . . . And it's expensive."[212] In Indiana, alcohol licenses are capped based on city and town populations, but the state has no caps for riverfront locations, and so even towns without rivers are claiming that they do have a river in order to get around restrictions and revitalize their communities with startup restaurants.[213]

In Sioux Falls, South Dakota, alcohol licenses go for $300,000 or more when they are available—a situation that is undermining restaurant entrepreneurship.[214] The *Argus Leader* profiled Ted Thoms, who "still sees potential in the grassy lot at West 12th Street and Sertoma Avenue where he once hoped to open a steakhouse. It's a peaceful setting, across the street from Legacy Park with a creek that flows behind what could have been the restaurant's outdoor space. He filed for a liquor license from City Hall. Ten years later, his application was approved. By then, he'd sold the land, given up on the project and deemed the restaurant investment 'one of the worst investments I've ever made.'"[215]

In Massachusetts, the "going price for a transferable all-alcohol license in Boston was at least $450,000, and a minimum of $150,000 for a beer-and-wine license."[216] The *Boston Globe* reported on one effect of the license caps: "Several neighborhoods have largely missed out on Boston's restaurant boom, as developers and restaurateurs in wealthier parts of the city pay top dollar to secure the available licenses."[217] Food journalists point to the negative effects of Boston's alcohol license caps on the city's restaurant scene, and community leaders argue that the caps create a development barrier for lower-income neighborhoods.[218] The wealthiest one-quarter of census tracts in the city hold more than half of all alcohol licenses.[219] An expert who defends the license cap system admitted that "The current shortage of liquor licenses in some cities and towns has caused many local, smaller neighborhood bars to be essentially a thing of the past."[220]

New Jersey's alcohol license caps are perhaps the most damaging in the nation. The state-imposed caps on each municipality have driven up the market price of a license to an average of $350,000, and as much as $1.8 million.[221] The system has created a bias against locally owned independent restaurants in favor of large chains that can afford the high license costs.[222] Many states have cheaper licenses for restaurants that serve just beer and wine, but not New Jersey. Because "of the way the liquor license industry works in New Jersey, some restaurant concepts that include wine and beer sales in their operating model in other jurisdictions find they are not able to similarly operate in New Jersey because either a license is not available, or it is cost prohibitive."[223]

A NorthJersey.com article found that "Liquor licenses in New Jersey cost $350K and it's crippling the state's dining scene."[224] The article profiled Peter Loria, "who still recalls with disappointment the time he tried to open a restaurant in Ridgewood. He poured a chunk of his retirement savings into what he thought would become a destination for New Jersey food lovers, but he hit a common roadblock. 'I couldn't get a liquor license,' Loria, who owns Café Matisse in Rutherford, said of the 2007 project. 'So it never opened. It was heartbreaking.'"[225] The state's restrictive alcohol licensing laws "are seen by local officials as holding back efforts to revitalize downtowns and attract new, often younger residents."[226]

The prices of New Jersey alcohol licenses "are often out of reach for independent chefs

"A NorthJersey.com article found that New Jersey liquor licenses cost $350,000 and are crippling the state's dining scene."

> **"The complexity of permitting, licensing, and zoning rules, and the discretion it gives to officials, makes it a breeding ground for corruption."**

and restaurateurs."[227] Drew Nieporent, a celebrated New York restaurateur who has owned more than 40 restaurants, "refuses to open a restaurant in the Garden State" because of the alcohol restrictions.[228] Dale Talde, chef and co-owner of restaurants in Manhattan and Jersey City, said, "If the laws change, there would be a flood of the best and most gifted chefs coming to New Jersey."[229] The alcohol restrictions have been a major frustration for "local officials and developers who have embarked on ambitious projects across the state to revitalize downtowns with new housing, entertainment and—crucially—restaurants."[230]

Alcohol licensing is a large and complex topic. It is a policy area that needs more focus from reporters and the public because of the many negative effects: the unfairness to entrepreneurs, the stifling of growth and urban development, and the creation of incentives for corruption as discussed below.

Some good news is that the pandemic has prompted some loosening of regulations to help restaurants survive. Many jurisdictions are allowing alcohol delivery with food, for example. And in Los Angeles, in response to the pandemic, the city cut the fee for a restaurant alcohol permit from $13,000 to $4,000 and sped the approval process from months to weeks.[231] Before the reform, "the process was so difficult that restaurant operators would have to often hire specialists or lawyers to obtain permits, adding to costs and further straining small businesses."[232]

The bad news from 2020 is that state and local governments have shown that they wield huge power over restaurants. A restaurant in the author's neighborhood in Virginia had been run by the same owner for many years but has shut permanently, partly because of government inflexibility during COVID-19.[233] The owner lost thousands of dollars a month as he waited in vain for regulatory approval to add outside tables. The county government deemed the sidewalk by his restaurant too narrow for tables, and it rejected proposals the owner made for placing tables in nearby parking spaces.

Many similar stories played out across the nation in 2020. In Los Angeles, there were unreasonable bans on outdoor dining and multiple cycles of closing and opening, with each cycle costing owners thousands or tens of thousands of dollars on wasted food inventories and other expenses.[234] In many cities, businesses spent thousands of dollars to make facilities safer for operation only to be told they would not be allowed to open. During the pandemic, governments imposed high costs on small businesses when they could least afford it.

