Six decades ago, fewer than 5 percent of Americans needed some sort of professional license (not counting mere certification) to work in their field. Today, that proportion is almost 30 percent. The growth of government regulation like licensure requirements seems to be a defining characteristic of the 20th and, thus far, 21st centuries. Most, if not all, economic life has been gradually brought under some kind—and usually many kinds—of regulation. Non-economic life has also been affected. Some deregulation has occurred in some fields (transportation and energy are the best known cases) but, it seems, not enough to compensate for increased regulation elsewhere (environment, finance, drugs, health and safety, licensure, etc.).

Economic theory suggests that increasing regulation dampens economic growth. In the standard neoclassical model of economic growth, an economy’s output (or gross domestic product) is a function of the quantity used of capital (equipment, machines, industrial and commercial buildings), labor employed, and technical progress—including the social and economic institutions that favor such progress. The growth of GDP thus depends on the rates of growth of labor and capital, their productivity, and technology. If growing regulation negatively affects those factors’ growth, we would expect regulation—whatever other benefits it can have—to impose a cost in terms of economic growth.

One important way in which regulation dampens productivity is by protecting incumbent businesses against competition, thereby interfering with the Schumpeterian process of creative destruction. But has regulation really impeded U.S. economic growth?

**REGULATION VS. ECONOMIC GROWTH**

To answer that question, we first need some way to measure regulation. That is a difficult task. Standard attempts focus on indices built with indicators of the presence of certain types of regulations. The Organization for Economic Cooperation and Development’s index of labor and product regulations is one example. But those sorts of measures suffer from many limitations. Arbitrary weights have to be chosen to aggregate different indicators. Some indices cover only short time periods or a limited number of industries. Because relevant data are not available, such indices do not take into account the complexity of regulations or the vigor of their enforcement.

A different approach to quantifying regulation is the work done by Melinda Warren of the Weidenbaum Center on the Economy, Government, and Public Policy at Washington University in St. Louis. Warren and her co-authors measure regulation by the budgets and staffing of the main federal regulatory agencies. Those proxies suggest a large increase in regulation between 1960 (the first year data are available) and 2013. Over those 53 years, the federal regulatory budget has jumped 17-fold in constant dollars, while the staffing of federal regulatory agencies has increased five-fold.

Another way to measure regulation has been proposed by John Dawson of Appalachian State University and John Seater of North Carolina State University. The two economists argue that counting the number of (standardized) pages of regulation provides a more comprehensive measure—although, of course, still imperfect. The number of pages of regulations is likely to be a direct function of the extent and complexity of regulations, as well as of their enforcement potential—the more detailed and loophole-free a regulation is, the easier it should be to enforce.

Dawson and Seater apply this method to the *Code of Federal Regulations* (CFR), an annual consolidation of all existing federal regulations, which has been published in a consistent format every year since 1949. Dawson and Seater’s data indicate that federal regulation has increased nearly every year, but most strikingly in the 1970s. Other notable periods of regulatory expansion have
been the 1950s, the late 1980s and early 1990s, and the early 2000s. The 1949 CFR had 19,335 pages; by 2005 it was 134,261 pages. By that measure, federal regulation has multiplied seven-fold since World War II.

A standard defense of expanding regulation is that a growing economy requires it. Real American GDP also grew seven-fold between 1949 and 2005. But the CFR does not include state and local regulations, which would boost the seven-fold growth considerably. In his 1996 book Regulation and Economic Performance, Brian Goff of Western Kentucky University guessed that state regulations equal about 150 percent of the CFR. And that still does not take local regulations into account.

At any rate, it is not clear why regulation should grow in tandem with the economy. Some people intuitively believe that “the more complicated the forms assumed by civilization, the more restricted the freedom of the individual must become” (as Friedrich Hayek quoted Benito Mussolini in The Road to Serfdom). But that justification is not satisfactory: Hayek persuasively demonstrated that social complexity is a result of individual liberty while, on the contrary, control and regulation—at least past a certain point—standardize society and constrain civilization.

**ECONOMIC COLLAPSE?**

Suppose that in 1949 somebody had been told that, in the following six decades, the amount of federal regulation in the United States would increase seven-fold. Wouldn’t that person—especially if he were an economist—have forecasted that such a regulatory fury would lead to a collapse of the economy? So why hasn’t it?

