Does the Jones Act Endanger American Seamen?

🔸 BY THOMAS GRENNES

he Merchant Marine Act of 1920, more commonly known as the Jones Act, requires (among other things) that all goods transported by water between U.S. ports be carried on U.S.-flagged ships, constructed in the United States, owned by U.S. citizens, and crewed by U.S. citizens and U.S. permanent residents. This provision sion was intended to strengthen the country's merchant marine and increase national security.

Now, nearly a century after the law's adoption, there is increasing evidence that it has the opposite effect. Because American-built ships have become increasingly expensive, shipping companies are slow to purchase new ones and, as a result, the U.S. merchant marine fleet has become older and less safe. This is an example of the unintended consequences of certain policies. It is doubtful that the original sponsors or the current defenders of the Jones Act intended to create conditions that would increase the dangers faced by American seamen, but that has been the result.

ElFaro tragedy / A recent tragedy illustrates this point. In 2015, a Jones Act–compliant ship, the *El Faro*, sank on a voyage from Jacksonville, Fla. to Puerto Rico. All 33 crew members died after the ship sailed into a hurricane.

The *El Faro* was 40 years old, 31 years older than the average foreign-flagged ship of its type. There was strong criticism in the press about the poor preparation of the ship for the conditions, and a sharply worded article in the *National Review* asked if the Jones Act was to blame for the deaths.

If old age contributed to the disaster, exactly what factors were relevant? U.S. Sen. Bill Nelson (D–FL) and others complained about the inadequacy of the ship's open lifeboats. These lifeboats were once common, but newer ships rarely use them today. Others complained that a more modern ship design would have protected against the loss of propulsion that left the crew unable to control the *El Faro* in the powerful winds. Previous crew members claimed the ship was in poor general condition even after its owner spent \$21 million on service and upgrades. In comments

to CNN, they described the *El Faro* as a "rusty bucket" whose "decks were filled with holes."

The Coast Guard commissioned a Marine Board of Investigation that held hearings on the disaster to investigate its causes, possible misconduct and violation of laws, and to make recommendations to improve future safety. The board has not yet issued its report.

Older ships, greater risk

/ Systematic evidence indicates that American-flagged ships are older, and older ships are less safe. Age varies by type of ship, but over all types, the average age for U.S. ships in 2016 was 33 years old, whereas foreign-flagged ships averaged 13 years, according to the *World Maritime News*. In every ship category, U.S. vessels were older.

A recent study by a group at Southampton University analyzed shipping data for the last 15 years. It concluded that older ships were associated with more frequent accidents. Marine insurers have a powerful incentive to investigate the determinants of shipping risk, and their trade group, the International Union of Marine Insurance, has compiled data also indicating that older ships have had more frequent accidents. Signee nations of the Paris Memorandum of Understanding on Port State Control, an international agreement on ship inspections, collect data on inspections of ships in ports and frequency of detentions of unsafe ships. Their latest data for July 2017 indicate that U.S. ships ranked 36th out of 42 relatively safe countries. In safety, they ranked below all the Western European countries and Japan



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and China. They also ranked below two of the leading "flags of convenience" countries, the Marshall Islands and Liberia.

Comparative advantage / How does the Jones Act affect the safety of American-flagged ships? Answering that question requires an understanding of the economics of shipbuilding.

American shipbuilders once had a comparative advantage over other nations in producing ships because of the U.S. abundance of forest products. As a result, American shipbuilders had lower costs for wooden ships that were powered by sails and the wind. But American-built ships today cost approximately five times as much as comparable ships on the international market. Over 90% of commercial ocean-going ships are now produced in South Korea, Japan, and China. The United



States is a small, high-cost producer with only three shipyards producing commercial, ocean-going ships.

Because new Jones Act-compliant ships are so expensive, domestic shipping companies delay replacing them. Consequently, the American-flagged fleet is older than the foreign-flagged fleet.

Because compliant ships are so expensive, domestic shipping companies delay replacing them, making the American fleet much older than the foreign fleet.

The lack of competitiveness of American shipyards is evident from the choices made by American companies that ship their products internationally. American export-

> ers and importers are not constrained by the Jones Act, and they choose foreign-flagged ships nearly all of the time to make those shipments.

Subjecting American seamen to greater danger is an unintended consequence of U.S. shipping policy. There are other examples of government policies that have had the unintended effect of making transportation more dangerous. For instance, consider the "fracking" revolution in natural gas and oil extraction, which has resulted in oil being produced in locations not served by older pipelines. Strong opposition to building and extending pipelines has led to more oil being carried by railroads and, as a result, there have been widely reported deaths and substantial damage

as a result of rail accidents. The opponents of pipelines probably have not intended to increase the volume of oil carried by railroads, but that is the result.