Breeding Ground for Corruption

The complexity of permitting, licensing, and zoning rules, and the discretion it gives to officials, makes it a breeding ground for corruption. Corruption is exacerbated by artificial caps that limit the supply of valuable permits and licenses and by slow bureaucracies that incentivize businesses to bribe officials in order to speed approvals.

Corruption favors incumbent and politically connected businesses at the expense of new and independent businesses. One expert noted on marijuana licenses that "A statewide cap tends to benefit well-connected and well-capitalized applicants such as large publicly traded companies while excluding smaller entrepreneurs and resulting in less choice and availability in the marketplace."[235] A study on Boston liquor licensing found that the "history of liquor licenses in Massachusetts is rife with corruption" and that the tight caps on the number of licenses "favors larger restaurant groups over independent and perhaps more innovative restaurateurs."[236]

Corruption scandals in Chicago often stem from bribes for licenses and permits.[237] The system of "alderman privilege" puts city council members in a position to approve or block regulatory actions within their wards. An entrepreneur who needs permits and licenses to start a pizzeria may be out of luck if it is near an existing pizzeria favored by an alderman. Aldermen "have de facto veto power over any new building within the ward they represent. In other words, if you want to build within a ward, you need to convince that alderman to approve of it. If they do not want it built, it will not be built. . . . Aldermanic privilege creates near-insurmountable inertia, and only benefits people with entrenched interests."[238]

University of Illinois at Chicago experts reviewed Illinois and Chicago corruption cases over recent decades and found:

> All of the governors and 26 of the aldermen were guilty of bribery, extortion, conspiracy or tax fraud involving schemes to extract bribes from builders, developers, business owners or those seeking to do business with the city or state. The bribe-payers either assumed or were told that payment was necessary to receive zoning changes, building permits or similar city or state action. . . . At the heart of most convictions is a payoff for something that is a sweetheart contract or a law or permit necessary to do business. This has been the main pattern of corruption in the city and the state for over 150 years.[239]

George Ryan, the Illinois governor from 1999 to 2003, "was found guilty in 2006 of racketeering, conspiracy and numerous other charges. Many of the charges were part of a huge scandal, later called 'Licenses for Bribes,' which resulted in the conviction of more than 40 state workers and private citizens."[240]

In New York City, permitting and licensing have been scandal-plagued for decades. A former prosecutor who focused on the problem pointed to the slow and complex bureaucracy as the cause: "We have a system where they only handle so many (permit applications) per day. . . . The rules are arcane, and you have to hire someone for $1,500 to get a basic permit from your own government. That's idiotic."[241] The New York Police Department was engulfed in a scandal a few years ago that involved cops speeding up the usually very slow approvals for gun licenses in exchange for cash and gifts.[242]

In Philadelphia in 2020, an official in the city controller's office was found guilty of taking bribes for issuing home renovation permits, a storage container permit, a plumbing permit, and a license to buy and sell cars.[243] In Toledo, Ohio, in 2020, four city council members were indicated for extorting cash from local business owners to support or oppose business zoning requests and liquor licenses.[244] And in New Orleans in 2019, a "building inspector admitted taking more than $65,000 in bribes from contractors and property owners to look the other way on permit violations or falsify inspections, marking the first domino to fall in what's expected to be a wide-ranging dragnet in the city's Safety and Permits office."[245]

The *Los Angeles Times* reported in 2018 that "Two former officials in California's liquor agency pleaded guilty Thursday to running a bribery scheme that for years targeted karaoke bar owners in Los Angeles' Koreatown."[246] Clients would pay the pair to fast-track their liquor license applications, and the pair would shake down bar owners for favors while threatening to target them for enforcement raids.[247]

An astounding local corruption scandal came to light in 2020 involving Los Angeles city councilman Jose Huizar. The *Los Angeles Times* explained, "Huizar faces a racketeering charge arising from allegations he ran a sprawling pay-to-play scheme in which real estate developers were shaken down for cash bribes and campaign donations in exchange for Huizar's help getting high-rise development projects through the city's arduous approval process."[248] Los Angeles Deputy Mayor Raymond Chan and numerous others were also charged in the schemes.

In announcing an indictment in November, U.S. Attorney Nick Hanna said, "The scope of corruption outlined in this indictment is staggering," noting that Huizar turned his "City Council seat into a money-making criminal enterprise."[249] Huizar is alleged to have taken at least $1.5 million in bribes for more than 400 overt acts. Hanna called corruption at

"In New York City, permitting and licensing have been scandal-plagued for decades."

> "The common denominator in local scandals is that governments impose too many requirements for permits, licenses, renewals, zoning changes, and other sorts of approvals."

Los Angeles City Hall a "cancer" and a "disease of elected officials and staff members breaking a series of laws in order to line their own pockets, maintain power and keep open a spigot of illicit bribes."[250]

Meanwhile, in Scranton, Pennsylvania, Mayor Bill Courtright was sentenced to seven years in jail in 2020 for corrupt actions during his five years in office.[251] Courtright frequently directed city officials "to hold up licenses, permits or contracts to extort cash and campaign contributions from entities doing business in or with the city."[252] There have been similar pay-to-play corruption scandals in recent years in Harrisburg, Reading, and Allentown.

The common denominator in all these scandals is that governments impose too many requirements for permits, licenses, renewals, zoning changes, and other sorts of approvals. Then the approval processes take too long and local officials have too much discretionary power over them. All these factors are also barriers to business startups. Unfortunately, despite decades of experience with scandal-plagued building permitting, alcohol licensing, and zoning, many states are now making the same mistakes with marijuana.