One reason could be that regulation is worse elsewhere in the world, maintaining the comparative advantage of U.S. businesses in supplying both Americans and foreign consumers. Take labor market regulation, for example. Labor markets are encumbered by many restrictions on participants’ freedom of contract. One type of restriction is called Employment Protection Legislation (EPL). EPL includes restrictions on dismissing permanent employees, which in turn calls for restrictions on temporary contracts, which itself suggests constraints on temporary work agencies. EPL restrictions
are common in Europe, but rare or mild in America. On the OECD index of protection of permanent workers against individual and collective dismissals, the United States is the second-least restrictive country (after New Zealand) among 34 countries. The index of all forms of EPL puts America first. Labor markets are thus more flexible and unemployment is lower in America.

Other areas of the economy are also less regulated in America. The OECD index of product market regulation (which combines administrative hurdles on creating and running businesses, restrictions on trade and investment, and the presence of state corporations) ranks the United States as the second-least regulated among 30 OECD countries. Even in labor markets, The Economist recently observed (August 30) that American flexibility would help explain why growth has not been dampened as much in America as in Europe.

The gap in regulation, however, has been closing in recent years. In many areas, the United States is now more regulated than other countries. For example, the OECD index of foreign direct investment restrictiveness shows the United States as the 10th most regulated among 34 countries. Even in labor markets, The Economist recently observed (August 30) that American flexibility is under assault by new interpretations from the courts and the National Labor Relations Board.

The Fraser Institute’s Economic Freedom of the World index comprises a regulation subcategory that covers credit market regulations, labor market regulations, and general business regulations (requirements for creating and running businesses, and such). Ranking economies from the least to the most regulated, the United States went from fifth among 101 countries in 1980 to 17th among 122 countries in 2011. On that criterion, regulation in America is not only worse than in countries like Switzerland, Canada, or New Zealand, but also such places as Rwanda and Guinea-Bissau. In another subcategory, “Freedom to trade internationally,” the United States fell from seventh to 30th, according to the Fraser Institute’s chain-linked data.

There must be other reasons why regulation has not led to rapid economic collapse. One is that markets are resilient to external constraints. Entrepreneurs exploit all loopholes, legal or illegal, to sell what consumers want. History is replete with examples, and so is contemporary Europe. On the Fraser Institute’s regulation index (non-chained and comprising 152 countries), Italy ranks 68th, France 61st, and Germany 56th, compared to the United States’ 28th. If prosperity can persist in more regulated Europe, it should thrive in somewhat less regulated America. Perhaps short of a catastrophe like hyperinflation, a sophisticated economy does not collapse.

A related consideration is that the freer and more complex an economy, the more difficult it is to enforce minute regulations and the more numerous are the possibilities of regulatory arbitrage (that is, legal avoidance of regulation by actively exploiting loopholes). However, the trend has been pointing in the other direction for some time. The cost of avoiding regulation has gone up with increased penalties and administrative discretion—witness the growing fines imposed on corporations, not to mention the punishment of individuals convicted of insider trading and other regulatory crimes. The Economist referred to “the criminalization of American business.” If avoiding regulations was once relatively easy, it has become much more costly.

**Did the Crash Happen, After All?**

A different or complementary answer for why the American economy has not collapsed under growing regulation is that regulation has crashed the economy, albeit in a gradual way.

Consider the recent “Great Recession.” Real GDP fell by 4.2 percent over six quarters of economic contraction. Youth and long-term unemployment in America nearly reached European levels. And contrary to the 1980–1982 recession, the recovery after 2009 has been anemic. After five years of recovery, unemployment still hovers around 6 percent and is close to double that if we include the discouraged unemployed who have dropped out of the labor force and the employed who work part-time because they cannot find full-time jobs. It was only in 2013 that American real GDP per capita reached its pre-recession level of 2007. Using the OECD’s estimates of potential output, cumulative GDP lost since 2007 amounts to $7.6 trillion (in 2009 dollars), or about $25,000 per American resident. The recovery is even weaker in Europe.

Regulation was not the only factor in the Great Recession and its aftermath. Recessions are inevitable. But they can be shallower or deeper depending on how fast the economy adjusts and recovers. And in this, regulation undoubtedly plays a role. Moreover, it certainly played a role through the numerous controls that impeded the mortgage market and the financial industry, as I argued in my 2011 book Somebody in Charge: A Solution to Recession? (Palgrave Macmillan). At any rate, the Great Recession must be seen in the context of the more general, decades-long economic slowdown that has been dubbed “the Great Stagnation.”

The Great Recession was not an isolated event, but the culmination of economic problems. It had been obvious for some time that the economy was struggling. A productivity slowdown started in the mid-1970s, or perhaps even in the 1960s. The growth rate of labor productivity per hour in the private sector dropped by one-third between the period 1950–1973 and the period 1973–2007, from 3 percent per year to 2 percent. Total factor productivity (also called multifactor productivity), a measure of productivity that can be partly traced to technical and institutional progress, followed the same trend.