Jones Act's durability / Nearly all systematic studies have concluded that the Jones Act has imposed net costs on the American

> economy. Its contributions to national security have also been called into question. (See "America's Welfare Queen Fleet: The Need for Maritime Policy Reform," Summer 1991.) Couple that with the greater danger for Ameri-

can crews, and we're left to wonder how the law has survived for nearly 100 years.

The act has the political advantage of having concentrated benefits but diffuse costs. The beneficiaries are a small number of shipbuilders, operators, and their labor unions. Those groups have formed an effective lobby in favor of continuing the act.

Conversely, many of the law's costs are spread rather evenly among millions of users of transported products. Most consumers are not aware of the Jones Act, and the cost per person is small relative to most items in their budgets. One estimate places the total consumer cost of the Jones Act at \$1.8 billion per year. Spread that cost evenly among 325 million Americans, and the cost per person would be about \$5.50 per year. That is little more than the cost of a couple of gallons of gas and less than one six-pack of good beer. Hence, individuals have little incentive to spend their time and money lobbying against the Jones Act.

The law also continues to receive strong support from presidents and members of Congress in both parties. It has developed one of the most effective lobbies in Washington. U.S. Sen. John McCain (R–Ariz.), one of the few prominent opponents of the act, stated in 2012 that repeal legislation would not get 20 votes in the Senate. Earlier attempts to reform the Jones Act, including the efforts of a former commissioner of the Federal Maritime Commission, were not successful.

However, the safety issue could weaken the support of some members of Congress for the act. Surely no Jones Act supporters intend to increase the risk faced by American seamen when they do their jobs. The huge cost differences in ships are indisputable, and the high cost of American-built ships has resulted in an older and less safe American-flagged fleet. Less safety is an unintended consequence of the Jones Act.

Union leaders are strong supporters of the Jones Act. Do they represent their members well if the Jones Act results in less safe working conditions? Or are union leaders subject to the same agency problem faced by heads of corporations? Many shareholders have complained that CEOs have represented their own personal interests rather than the best interests of shareholders. Are union leaders ignoring the additional risks faced by officers and crews of older and less safe Jones Act ships?

Reform/ The Jones Act's perverse incentives that make American ships older and more dangerous could be eliminated by simply repealing it. Unfortunately, the political realities noted above make it unlikely full repeal will happen anytime soon. However, a more modest reform would reduce the incentive to use older ships on some of the most dangerous routes.

Ocean-going ships traveling to and from the non-contiguous regions (Hawaii, Alaska, and Puerto Rico) could be exempted from the Jones Act mandate to use the more expensive American-built ships. This exemption would allow carriers to buy the much cheaper and more modern foreignbuilt ships and replace them more frequently. This exemption has been formally proposed by the Hawaiian Shippers' Council. Other features of the Jones Act, such as requiring American crews, ownership, and registration, could remain in force.

Support for this modest reform could be increased by offering to compensate some shipbuilders for possible loss of jobs. Buyouts of special-interest groups that gained from historical protectionist policies are controversial, but they have been used successfully to end some old and inefficient programs, such as the U.S. tobacco and peanut support programs that dated back to the 1930s. Even with the cost of the buyout, those initiatives have benefited the general public by removing a gross inefficiency.

Conclusion / Requiring Americans to use American-built ships on domestic routes increases shipping costs in the short-run and reduces innovation and slows growth in the long-run. In addition, the Jones Act makes the American-flagged fleet older and less safe than it would otherwise be. Instead of producing a stronger merchant marine, the Jones Act has contributed to a smaller and older domestic shipping industry with more dangerous conditions for American seamen.

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Deregulation through No Regulation?

🔸 BY SAM BATKINS AND IKE BRANNON

n the first few months of Donald Trump's administration, Congress has passed and the president has signed a record 14 Congressional Review Act (CRA) resolutions of disapproval, withdrawing rules implemented by Barack Obama's administration in its final months in office. These CRA actions will save a total of \$1.1 billion

in annual compliance costs. In addition, Trump issued an executive order calling for the repeal or amendment of two existing rules for each new rule an agency implements.

Some advocates of limited government have complained that, so far, the administration's regulatory accomplishments have largely been limited to those CRA votes. They hope Congress will undertake expansive deregulation of financial services, health care, and energy in the coming months.

But one feature of Trump's regulatory policy is being overlooked: the decline in the issuance of new rules. There has been a massive slowdown in regulatory output, which Trump's supporters should take as proof that his administration is serious about regulatory reform.