The marijuana industry is creating opportunities for entrepreneurs as it is legalized across the country, but some states have set up regulatory systems that foster corruption. The mistake is to limit the number of licensed businesses and to give control over approvals to local officials. The result is that startup businesses are at a disadvantage unless they have insider connections to politicians or want to pay bribes or make campaign contributions. A *Politico* investigation found:

> Almost all the states that legalized pot either require the approval of local officials—as in Massachusetts—or impose a statewide limit on the number of licenses, chosen by a politically appointed oversight board, or both. These practices effectively put million-dollar decisions in the hands of relatively small-time political figures—the mayors and councilors of small towns and cities, along with the friends and supporters of politicians who appoint them to boards. . . . They have also created a culture in which would-be cannabis entrepreneurs feel obliged to make large campaign contributions or hire politically connected lobbyists.[253]

Politico notes that the authorities arrested the mayor of Fall River, Massachusetts, for trying to "extort cannabis companies of $600,000 in exchange for granting them lucrative licenses to sell weed in his impoverished city."[254] *Politico* states the case is "emblematic of a rash of cannabis-related corruption across the nation, from Massachusetts to California to Arkansas and beyond."[255] In November 2020, the *Los Angeles Times* reported that "Since California voters legalized recreational cannabis four years ago, allegations of conflicts of interest, bribery and bias in the permitting process have plagued cities and counties as they try to regulate the fledgling industry."[256]

What is causing the problems? The same thing that causes corruption in alcohol licensing: artificial caps and discretion in approvals. The *Los Angeles Times* noted that California cities that "allow pot operations typically place strict limits on the number of licenses they issue as well as their locations. With permits limited, it is speculated that they could be worth millions of dollars, and competition for them can be fierce."[257]

What is the solution? Simple: it is deregulation. All states and cities should repeal caps on marijuana business licenses, just as they should repeal caps on alcohol licenses. The *Politico* article found that Colorado and Oklahoma have largely avoided marijuana corruption scandals because they have not imposed tight caps on the number of licensed businesses.

Home-Based Businesses

Many great American companies were launched from homes and garages, including Amazon, Apple, and Hewlett-Packard. A wide range of people run businesses out of their homes, including accountants, daycare providers, repair persons, music teachers, tutors, small-scale food producers, yoga teachers, contractors, caterers, wedding planners, dog groomers, haircutters, massage therapists, lawn-care specialists, software writers, bloggers, and candlemakers.

The Small Business Administration (SBA) says that half of America's 30 million businesses are home-based.[258] About two-thirds of all startups are home-based.[259] In recent decades, the internet has expanded opportunities to earn income from home. Most artistic businesses in America are home-based, with many artists selling their products online.[260] Etsy.com now hosts almost three million arts and crafts sellers on its platform, nearly all of whom work from home.[261] And about 1.7 million small businesses use Shopify, which provides tools for home-based and other small businesses to set up operations.[262]

The pandemic and recession of 2020 strengthened interest in working from home: the share of Americans working from home peaked at about 40 percent in June 2020.[263] A University of Chicago survey found that the home-working experience during the pandemic was "better than expected for the majority of firms and workers."[264] The pandemic alerted people to the lifestyle advantages and cost savings of running businesses from homes, and tools such as Zoom have made it more feasible.

But there is one big problem: local governments impose zoning rules that ban, restrict, or raise costs for home-based businesses in residential neighborhoods, which city planners call "home occupations." At the same time, governments often restrict people from living in their business spaces in nonresidential areas. Such restrictions accumulated in American cities over the 20th century, but cultural and technology changes should prompt policymakers to rethink yesterday's restrictive rules.

Early in the nation's history, most Americans worked from their homes as farmers, artisans, doctors, lawyers, and small-scale producers. The rise of large-scale industry in the 19th century separated work from home. Then, in the 20th century, governments solidified the separation with single-use, or "Euclidean," zoning, which split cities into residential, commercial, and industrial zones.[265] The purpose of such zoning was to "address the possibility that nonresidential uses will inflict negative externalities on residential neighborhoods."[266] Businesses were assumed to impose noise, congestion, and other problems on neighborhoods, thus conflicting with residential lifestyles.

However, 20th-century zoning was usually not based on analyses of actual externalities, but on blunt rules based on tradition, guesswork, and elitist views.[267] Initially, cities allowed only certain occupations to be performed in homes that had been customarily performed there, or they specified lists of occupations not allowed. As the century progressed, cities added layers of rules, permits, licenses, hearings, and other bureaucratic hurdles to home-based businesses. Most cities retain elements of these regulatory regimes today.

In a 2004 report on home-based businesses, the SBA found that "Many zoning codes incorporate outright prohibitions, prescriptive requirements, or limits on various aspects of home-based businesses (e.g., number of employees, visitors, parking, exterior changes, or specific industries)."[268] Other common restrictions regard signage, renovations, outdoor activities, materials storage, deliveries, noise, odors, animals, square footage, types of occupations, number of visitors, and retail sales on premises.[269] Some cities impose tight restrictions on the parking of business trucks in residential neighborhoods.

It is appropriate for local governments to consider the negative externalities created by home-based businesses. But there is often inconsistency between business and nonbusiness activities. For example, homeowners can freely have visitors for social purposes and use available parking, but if the purpose of

"Local governments impose zoning rules that ban, restrict, or raise costs for home-based businesses in residential neighborhoods."

