GEORGE STIGLER
50 YEARS LATER
GEORGE STIGLER 50 YEARS LATER

INDEX

1. Economic Regulation after George Stigler by Filippo Lancieri and Luigi Zingales 1
2. The Durable Impact of Stigler’s Theory of Economic Regulation by Sam Peltzman 5
3. George Stigler and the Challenge of Democracy by Anat Admati 11
4. Let’s Not Forget George Stigler’s Lessons About Regulatory Capture by Susan Dudley 18
5. Stigler’s Interest-Group Theory of Regulation: A Skeptical Note by Cass Sunstein 23
6. The Many Faces of Stigler’s Theory of Economic Regulation: Interest Group Politics Still Thrives—but Industry Often Comes Second by Richard Epstein 30
7. George Stigler’s Paper on Regulation and the Rise of Political Economy by Andrei Shleifer 39
8. George Stigler’s Errors and Their Virtues by Daniel Carpenter 46
9. Assessing George Stigler’s Economic Theory of Regulation by Cary Coglianese 52
10. The Metaphysics of Regulatory Capture by Karthik Ramanna 60
11. Economic Regulation: The End of the Beginning by Filippo Lancieri and Luigi Zingales 65
ONE

Economic Regulation after George Stigler

By Filippo Lancieri and Luigi Zingales

George Stigler’s “The Theory of Economic Regulation” has left a lasting impact on the academic and real-world practice of regulatory policy. Fifty years after its publication, we put together a symposium to commemorate this landmark article and reassess where his theory stands in today’s world.
For the better part of the twentieth century, the majority of economists espoused a very benign view of regulation. Following the great British economist Cecil Pigou, government regulation was seen as the product of a benevolent planner who corrected market failures: from externalities to monopolies, from asymmetry of information to lack of sophistication on the part of consumers and investors. This led to a steady expansion of the regulatory state. The 1887 Interstate Commerce Commission was the first government agency to regulate an important sector of the US economy. By the 1900s, there were 10 federal agencies, employing 15,000 workers. By 2019, the number of agencies rose to 117, employing 1.4 million workers. The twentieth century could easily be labeled the century of regulation.

Most likely, the twentieth century would have also ended as the century of regulation if it were not for George Stigler. Exactly 50 years ago, Stigler published “The Theory of Economic Regulation” in the *Bell Journal of Economics and Management Science*. The academic and real-world practice of regulatory policy has not been the same ever since.

The inspiration for the path-breaking article came from his study of electric utility regulation conducted with Claire Friedland, where they found no evidence that electricity regulation benefitted consumers through lower prices. In his 1971 article, Stigler then followed suit by asking two simple questions: if regulation fails in the very purpose it was created for, why does it exist and, most importantly, why does it persist? Stigler’s well-known answer was that regulatory activity is not just driven by attempts to increase welfare, but also by the self-interest of the very players that are subject to it.

That was a groundbreaking insight. As the motivation for his Nobel Prize rightly emphasized, “his studies of the forces which give rise to regulatory legislation have opened up a completely new area of economic research.” While accurate at the time, this statement was also prescient—by 1982, Stigler’s powerful ideas were just starting to impact the world. Since then, the academic interest in “regulatory capture” has skyrocketed, as documented by a Google Ngram of the use of the term in books published in English.

Today, with Facebook asking to be regulated, private prisons lobbying for longer mandatory sentences, and Hewlett Packard pushing for stricter environmental controls as a way to raise its rivals’ cost, it is difficult to conceive of a time when regulation was considered the sole product of a benevolent planner. This is the best evidence of Stigler’s lasting impact.
Stigler’s core argument—that self-interested, politically powerful private agents may shape governmental action to protect their interests at the expense of the common good—is so compelling, and the evidence of political distortions is so overwhelming, that it is tempting to conclude that regulatory cures are always worse than the underlying disease. However, while this is certainly true in some cases, it is not true in all cases. As we see it, Stigler’s enduring legacy was opening the door for the political analysis of regulation, not providing a definitive answer on how societies should shape their markets and political processes. Starting with Sam Peltzman, the economic and legal literatures are constantly engaging with the question of how to design regulatory systems that promote welfare while fending off undue external influences. While much progress has been made, the literature still struggles to provide answers.

On the occasion of the 50th anniversary of “The Theory of Economic Regulation,” the Stigler Center organized a two-day symposium with some of the best minds in the field. The symposium was held virtually on April 19 and 20, 2021. The first day celebrated the theory’s enduring impact in academia and beyond, bringing together different generations of renowned scholars to discuss how Stigler’s views impacted their work. The second day focused on how the “Theory of Economic Regulation” should progress to reflect today’s market environment and political dynamics, as well as how to design regulatory frameworks and institutions to counter the influence of powerful interest groups. We have also invited a series of scholars to write some reflections on Stigler’s groundbreaking insights—these were published in ProMarket in the spring and summer of 2021.