We examined the data and found ample evidence to support the perspective that rulemaking has slowed dramatically since Inauguration Day. Through its first five months, the Trump administration has imposed just 1.9% of the average number of rulemakings for that same length of time since 1994.

Methodology / To carry out our analysis, we compiled data from the Office of Information and Regulatory Affairs (OIRA) from 1994 to present. We used 1994 as our start year because it was the first full year after President Bill Clinton issued Executive Order 12,866, which mandated that all major regulations—that is, those that have a compliance cost of \$100 million or more—undergo cost-benefit analysis. The order dramatically narrowed and focused the scope of OIRA's scrutiny. In 1992 OIRA

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reviewed 2,285 rulemakings, but by 1994 the number of reviews declined to 831.

We also obtained data on the total rulemakings as well as the number of economically significant rulemakings OIRA reviewed, and the number of rules that OIRA rejected in some ways or the issuing agency retracted because of objections from other agencies. This information allowed us to calculate the percentage of economically significant rules reviewed, the percentage of rules withdrawn, the number of approved rules, and the number of approved economically significant rules.

Finally, with data from the American Action Forum (publically available at www. regrodeo.com), we calculated the final regulatory costs for executive branch agencies (excluding independent agencies like the Securities and Exchange Commission or the Federal Communications Commission, which are exempt from EO 12,866) from 2005 to present, years in which data were available. With this information, we could observe a few broad trends in OIRA activity for the past 23 years as well as regulatory cost data for the past 12.

Historic slowdown / So far, the Trump administration's regulatory output is historically low, we find. The average number of OIRA-reviewed rulemakings over a five-month period during the 23 years we examined was 235, but there have been just 53 reviews in 2017, which is just 22% of the historical average.

When it comes to withdrawn rulemakings, previous administrations averaged about 19 over their first five months, but the Trump administration withdrew 27. The withdrawn measures were typically legacy rules of the previous administration, and withdrawing rules is common during presidential transitions regardless of party. For example, during the period studied, there were 130 withdrawn rulemakings in 2001, the first year of the George W. Bush administration, and 37 such withdrawals in 2009, the first year of the Obama administration.

The Trump administration has focused more of its attention on economically sig-

nificant measures. Some 34% of OIRA's work under this administration has involved economically significant rulemakings, as compared to the Clinton and Bush administrations, where economically significant rules comprised less than half that proportion. However, at this early stage of the Trump administration, we are not yet ready to pronounce this a definite change of emphasis; given its two-in/oneout edict, the administration may simply be focusing on larger rules.

During the Obama administration, the proportion of rules that were economically significant rose to nearly 23%, and

On average, cabinet-level agencies finalized rules costing \$30.1 billion for the first five months of the year. The Trump total was just \$593 million.

climbed to a record 30% in its last year. That administration published 118 major rules in 2016, 18% more than in any other year, but the total number of rulemakings was not that much higher than in Obama's previous years of governing.

During presidential transitions, the number of withdrawn rulemakings can cloud the OIRA review data because so many rules are withdrawn when a new president enters. But the datum that is most important to business—and, we argue, economic growth—is the number of new rules approved. The Trump administration has been positively stingy by this measure, approving just 26 measures during the period we examined, or 12% of the average for that length of time. By contrast, the historical average is 216 measures.

The Trump administration has approved 12 economically significant measures, 32% of the historical average. Even that small number overstates things; three of the 12 were formal delays of previous rules, and one reduced health care compliance costs. Removing those four leaves just eight significant new regulations approved, or 22% of the historical average. Although counting up the sheer number of rules reviewed is instructive, it does not fully capture the extent of the burden of rulemaking because it fails to capture the magnitude of each rule. For instance, the Clean Power Plan imposed carbon emissions standards on power plants and was far more economically significant than the routine migratory bird hunting regulations that are approved annually.

Using data from the American Action Forum on regulatory cost estimates, we can determine the regulatory burden each year from 2005 to present. On average, the cabinet-level agencies together finalized rules

> totaling \$30.1 billion in net present value costs in the first five months of each year from 2005 through 2017. The high was in 2010, when the Obama administration published rules with \$97 billion in costs between

January and June.

The Trump administration figure for that period is just \$593 million, or 1.9% of the historical average, and \$312 million of that figure represents routine airworthiness directives from the Federal Aviation Administration. In addition, a legacy rule from the Obama administration's Department of Labor that was finally published on January 23rd imposed \$345 million in costs-a cost that goes under the Trump administration, but the rule is hardly a Trump product. Excluding those rules means the current administration has actually cut total regulatory costs by \$64 million, and that figure doesn't include the cost savings from the CRA votes.