> "In legal challenges in many cities, the Institute for Justice has highlighted excessive restrictions on home-based businesses."

visitors is business then stricter parking rules often apply. Christina Sandefur noted regarding home-based businesses that there is an "often-unspoken assumption that the presence of a commercial transaction transforms an innocent activity into a business that government must oversee."[270]

Some common restrictions on home-based businesses have little to do with externalities, such as rules on the use of space within one's home. The SBA noted, "Most zoning codes restrict the space that a home-based business may occupy. Some jurisdictions measure the space allowed for use as a percentage of livable space; Others use square feet as an alternative, or additional, measure."[271] The report concluded that many zoning codes "still contain stringent restrictions that do not appear to have commensurate benefits to the community."[272]

In her study on home-based businesses, law professor Nicole Stelle Garnett said, "Most zoning laws severely restrict residents' ability to work from home. Some prohibit it outright."[273] She argued that while the ostensible purpose of these laws is to protect neighbors from externalities, they also reflect an ideology "that the 'good life' requires the careful segregation of work and home."[274] But that ideology is outdated for many people today.

In Fairfax, Virginia, Marietta Grundlehner launched a business selling LuLaRoe clothing out of her home. Grundlehner needed a flexible schedule: "It was perfect. I was able to work and be with my son."[275] A goal of LuLaRoe is to allow moms to earn income at home to achieve a work-life balance.[276] But her dream came to a halt when the county government sent her a notice of zoning violation based on an anonymous tip. She battled the county in court, but ultimately lost and was shut down. Grundlehner is right that "The zoning laws needed to be updated to be up to speed with e-commerce these days. . . . It's an antiquated rule and it needs to be updated."[277]

As in many jurisdictions, there are layers of restrictions in Fairfax County. Some types of small businesses are generally barred from homes, such as barbering and repair services. Other types of businesses—including physical therapists, architects, engineers, attorneys, and insurance agents—must apply to operate as "home professional offices." These businesses need to a submit a "special permit" application, attend a public hearing, and obtain a favorable decision by the Board of Zoning Appeals.[278] The application package for this process in Fairfax is 57 pages long, and the process takes months and can cost thousands of dollars. Zoning boards are sometimes reluctant to grant variances and issue permits. As this study was being finalized in March 2021, Fairfax County liberalized its rules for home-based businesses.

In legal challenges in many cities, the Institute for Justice has highlighted excessive restrictions on home-based businesses.[279] In Nashville, the institute represented Lij Shaw, a music producer who records musicians at his home studio, and Pat Raynor, a hair stylist who serves her clients in a single-chair salon in her house. The two entrepreneurs wanted to work from home for cost and lifestyle reasons: Lij was raising his daughter, and Pat was short on money after her husband's death.

The problem the entrepreneurs ran into is that a "1998 addition to Nashville's residential zoning ordinance prohibits any so-called 'home occupations' from serving clients on their property."[280] The law was passed without public debate by the Nashville Metro Council and "imposes steep fines and potential imprisonment on local musicians, hair stylists, interior designers and other aspiring entrepreneurs if any customers physically come to their homes to do business."[281]

There was no evidence that Shaw's or Raynor's businesses affected their neighbors, yet the city ordered them to end their recording and hair-cutting activities in their homes. Nashville bans home businesses in residential neighborhoods that serve visiting clients even when there is no harm to others, and it enforces rules based on anonymous tips. Furthermore, the tight ban led to favoritism—some home business owners got city council members to create special exceptions for them.[282] Fortunately, Nashville reversed course and in July 2020 repealed its ban on home businesses that serve customers, and Shaw and Raynor can now apply for permits.

In a 2017 study, Olivia Gonzales and Nolan Gray examined home-based business regulations in 12 U.S. cities and found that they mainly reflected restrictive 20th-century approaches.[283] Many cities have lists of disallowed business types and impose restrictions that are excessively strict, vague, or unenforceable. However, their study found that some cities are making reforms to comport with today's changing technologies and lifestyles.

Governments should liberalize rules for home-based businesses for at least eight reasons.

First, the starting point for public policy should be a respect for individual rights, and private property is a core right. People own their homes and should be able use them as they see fit, although that right is limited by the equal rights of others to enjoy their homes and property.

Second, many of today's home-based business rules were put in place in an earlier era when society was different. Rules have not kept up with the shift in the economy toward internet and service industries, modern childcare needs, and other dynamics. A recent analysis of 1,000 U.S. occupations found that 37 percent of them can now be performed from home.[284]

Third, home-based businesses create opportunities for people to earn a living while caring for young children and elderly parents at home. The latter issue is often overlooked, but it is becoming increasingly important as the number of elderly people rises, especially since retirement and nursing homes are so expensive. Some 16 percent of adults provide care for an elderly parent needing help, and the average daily care is about three hours.[285]

Fourth, home-based businesses reduce commuting by business owners, which saves time and money and reduces automobile pollution and congestion. Neighborhood customers of home-based services—such as daycare, tutoring, and repair services—may also benefit from shorter car trips. Home-based businesses can "bring goods and services into areas whose needs are not being met because they are far from commercial centers."[286]

Fifth, liberalizing regulations for home-based businesses reduces bureaucratic headaches for entrepreneurs. In many jurisdictions, entrepreneurs in residential neighborhoods are treated as crooks by the government, rather than as people adding value to communities. Cities with overly restrictive rules will lose valuable services and income-generating activities if frustrated entrepreneurs leave.