Economic growth is a function of the increase in the quantity of factors of production and their productivity. Other things equal, less productivity growth will cause a slower growth in GDP. And that has indeed happened. While real American GDP grew by 4 percent between 1950 and 1973, the rate of growth slowed to 3 percent from 1973 to 2007, and to 2.7 percent if we extend the observation period to 2013.
Since incomes come from GDP, their growth has also slowed. The broadest estimate of average income is GDP per capita. Between 1950 and 1973 in America, real GDP per capita grew at an annual rate of 2.5 percent; the rate of growth slowed to 1.9 percent over the period 1973–2007, and to 1.7 percent if we extend that period to 2013. An oft-cited Census Bureau statistic suggests that real median household income dropped 9 percent between its 1999 peak and 2013, to a level no higher than a quarter-century ago. This Census Bureau statistic, however, is not consistent with national accounts data and has been proven unreliable. Yet, a slower growth of GDP per capita can be expected to translate into hardship for some people. In the long run, even a small decline in the rate of economic growth has momentous consequences on incomes.

The importance of Dawson and Seater’s work lies not only in their measurement of regulation, but also in their econometric estimates of the effect of federal regulation on economic growth. Using what economists call an endogenous growth model, they estimate that federal regulation since 1949 has cut 2 percentage points from the annual growth rate of GDP. Because of compounding, a 2 percentage point drop in the annual rate of economic growth translates into the loss of $39 trillion in the 2011 GDP. As preposterous as it sounds, Dawson and Seater thus claim that if federal regulation had remained at its 1949 level, 2011 U.S. GDP would have been $54 trillion instead of its actual $15 trillion. Seen from another point of view, the average American (man, woman, and child) would now have about $125,000 more per year to spend, which amounts to more than three times GDP per capita. If this is not an economic collapse, what is?

Dawson and Seater’s estimates suggest that total factor productivity has been negatively affected by regulation during the whole 57-year period they studied, but with a higher negative effect from the mid-1960s to about 1980, a somewhat less negative effect from then on to the late 1990s, and a large negative effect again in the early 2000s. This evolution closely matches the large jumps in regulation in the 1950s, in the 1970s, and again in the early 2000s. The authors conclude, “We find that federal regulation explains much of the famously puzzling productivity slowdown of the 1970s.” That supports the claim Goff made in his 1996 book.

If Dawson and Seater are right about the loss in GDP, then even if it is relative to an unobservable counterfactual, and though it still leaves most people relatively richer than they were in 1949, the economic loss is nonetheless real and very large—a slow-motion economic crash.

**ELEPHANT IN THE ROOM**

Do Dawson and Seater’s estimates exaggerate the effect of regulation on economic growth? Does it strain credulity too much to be told that the average American income would now be 3.6 times higher had federal regulation stayed where it was in 1949? Dawson and Seater are aware of this problem: “Our estimates of the output losses induced by regulation may elicit ‘sticker shock’ on the part of the reader,” they write. Does the sticker price make sense?

Of course, the exact estimate is subject to caution. Some empirical studies of small countries have produced results that can be interpreted as consistent with Dawson and Seater, but those findings may not apply to highly developed countries like the United States. Yet Dawson and Seater’s estimates support the economically plausible idea that a large increase in regulation must have had a large effect on potential economic growth. It should also be remembered that, because of compounding, a small but persistent decrease in annual growth translates into a large effect over several years. It can be easily calculated that a drop of the annual growth rate from 4 percent to 2 percent results, over 62 years, in a future value 70 percent lower.

A skeptic might point out that if we were to incorporate state and local regulation into Dawson and Seater’s model, it would likely produce a result far out of bounds with reality. But this argument also suggests its own response: it is not impossible that Dawson and Seater’s estimates already capture the effect of the nonmeasured state and local regulations, which are arguably correlated with federal regulation. In this case, the estimate derived by Dawson and Seater becomes more reasonable. At the very least, their numbers support the idea that regulation’s economic effects have been large.

Many factors jostle to be part of the explanation of the Great Stagnation, but regulation is quite probably the invisible elephant in the room. The marginal cost of regulation must rise as its stock increases. Moreover, the market rigidities caused by regulation increase the cost of adapting to the creative destruction brought by technological change. The role of regulation could explain why Europe, where the labor market is more regulated than in America, is stagnating even more.

The resilience of markets, especially in a rich and sometimes still-flexible economy like the United States, has dampened the effect of regulation. However, it is reasonable to believe that, over the more than six decades since World War II, regulation has deleted a big chunk of potential prosperity. It has not actually cut into the average standard of living, but this is only a consolation prize, for worse could come if the regulatory bulldozer is not pushed back.

**READINGS**