Can Trump keep it up? / While publishing few new regulations may be considered a good start for those who believe the regulatory state has grown beyond its usefulness, it is simultaneously not enough and also unsustainable. Just saying "no" to regulations for four or eight years—good and bad alike—will be politically difficult to maintain, even with a Republican Congress. Also, some believe that stopping new rules is only a first step to

repealing costly, ineffective rules already in place. The Trump administration has made only tentative steps in that direction thus far, no doubt in part because of a lack of personnel in place.

The Trump administration will need help from Congress if it wants to repeal portions of the Affordable Care Act, the Dodd-Frank financial legislation, and many of the Obama administration's energy rules. The public got its first glimpse of the broader Trump regulatory agenda when it published its Unified Agenda of Regulatory and Deregulatory Actions. Unlike previous agendas, this one focused more on deregulation.

It is easy to stop issuing new regulations, at least for a short period of time. But pulling back existing rules requires legislative and administrative proficiency that has yet to be demonstrated. Based on public information, not every agency has complied with EO 13,777, issued by Trump in February, which establishes regulatory reform officers and task forces within each agency. The administration cannot deregulate if it does not have political appointees in place to identify regulations for repeal.

What's more, the courts will likely stand in the way, or at least delay, many of the controversial deregulatory moves of the Trump administration. While many small-government supporters may agitate for the repeal of the Clean Power Plan or the Department of Labor's Fiduciary Rule, the reality is that the federal courts will likely determine their fate. Occasionally, courts have stood in the way of onerous new rules, but there is little doubt unions and environmental groups will spend most of the next three years in court litigating every aspect of deregulation. If President Trump's regulatory vision is to succeed, he will have to rely on deference from the judicial branch, otherwise the onpaper savings of regulation will dissipate with each new court opinion.

Another point that we have made previously in these pages is that rules that have already been implemented for some time, and that affected firms have already spent money and resources in order to ensure compliance, may not save anyone all that much money if they were to be repealed. Compliance costs typically increase fixed costs more than marginal, ongoing costs.

For instance, many coal-fired plants have already been shuttered in recent years, both in anticipation of more stringent emissions regulations and also because the sustained low price of natural gas has made much coal-fueled generation uneconomical. Repealing the rule will not reduce compliance costs for coal plants that have already spent money to adhere to the new regulations, and many of the shuttered plants have been dismantled. Those that are still in existence may remain cost-ineffective even with the rule repealed.

A successful deregulatory agenda will need to focus on the repeal of regulations that truly hold the promise of generating substantial cost savings compared to the loss of whatever regulatory gains are sacrificed.

Nothing is not enough / If libertarians were told in 2016 that the following year's regulatory output would be a tiny fraction of the historical average, they probably would have cheered. However, those who agitate for less regulation ultimately want to achieve more freedom, greater labor force participation, and fewer barriers to market entry, each of which should help boost economic growth. To truly boost economic freedom, it will take more than a regulatory slowdown and a few CRA resolutions of disapproval.

This has happened before. The deregulation of the late 1970s and early 1980s helped to transform the economy and was accomplished on a bipartisan basis. What's more, it was congressional legislation that spurred the deregulatory agenda, with the encouragement and assistance of Jimmy Carter's administration.

Whether the same sort of success can be accomplished through executive action alone is a question for the courts. But it is unclear whether Congress has the votes or the White House has the consensusbuilding talents for the kind of durable, bipartisan efforts that could replicate the successes achieved by Presidents Carter and Ronald Reagan.

Which Agency Improves Rulemakings the Most?

🕪 BY SAM BATKINS

n a previous article ("Changing Rule Estimates" Spring 2014), Ike Brannon and I noted that the estimated aggregate burden of rules issued by some agencies tend to increase drastically from the rule's proposed version to its final form. However, for other agencies, namely in the environmental realm, the estimated burdens tend to shrink from proposed rule to final regulation. of the rulemaking, as well as the aggregate

I examined 73 major regulations (rules with a compliance cost of \$100 million or more) issued during the last six years that monetized both costs and benefits in the proposed and final versions. These data revealed which agencies saw their benefit-cost ratios change over the course

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Of the 73 rulemakings examined, 34 (46%) improved their benefit-cost ratio from the proposed to final versions. The net estimated benefits increased by \$22.5 billion, or \$308 million per rule.

A handful of rulemakings drove those results. The Environmental Protection Agency's Mercury Air Toxics Standard (MATS)



TABLE 1

rule originally had estimated costs of \$10.9 billion and benefits of just \$118 *million*. But by the final rule, costs had declined to \$9.6 billion and benefits increased to \$57 *billion*, largely because they included the co-benefits of particulate matter reduction. This resulted in a gross change of \$58 billion in favor of greater net benefits.