Sixth, when home-based business regulations are too restrictive, businesses go underground. Many home-based businesses break complex zoning rules one way or another. When that happens, enforcement becomes more arbitrary and unfair because investigations often start with anonymous neighbor complaints. Sandefur describes cases in Arizona that illustrate how excessive regulations have led to angry divisions in neighborhoods.[287]

Seventh, home-based businesses provide a low-cost way to operate small businesses that may not otherwise be viable if entrepreneurs had to rent separate space and pay for childcare and commuting. Restrictions that ban or raise costs for home-based businesses eliminate beneficial economic activity.

Eighth, homes are a low-cost incubator to test business ideas before larger investments are made. Amazon began as a home-based business in 1994. The Institute for Justice profiled a Chicago chocolatier who is now nationally known but who began operations in her home illegally because of the city's strict rules.[288] She launched the business in her home because she could not afford the high cost of renting commercial kitchen space.

Consider the remarkable growth of the craft brewing industry since home brewing was federally legalized in 1978. As home brewing grew in popularity, it ultimately led to the repeal of many state laws that had blocked the growth of the craft brewing industry. In a history of the industry, Ken Elzinga and coauthors

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“Craft brewing is a $22 billion industry today that grew out of a previously illegal home-based activity.”

write, “We are unaware of any U.S. industry in which home production led to more commercial start-ups than took place in craft beer.”[289] They explain:

> The art of making good beer requires experience, and most early craft brewers gained experience from home brewing. On October 14, 1978, President Jimmy Carter signed a bill that made home brewing legal, effective February 1, 1979. Both the tax break and the legalization of home brewing facilitated the birth of the craft segment. Changes in state laws and regulations also aided the craft segment. Although federal law made home brewing legal in 1979, states still retained the right to limit alcohol production and consumption. For example, Bert Grant opened the first brewpub in Yakima, Washington, in 1981, not realizing it was illegal at that time.[290]

In 1982, Washington State was the first state to legalize brewpubs, which helped trigger reforms across the nation in the 1980s and 1990s. Many original industry entrepreneurs—such as Ken Grossman, cofounder of the highly regarded Sierra Nevada Brewing Company—had started brewing in his home illegally, but legalization led to the rapid growth and acceptance of the industry.[291] A Smithsonian Institution article on the history of beermaking noted that “homebrewing is how over 95 percent of craft brewers learn their trade.”[292] Craft brewing is a $22 billion industry today that grew out of a previously illegal home-based activity.[293]

Local governments do need to consider externalities—that is, to limit disruptions to neighborhoods from home-based businesses. However, the traditional policy goal in cities to allow zero, or near zero, externalities from home-based businesses does not make sense. For one thing, the tolerance level for externalities from non-business activities in residential neighborhoods is not zero.

Furthermore, any negative externalities from home-based businesses need to be balanced against the positive benefits of businesses for entrepreneurs, business customers, and local economies. People benefit when their neighbors offer home-based services such as daycare, music instruction, and handyman services. The author knows a person who illegally runs a thriving repair business out of his suburban home’s garage. He repairs lawnmowers, leaf blowers, exercise machines, and other equipment. Rather than imposing a negative externality on his neighbors, this entrepreneur is appreciated for his convenience and low prices.

A few decades ago, many local governments considered home daycares a “problem use” and barred them.[294] With today’s high demands for childcare by dual-working couples there is pressure to liberalize the rules to increase daycare supply and reduce costs, but there continues to be resistance: “Day care providers forced to seek approvals from local land-use boards face an uphill battle. Land-use boards are famously responsive to homeowners’ concerns that uses other than single-family homes might decrease their property values.”[295]

Most home-based business restrictions are imposed by local governments, but state governments should limit the restrictions that local governments can impose. Some states have liberalized rules for some types of businesses. For example, 18 states have passed laws to preempt excessively tight local zoning restrictions on home daycares.[296]

Similarly, numerous states have liberalized regulations on “cottage food” production, which generally means foods that do not include meat or need to be refrigerated. It includes small-scale baking, canning, pickling, chocolate making, candy making, jamming, and the making of fruit pies, honey, pasta, and other food items for retail sale.[297] After recent liberalizations in Wyoming, home-based businesses can sell any type of food except meat, and can earn up to $250,000 annually in gross sales.[298] But many states still impose tight restrictions on the types of foods allowed and place limits on revenues. In Oklahoma, home-based businesses are only allowed to sell certain baked goods under a $20,000 annual sales limit, and in Rhode Island only farmers are allowed to sell food made in their homes.

New Jersey is one of the few states that bans the sale of baked goods made at home because a single state senator has blocked the passage of reforms.[299] A baker in New Jersey described the benefits of homes as low-cost business incubators:

> Martha Rabello, 36, of Cranford, rents out space at commercial kitchens. She said that a cottage food law would help people get started out without having to either spend $15,000 or more to build a commercial kitchen or find a rental space, which she said costs about $20 per hour. "That's a big investment; you don't have that leeway to try things," Rabello said. "This is a business that has a high failure rate. If you invest all that money and what you decided (to make) doesn't sell, you lose a lot more than if you had the ability to start at home."[300]

Georgia liberalized its cottage food laws in 2015. Before then, food producers "were prohibited, under most circumstances, from selling any type of food that was not prepared in a commercial-grade kitchen used solely for commercial purposes."[301] That meant that "if you wanted to sell birthday cakes out of your home, you had to build a second kitchen used only for that purpose and meet the same inspection standards required of restaurants or other commercial kitchens."[302]

Atlanta magazine noted, "That bar was too high, and financially impractical, for most folks to meet. The result: a lot of home cooks selling baked goods under the table, without licensing or food safety training."[303] With reforms in Georgia, entrepreneurs can now sell numerous foodstuffs directly from their homes, including "breads, cakes, cookies, fruit pies, jams and jellies, dried fruits, herbs and mixtures, cereals and granola, nuts, vinegars, popcorn and candies."[304]

Harvard Law School's Food Law and Policy Clinic examined the benefits of liberalizing rules for cottage food production in a 2018 study.[305] They pointed to Mark Stambler, who was shut down by Los Angeles County for selling bread out of his home. Stambler fought back and was successful in getting local cottage food laws liberalized. His business grew, he won baking awards, and he ultimately founded a successful brick-and-mortar business. The Harvard study notes that because "Mark was able to start his business out of his home kitchen, he was able to test the market for his product and take a risk that ultimately led to a very successful business."[306]

States and cities across the nation promised billions of dollars of subsidies to giant Amazon when it was looking for a new headquarters location in 2018.[307] But there is a better way to promote local economic development that would not cost taxpayers anything: liberalize rules for home-based businesses. Some of those local businesses may grow to eventually become large national businesses, as Amazon did.

CONCLUSION

The 2020 pandemic caused the shutdown of many businesses and threw millions of people out of work. As the economy rebuilds in 2021, it needs startups to create jobs and pursue new post-pandemic opportunities. Startup businesses add value to every community in the nation, and some startups grow into leading innovative companies. To speed economic recovery and support long-term growth, governments should remove regulatory barriers to startups.

State governments should repeal certificate of need laws because they block new businesses and investments for no good reason. These laws tend to reduce supply, raise prices, and block innovations that new businesses would bring to industries.

State governments should review all occupational licensing rules and regulations and repeal those that other states do not require

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> “A lesson from the legalization of the craft beer, marijuana, and hemp industries is that entrepreneurship flourishes when government gets out of the way.”

or that fail cost-benefit tests. States should accept licenses issued by other states, explore whether licenses can be replaced by private certification, and reduce the costs and time requirements for needed licenses.

State governments should eliminate regulations that raise labor costs, such as minimum wage and mandatory paid leave laws. Minimum wage rules are particularly harmful to startups and small businesses, such as restaurants, that provide opportunities for entry-level workers.

Local governments should eliminate low-value permits, licenses, and other approvals. Bureaucratic processes should be much faster and more transparent. It makes no sense that entrepreneurs burn through cash for months on end waiting for government approvals before they can open their businesses.

Mayor Rahm Emmanuel's regulatory reform team in Chicago found that many licenses and permits were imposed simply for the government to track information on people, not to protect public health or safety.[308] That is a dubious purpose for government intervention in a free society.

State and local caps on the numbers of marijuana and alcohol licenses create barriers to entrepreneurs, and in many cities those caps have created breeding grounds for government corruption. All such caps should be repealed.

Slow and complex permitting, licensing, and zoning bureaucracies also encourage corruption. Both entrepreneurship and clean government would be aided by repealing excess rules and restrictions and speeding approval processes.

Local governments should liberalize rules for home-based businesses, which are increasingly attractive given the changes in technology and society. Home-based businesses employ millions of people and have been a low-cost incubator for many successful companies. They add value to the economy and should not be treated as a nuisance to communities but instead seen as a benefit.

A lesson from the legalization of the craft beer, marijuana, and hemp industries is that entrepreneurship flourishes when government gets out of the way. But policymakers should do more to free those industries from unneeded restrictions. They should also be on the lookout for other industries to legalize and deregulate.

The Entrepreneur Regulatory Barriers Index suggests that the lowest startup barriers are in Georgia, South Dakota, North Dakota, Colorado, New Hampshire, Kansas, Indiana, Wyoming, Utah, and Ohio, while the highest barriers are in Rhode Island, Oregon, Nevada, New York, West Virginia, Washington, Hawaii, California, New Jersey, and Connecticut.

However, every state should consider adopting the policies of the least-regulated states in each policy area. If 15 states do not need CON laws, then neither do the other 35 states. If 32 states do not need caps on alcohol licenses, then neither do the other 18 states. If 24 states do not need occupational licensing of auctioneers, then neither do the other 26 states.

There was both good news and bad news in 2020 regarding regulations and entrepreneurship. The good news was that many states relaxed some regulations on health care provision, restaurant alcohol delivery, and other activities. The bad news was that state and local officials wielded enormous power to restrict and close businesses. Many shutdowns were overkill and arbitrary. Looking ahead, entrepreneurs will need to consider such emergency powers in deciding where to invest.

Finally, entrepreneurs nationwide will face challenges in coming years as the Biden administration is likely to increase regulations on businesses and raise taxes. But whatever happens in Washington, state and local governments can do much to improve the entrepreneurial climate by repealing low-value and harmful regulations.

APPENDIX: METHODOLOGY FOR THE ENTREPRENEUR REGULATORY BARRIERS INDEX

The Entrepreneur Regulatory Barriers Index is calculated from 17 variables across four categories. The variables measure restrictions and costs imposed on new businesses in each state. The four categories are small business views, occupational licensing, other entry barriers, and regulation-created costs. The variables are shown in Table A.1.