The Environmental Protection Agency's Greenhouse Gas Standards for Heavy-Duty

Trucks underwent a drastic change as well. In its proposed version, annual costs were \$1.3 billion, compared to \$11.5 billion in benefits. By the final rule, costs had increased to \$2.5 billion, but benefits had also increased to \$19.8 billion, leading to \$7 billion in net benefit gains. However, the rule's proposed benefit-cost ratio of 8.8:1 declined slightly to 7.6:1 for the final rule.

Other notable changes during the course of recent rulemakings:

- 2013 Ozone Standards: \$20 billion reduction in net benefits
- 2017–2025 CAFE Standards: \$4.4 billion decrease in net benefits
- 2015 Rule on Furnace Emissions: \$4.4 billion increase in net benefits

In sum, while the ratio between benefits and costs might have declined for a major-

CHANGES IN AGENCIES' ESTIMATED BENEFIT-COST RATIO BETWEEN PROPOSED AND FINAL RULE

Agency	Average Benefit- Cost Ratio	Increased Ratios	Decreased Ratios
Energy	40:1	13	7
EPA	11:1	8	9
FDA	2.9:1	2	4
Labor	10:1	1	4
Transportation	5.8:1	7	13

ity of the major rules in the sample, the magnitude of some rules drove net benefits higher overall.

Agency results/ Given the examples above, the agencies that showed the greatest "improvement" from initial rule proposal to final rule aren't all that surprising. In the words of Washington rainmaker C. Boyden Gray, "Particulate matter and ozone seem to offer EPA an inexhaustible well of regulatory co-benefits." This statement is evident in the data. Table 1 tracks agencies with at least five rulemakings in our sample, and presents the average benefit-cost ratio by agency and the number of rules with increased and decreased ratios.

The EPA and the Department of Energy stick out immediately. But like many issues with small sample sizes, outliers are a factor. For instance, in the Energy Department's Pre-Rinse Spray Valves Efficiency Rule, the original benefit-cost ratio was 341:1, owing largely to the insignificant costs. The final rule further reduced costs and the ratio increased to 646:1. Despite the agency's sterling ratio of 40:1, excluding the Pre-Rinse Spray Valve Rule reduces the average figure to a more pedestrian 8.7:1. The cumulative increase in net benefits for Energy is \$5.9 billion, implying that the agency has acted to reduce costs and increase benefits during the rulemaking process.

The "inexhaustible well of regulatory co-benefits" has aided the EPA's efforts to implement regulations as well. The agency's benefit-cost ratio for individual rules ranged from costs exceeding benefits by 10:1, to benefits exceeding costs by 23:1. In the EPA's 2013 Particulate Matter Rule, costs were merely \$69 million, compared to \$3.7 billion in benefits, good for a 54:1 ratio. The final rule drastically increased both: costs

from \$69 million to \$350 million, and benefits from \$3.7 billion to \$8.2 billion. Thus, even though the benefit-cost ratio declined from the proposed to the final version, the net benefits increased by \$4.1 billion.

Two agencies, the Food and Drug Administration and the Labor Department, had positive benefit-cost ratios but negative net benefit changes. The FDA only had six rules in the sample, but cumulative net benefits declined by \$181 million as rulemakings progressed from the proposed to the final rule stage. In its Poultry Slaughter Inspection Rule, costs increased by only \$5 million, but benefits declined by more than \$340 million. Thus, the benefitcost ratio went from 18:1 to a mere 1.2:1.

The Labor Department largely suffered because of net benefit declines to its controversial Fiduciary Rule for investment advisers, thanks to a massive increase in

estimated costs. In the proposed version, costs were just \$570 million; however, the final rule estimated burdens at \$1.9 bil-

lion. Benefits did increase from \$3 billion to \$3.4 billion, but the benefitcost ratio declined from 5.2:1 to 1.7:1. The agency gained largely from its Silica Rule, which managed to turn a proposal with \$2.8 billion in net the strongest regulations possible, leaving room to remove compliance burdens to placate industry. However, if this were

Improvements in net benefits do not necessarily equate to a more favorable cost-benefit ratio. The opposite is true as well.

benefits into a final rule with \$3.7 billion in net benefits. Despite those gains, the benefit-cost ratio declined from 5.2:1 to 4.5:1.

Explanations / This discussion largely illustrates that improvements in net benefits don't equate to a more favorable cost-benefit ratio. The opposite is true as well. Although they are sometimes used synonymously, plenty of rulemakings can improve ratios while also narrowing the gap between benefits and costs. Likewise, agencies can drastically improve net benefits but the overall ratio can decline.