Each variable was converted to a normalized score using the formula *(value – mean) ÷ standard deviation*. That formula centers the values for each variable around a mean of zero. Then the normalized scores were averaged within the four categories and the overall score was calculated as the average of the categories.

Small Business Opinions

Thumbtack.com publishes an annual survey of small business opinions on the friendliness of each state's business climate.[309] Its 2019 survey had more than 5,000 respondents. We constructed three variables using responses to the questions: "How difficult or easy do you think it is to start a business in your state?," "How unfriendly or friendly is your state or local government with regard to employment, labor, and hiring regulations?," and "How unfriendly or friendly is your state or local government with regard to licensing forms, requirements, and fees?" Each response was graded as an F to A+ choice, which were converted to scores of 1 to 13.

Occupational Licensing

The occupational licensing category includes two variables. The first is the percentage of the workforce that requires an occupational license, which is estimated by a 2018 Institute for Justice study.[310] The second is the average cost of occupational licenses, which is calculated from the National Conference of State Legislatures National Occupational Licensing Database.[311] The cost is the average initial cost of a license in dollars plus the average annual renewal cost across the 47 occupations examined by the database in 2020.

Other Entry Barriers

Five variables in this group measure regulatory barriers to entering selected industries. Certificate of need is binary and denotes whether a state has a CON law for health care.[312] Cottage food laws are based on a 0 to 6 scale from forrager.com, a website that tracks the restrictiveness of these home-based business laws.[313] A score of 6 indicates the most liberal cottage food laws. Cannabis laws are based on a 0 to 5 scale. States receive one point for making each of these reforms: legalizing commercial hemp, decriminalizing marijuana, legalizing CBD oils, legalizing medical marijuana, and legalizing recreational marijuana.[314] An alcohol score is averaged from two binary variables: whether a state imposes on-premise liquor license caps (which can make it difficult for entrepreneurs to open restaurants and bars) and whether a state is an alcohol control state (meaning the state has a monopoly over wholesaling or retailing of beer, wine, or liquor).[315]

Regulation-Created Costs

The score for regulation-created costs is based on seven variables. State minimum wage rates are from the National Conference of State Legislatures.[316] The land-use variable is calculated from the average score in the 2019 Wharton Residential Land Use Regulatory Index for cities in each state.[317] The Wharton study focuses on regulations for housing projects, but we used the results as a proxy for the zoning restrictiveness of building projects of all types. The 2019 version of the index excludes Hawaii, so we used the value for that state from the prior Wharton study. The lawsuit variable is the reasonableness of state legal climates based on a 2019 survey of business attorneys by the U.S. Chamber of Commerce.[318]

Four variables for additional labor costs are averaged and then included in the cost measure. These are three binary variables—whether a state mandates paid family leave, paid sick leave, and short-term disability insurance—and the state's workers' compensation premium rates as a percentage of the median state's rates.[319]

"Whatever happens in Washington, state and local governments can do much to improve the entrepreneurial climate by repealing low-value and harmful regulations."

Appendix

Variables in entrepreneur regulatory barriers index

		Small business views of regulations			Occupational licensing	
State	Overall rank	Ease of starting a business	Labor and hiring laws	Licensing laws	Percent of workers	Average license costs
Alabama	29	A–	B	B+	18	416
Alaska	25	D+	A	A+	18	488
Arizona	17	A+	A	B	19	466
Arkansas	13	A	A	B+	20	348
California	48	D+	D	F	17	398
Colorado	4	A	B+	B+	18	294
Connecticut	50	D	F	F	22	458
Delaware	14	A+	C+	B	15	398
Florida	27	B+	A–	B+	21	383
Georgia	1	A+	A+	A+	14	317
Hawaii	47	D+	D+	D+	21	360
Idaho	18	A+	A	A	24	339
Illinois	33	B	C+	F	18	329
Indiana	7	A+	B	B	18	274
Iowa	35	B	C+	B–	24	329
Kansas	6	B–	B–	B–	16	276
Kentucky	24	B	C+	C–	19	338
Louisiana	30	B+	A	A+	22	407
Maine	39	C	A–	D+	24	380
Maryland	38	A+	B–	B-	19	417
Massachusetts	34	C+	A	C–	18	407
Michigan	36	B	D+	C–	19	333
Minnesota	22	A–	C+	B	22	347
Mississippi	26	B+	A+	A+	19	424
Missouri	21	A–	B+	B	21	294
Montana	40	F	C–	B–	19	387
Nebraska	16	A	C+	C–	18	311
Nevada	43	A	B+	B	27	524
New Hampshire	5	A–	B	A–	16	321
New Jersey	49	B	C+	C	20	396
New Mexico	20	B	B–	C+	18	390
New York	44	D	D	D+	21	341
North Carolina	12	A+	A+	A	19	396
North Dakota	3	A+	A+	A–	23	353