As noted, this is largely a function of rising benefits or declining costs. It appears from the data that costs are more prone to fall and benefits are more likely to rise, resulting in an increase in net benefits. Overall, regulators increased benefits in 39 rules from proposed to final stage, compared to 36 times for costs. With regard to net change, the cumulative benefits in the sample increased by more than \$9 billion from proposed to final rule, but costs declined by \$4.3 billion. The average rule in the sample gained \$127 million in benefits, but lost \$61 million in costs.

Does this mean that regulators often tap the "inexhaustible well of regulatory co-benefits" while finding ways to ease compliance burdens during the notice-and-comment period? It's unclear. The largest rule in the sample, the proposed Ozone Rule, lost \$13.6 billion in costs from the proposed to final stage, but benefits also declined by \$33 billion. The MATS rule also shed \$1.3 billion in costs during the process.

One could assume that agencies begin a major rulemaking by proposing one of

true, why do benefits increase more frequently and with a greater magnitude than costs? Perhaps agencies have broad discretion with benefits as well, able to appease environmentalists and special interests by touting higher health benefits with the final rule? It is notable that the FDA, one of the major agencies without access to particulate matter and ozone benefits, has one of the lowest benefit-cost ratios among the agencies studied. **Conclusion** / The short answer to the title of this article is the Department of Energy, which improved the benefit-cost ratio in 65% of its rulemakings and increased net benefits by \$5.9 billion. Yet that is hardly the entire story; explaining why benefits and costs vary so much within a rulemaking's life is far more important than noticing that they fluctuate wildly.

Still, the trends across this sample are interesting. For observers who complain that public comments don't move the needle on regulatory burdens, there is evidence that costs often decline, dropping by \$4.3 billion in the sample. Benefits, on the other hand, seem to evolve and grow, gaining more than \$9 billion.

With only 73 rules in my sample, additional data could inform this research. The specific answers to many of the questions posed are likely specific to individual rules and could inform federal rulemaking generally.

Regulation and Big-Firm Capitalism

ith the U.S. economy growing at a zombie-like pace, we're now hearing whispers that American-style capitalism is passing away. A recent paper by Credit Suisse analysts Michael Mauboussin, Dan Callahan, and Darius Mjad indicates that more than half of all U.S. publicly traded companies have disappeared

from stock market listings in the last 20 years. The authors note that the disappearances are not explained statistically by growth in gross domestic product or other relevant independent variables when they model the count of publicly traded firms. The same phenomenon is not seen in other parts of the industrialized world. Put another way, something else is going

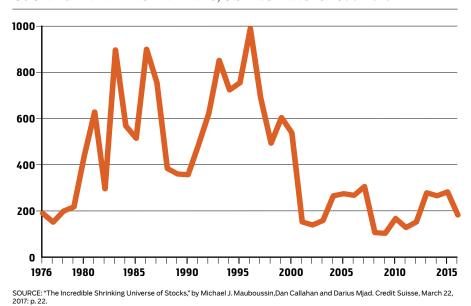
on in the United States.

In 1997 there were 7,355 exchange-listed firms, according to Mauboussin et al.; today there are less than 3,600. According to their estimates, there's currently a 5,800-firm shortfall, if historical trends had continued. But though the number of marketlisted firms has gotten smaller, the firms themselves have gotten much bigger and older; the average market-capitalized value of listed firms has increased 10-fold and the average age of listed firms has risen 80%.

What's going on here? Could the disappearance of exchange-listed firms be

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FIGURE 1 COUNT OF NEWLY LISTED FIRMS, U.S. EXCHANGES. 1976-2016



evidence of the rise of big-firm capitalism described by William Baumol, Robert Litan, and Carl Schramm in their 2007 *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity*, in which they argue that large firms have distinct advantages in global market operations? Or could it be that, among other advantages,

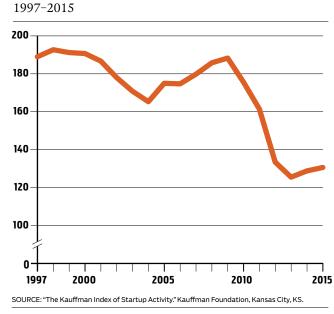
large firms benefit from regulatory economies of scale, as Kevin Murphy, Andrei Schleifer, and Robert Vichny described in a 1993 paper and Richard Wagner in a 2016 book?

Big firms, big markets / Baumol, Litan, and Schramm offer a taxonomy as well as a theory of capitalism's evolution. They first describe bad systems in which national economies are formed by way of *state-guided capitalism* in which national governments pick winning firms, industries, and sectors. By way of subsidies, loans, or other special treatments, governments then seek to give a predetermined advantage to the selected firms or sectors. We see an example of state-guided capitalism in the current U.S. government's support for certain forms of renewable energy (ethanol and solar) and low-emission automobiles, the extensive government management of health care, the regulation of housing finance, and the government direction of agricultural markets.

Oligarchic capitalism, the second bad cat-

U.S. BUSINESS STARTS PER 100,000 POPULATION,

FIGURE 2



egory identified by Baumol, Litan, and Schramm, is generally observed in countries that lack an independent judiciary as well as predictable definition and enforcement of property rights. In these situations, strong families emerge as the owners and protectors of wealth, sometimes in collusion with government dictators and leaders or through extralegal means, such as with the mafia. In recent years, we have observed oligarchic capitalism emerge as previously socialist countries became transition economies. In those cases, oligarchic capitalism has been termed "crony capitalism." The absence of strongly evolved market-friendly institutions is part and parcel of these capitalistic schemes, where individual ownership of assets and trade in major products and services are dominated by a small number of individuals or families.

Big-firm capitalism is an important third category. It is not necessarily bad; in fact, it is fundamental to the formation of good capitalism. The big firms are large enough to exploit ultimate economies of scale and scope. They operate in fully national and global markets and in doing so take up the production of newly developed products and services, extending them to the four corners of the earth. Baumol, Litan, and

Schramm see this category as a principal component of the currently evolving U.S. economy.

In some cases, the big firms are the result of rapidly growing entrepreneurial firms, which represent the three scholars' final category. Entrepreneurial capitalism brings radical, transformative innovations and from which fundamentally different products and ways of doing business emerge. Current examples include transportation services Uber and Lyft, which demonstrate how small, innovative firms can emerge and-following a big-firm capitalism pattern established by Facebook, Google, and Amazon-quickly become large global players.

Baumol, Litan, and Schramm's

theory of American capitalism requires an economically healthy operating environment for high-growth small firms and for big-firm operators that convey newly emerging products and services to global markets. However, the authors do not deal with the political interaction and rentseeking that occur as big firms gain dominant positions in their industries. Nor do they deal explicitly with big firms' demand for specific regulations that will increase or stabilize the firms' profitability and cement their dominant position.

Clearly, it is possible for big-firm capitalism to turn bad. Put another way, it is possible for a small number of big firms to have disproportionate power in influencing the direction taken by a political

FIGURE 3 ENTERPRISE EXITS, FEWER THAN 20 & MORE THAN 500 EMPLOYEES, 1989–2011

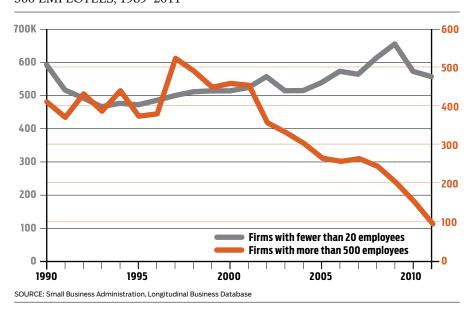
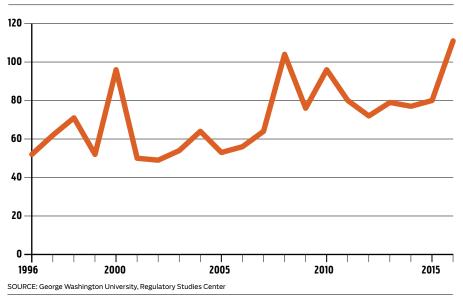


Figure 4

MAJOR RULES PUBLISHED BY PRESIDENTIAL YEAR, 1996-2016



economy. These firms can also be protected from competitive entry by regulatory mandates that raise rivals' costs and reduce the flow of consumer-valued goods and services to the marketplace.

What data may tell us / Mauboussin, Callahan, and Mjad tell us that the number of U.S.-listed firms has fallen by 50% since 1979. The count of newly listed firms is an obviously important metric of the vitality of a capitalist economy. After all, financial markets provide access to capital and thereby nurture the growth of capitalist systems.

The authors also report that the average market-capitalized value of listed firms has risen from \$620 million in 1979 to \$6.8 billion in 2016 (both in 2016 dollars). Simply put, today's marketplace is dominated by big firms. Baumol, Litan, and Schramm should be pleased by the accuracy of this part of their 2007 analysis.

In addition, the average age of listed firms has risen from 10.9 years to 18.4 years. The big firms seem to be more durable and perhaps are better protected from competition. These data support the notion that entry barriers may be higher; the data also support indirectly the notion that regulation matters.