Other entry barriers					Regulation-created costs						
Certificate of need laws	Cottage food laws	Cannabis laws	Liquor license quotas	Alcohol control state	Minimum wage	Land-use laws	Lawsuits	Workers compensation	Paid family leave	Paid sick leave	Short-term disability
Y	3	1	N	Y	7.25	−0.53	66	92	N	N	N
Y	3	5	Y	N	10.34	−0.92	73	129	N	N	N
N	5	5	Y	N	12.15	0.32	71	73	N	Y	N
Y	4	2	N	N	11.00	−0.50	70	50	N	N	N
N	5	5	Y	N	14.00	0.75	60	150	Y	Y	Y
N	4	5	N	N	12.32	0.10	71	87	N	N	N
Y	3	3	N	N	12.00	0.00	74	138	Y	Y	N
Y	3	3	N	N	9.25	0.27	76	137	N	N	N
N	4	3	Y	N	8.56	0.37	62	98	N	N	N
Y	4	1	N	N	7.25	−0.40	66	114	N	N	N
Y	4	3	N	N	10.10	1.09	71	144	N	N	Y
N	4	0	Y	Y	7.25	0.25	72	108	N	N	N
Y	4	5	N	N	11.00	−0.20	60	101	N	N	N
Y	4	2	Y	N	7.25	0.01	69	53	N	N	N
Y	4	1	N	Y	7.25	−0.51	71	107	N	N	N
N	4	2	N	N	7.25	−0.30	69	78	N	N	N
Y	4	2	N	N	7.25	−0.40	67	78	N	N	N
Y	4	3	N	N	7.25	−0.29	60	135	N	N	N
Y	5	5	N	Y	12.15	−0.40	74	113	N	N	N
Y	3	4	N	N	11.75	1.04	70	79	N	Y	N
Y	5	5	Y	N	13.50	0.32	70	81	Y	Y	N
Y	3	5	Y	Y	9.87	−0.39	69	79	N	Y	N
N	3	4	Y	N	8.21	−0.09	71	112	N	N	N
Y	3	3	N	Y	7.25	0.37	62	83	N	N	N
Y	3	3	N	N	10.30	−0.41	64	115	N	N	N
Y	4	5	Y	Y	8.75	0.34	73	117	N	N	N
Y	4	1	N	N	9.00	−0.38	72	100	N	N	N
Y	3	5	N	N	8.00	0.72	70	74	N	Y	N
N	3	3	N	Y	7.25	−0.25	71	95	N	N	N
Y	0	5	Y	N	12.00	1.11	65	175	Y	Y	Y
N	4	5	Y	N	10.50	0.07	71	93	N	N	N
Y	4	4	N	N	12.50	0.06	68	155	Y	N	Y
Y	5	1	N	Y	7.25	−0.02	71	91	N	N	N
N	5	4	N	N	7.25	−0.46	73	47	N	N	N

		Small business views of regulations			Occupational licensing	
State	Overall rank	Ease of starting a business	Labor and hiring laws	Licensing laws	Percent of workers	Average license costs
Ohio	10	B	A+	B+	18	319
Oklahoma	23	B+	A+	B	19	449
Oregon	42	B+	D+	D	20	377
Pennsylvania	32	D	D+	B–	19	307
Rhode Island	41	B	D+	D	17	312
South Carolina	28	B–	B	C–	18	350
South Dakota	2	A	A	A+	21	294
Tennessee	31	A	B+	B–	21	399
Texas	15	B+	A	A–	19	451
Utah	9	A+	B–	B	16	316
Vermont	37	D	D+	C+	19	318
Virginia	11	B+	A+	A+	20	373
Washington	46	A–	F	C–	22	413
West Virginia	45	F	D+	C	22	412
Wisconsin	19	B+	D	C–	18	340
Wyoming	8	A	A	A+	23	334

Source: See appendix text for description of variables and sources.

NOTES

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8. "2017 SUSB Annual Data Tables by Establishment Industry," U.S. Census Bureau, www.census.gov/data/tables/2017/econ/susb/2017-susb-annual.html. And see Dustin Chambers, Patrick McLaughlin, and Tyler Richards, "Regulation, Entrepreneurship, and Firm Size," Mercatus Center, April 26, 2018, Tables 1 and 2.

9. "Federal Policies in Response to Declining Entrepreneurship," p. 5.

Other entry barriers					Regulation-created costs						
Certificate of need laws	Cottage food laws	Cannabis laws	Liquor license quotas	Alcohol control state	Minimum wage	Land-use laws	Lawsuits	Workers compensation	Paid family leave	Paid sick leave	Short-term disability
Y	5	3	Y	Y	7.25	−0.37	68	77	N	N	N
Y	2	2	N	N	7.25	−0.37	71	115	N	N	N
Y	3	5	N	Y	12.00	0.36	70	69	Y	Y	N
N	5	2	Y	Y	7.25	0.11	67	108	N	N	N
Y	4	3	Y	N	11.50	0.91	71	134	Y	Y	Y
Y	4	1	N	N	7.25	0.13	68	108	N	N	N
N	4	5	Y	N	9.45	−0.46	72	103	N	N	N
Y	4	1	N	N	7.25	−0.02	68	76	N	N	N
N	4	2	N	N	7.25	−0.03	67	68	N	N	N
N	4	2	Y	Y	7.25	0.58	71	59	N	N	N
Y	4	5	N	Y	11.75	−0.13	72	153	N	Y	N
Y	4	5	N	Y	7.25	−0.10	71	89	N	N	N
Y	3	5	N	N	13.69	0.24	70	106	Y	Y	N
Y	5	3	N	Y	8.75	−0.28	63	55	N	N	N
N	4	2	N	N	7.25	0.00	71	121	N	N	N
N	6	0	Y	Y	7.25	−0.29	73	100	N	N	N

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13. "Business Formation Statistics," U.S. Census Bureau, www.census.gov/econ/bfs. This dataset includes a subset of "high-propensity applications" that are likely to become active businesses with payroll. These data are less precise than the "business dynamics" data but are more current.

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15. "Federal Policies in Response to Declining Entrepreneurship," p. 7.

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