But there may be something else going on, something Baumol, Litan, and Schramm did not consider. As shown in Figure 1, new firm listings generally rose from 1976 to 1996 and then plummeted around the time of the 2002 Sarbanes-Oxley corporate governance and accounting legislation.

Obviously, something else could be affecting the listing decline, but it is hard to dismiss Sarbanes-Oxley out of hand. It significantly raised disclosure requirements and personal liability for corporate officers and directors, which in turn made the decision to become a listed firm far more costly. In commenting on the possible Sarbanes-Oxley effect, Mauboussin, Callahan, and Mjad indicate that the legislation could have been an influence, but that the decline in the total number of listed firms was underway prior to 2002. However, when just new listings are examined instead of total firms, it seems clear that 2002 is a strategic date.

In their 2009 financial markets analysis of the costs and benefits of Sarbanes-Oxley, Yael Hochberg, Paola Sapienza, and Annette Vissing-Jorgensen examined lobbying activities by individual investors, large investors, and corporate insiders. They found evidence of higher abnormal returns for firm portfolios where small and large investors lobbied for final Sarbanes-Oxley rules, as well as for firms where insiders lobbied against the same rules. Probing deeper, the three authors found that insider opposition was higher for firms where there was evidence of higher agency

cost and relaxed executive behavior.

Data from the Kauffman Foundation on new business starts adds another dimension to our discussion of entry in America's newly forming industrial organiza-

tion. Figure 2 shows the trend in newly formed firms. Once again, fewer people are knocking at the door. In 2000 there were approximately 190.7 new starts per 100,000 population. By 2015 the count had fallen to 130.6, more than a 30% decline. With the start-up rate falling, all else equal, there will be fewer new listings on stock exchanges.

If entry is affected, what about exits? A Small Business Administration data set (ended after 2011) on the dynamics of the U.S. economy supports the notion that big-firm capitalism is somehow better insulated from competitive entry and other marketplace hazards. Figure 3 reports exit data—deaths of firms—with more than 500 workers and with 20 or fewer workers. Note that exit activities for the two categories follow a similar pattern from 1989 until about 2000. At that point, big-firm exits plummet.

With fewer exits across time, the average age of incumbent firms will rise, just as reported by Mauboussin, Callahan, and Mjad. Taken together, the three data sets newly listed exchange firms, new starts, and exits by larger and smaller firms—describe the rise of big-firm capitalism where the larger firms seem to be insulated from competitive entry and other marketplace hazards that would cause them to fail. The data tell us that since the year 2000, fewer firms are being started and fewer yet seek to be publicly owned. The data suggest that regulation matters.

Regulatory advantage / We know there are economies of scale in managing regulations that have a high fixed cost component. We also know that there are economies of scope for firms that build lobbying networks across a large array of regulatory and other government agencies, nationally and internationally. How might this

When major regulations befall them, larger firms generally are able to carry the load with greater ease than their smaller competitors.

> figure into the story? I contend that big firms benefit relatively from the adoption of major regulations—those that have a compliance cost of at least \$100 million annually imposed on the economy. By this I do not mean that larger firms are lobbying for high-cost regulations, but rather that when major regulations befall them, larger firms generally are able to carry the load with greater ease than their smaller competitors. All else equal, the larger firms are less likely to exit the economy. Those thinking of entering with a new business are less likely to pay the price.

> The empirical element of the argument is seen in the annual count of major regulations (those with compliance costs of \$100 million or more) adopted in recent years. Figure 4 shows the count for the years 1996–2016. Obviously, the count of major rules has increased systematically since 2000, and though not shown in the figure, the count is cumulative. That is, each major rule imposes at least \$100 million in annual costs on the economy for as long as the rule is in force. It is my hope that this picture and the foregoing discussion will help to form refutable hypotheses for test

ing competing explanations for America's disappearing capitalism.

Final thoughts / I worry that America's regulatory-induced big-firm capitalism operates as part of a sleep-walking economy, where GDP growth is weak and the prospects for widespread wealth creation are less than stellar. While many forces interact to yield economic life, it seems clear that regulation is one of the major factors that influence the big-firm-dominated industrial organization.

With that in mind, I end this article with some sage advice from *Wealth of Nations*:

The proposal of any new law or regulation of commerce which comes from this order ought always to be listened to with great precaution and ought never to be adopted till after having been long and carefully examined, not only with the most scrupulous, but the most suspicious attention. It comes from an order of men whose interest is never exactly the same with that of the public, who have generally an interest to deceive and even to oppress the public, and who accordingly have, upon many occasions, both deceived and oppressed it.

We are thus advised to beware of capitalists who seek and obtain advantage by way of government regulation.

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READINGS