In his Nobel Memorial Lecture—a piece well-worth reading called “The Process and Progress of Economics”—Stigler discussed the need for scientific fields to have a set of fundamental and durable problems that are constantly reassessed and challenged over time. In this spirit, we cannot think of a better way to commemorate Stigler’s lasting contribution than to reassess and challenge where “The Theory of Economic Regulation” stands today.
Filippo Maria Lancieri

Filippo Lancieri is a post-doctoral fellow at the ETH Zurich Center for Law and Economics and a research fellow at the Stigler Center at the University of Chicago Booth School of Business. He concluded his JSD at the University of Chicago Law School. Lancieri’s research explores the challenges associated with regulation of digital markets, with an emphasis on the enforcement of antitrust and data protection policies. He is trained as a lawyer and an economist and his academic and professional experience spans the United States, Europe, and Brazil. His work has been published or is forthcoming in The University of Chicago Law Review, the Antitrust Law Journal, the Journal of Antitrust Enforcement, and the Stanford Journal of Law, Business & Finance, among others.

Luigi Zingales

Luigi Zingales is the Robert C. McCormack Distinguished Service Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business. He is a research associate of the National Bureau of Economic Research, a research fellow of the Center for Economic Policy Research, and a fellow of the European Corporate Governance Institute. His research interests span from corporate governance to financial development, and from political economy to the economic effects of culture. He has published extensively in the major economics and financial journals. In 2003, Zingales received the Bernacer Prize for the best European young financial economist. In 2013, he has been named founding director of the Center for Economic Analysis of the PCAOB. In 2014, he served as president of the American Finance Association. He is co-author with Raghuram G. Rajan of Saving Capitalism from the Capitalists (2003) and author of A Capitalism for the People: Recapturing the Lost Genius of American Prosperity (2012). His latest book is Europa o no (2014).
The Durable Impact of Stigler’s Theory of Economic Regulation

By Sam Peltzman

George Stigler’s “The Theory of Economic Regulation” was an early application of public choice reasoning to a practical problem—the work of regulatory agencies. It has had a durable impact.
George Stigler’s 1971 article “The Theory of Economic Regulation” has influenced economists’ thinking about regulation for 50 years. Above all, Stigler asked the right questions: Why do we (really) have regulation? What can we (realistically) expect it to do? He answered, using public choice logic, with a capture theory of comprehensive scope: the industry acquires regulation and then designs and operates it for its benefit. There are two elements of the original theory that have endured. One is the application of public choice logic to analysis of regulation, and the other is the implication of that logic about the great weight of the industry interest in the implementation of regulation.

Stigler’s application of public choice logic emphasizes the role of organized interests: interest groups who know what their interest is and can overcome barriers to collective action in pursuit of that interest in the political arena. You cannot be politically effective if you do not even know what to ask for. The consumers are a large group with a small per capita stake in any regulatory outcome. They will be “rationally ignorant,” per Anthony Downs: regulatory outcomes are too unimportant for typical consumers to justify the effort of learning about what is at stake. The producer side will have a large stake and so be rationally informed. Then, once we know what is at stake and, therefore, which political actors merit our support, that support will have to be delivered in a form that moves those actors to favor us. This requires collective action—to lobby, to finance political campaigns, to reward with employment in the political afterlife, etc. Stigler draws from Mancur Olson the conclusion that the more compact producer group will be more successful at solving the resulting collective action problem.

Once the rational political actors are confronted by ignorant, unorganized consumers on one side and well informed, organized, and politically effective producers on the other, there is little doubt about who wins the competition: “… as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.”

And so the “capture theory” was born.

That emphasis on interest groups essentially shaped the subsequent development of general theories of regulation for the next two decades. This is most obvious in “The Economic Theory of Regulation,” which generalized the set of politically relevant interests. It is also evident in
Theoretical and empirical work that tries to understand what it is within the Stiglerian “black box” that links interest groups to outcomes. The development of general theories of regulation receded in importance as regulatory economics shifted to analysis of specific cases, which is the dominant emphasis today. So Stigler’s article remains a canonical reference for any article that wants to recognize the importance of the industry interest. For example, close to 10 percent of all Google Scholar citations to the article (1,270 of the 13,521 that showed up in an early 2021 search) are from 2019 and later.

However, Stigler’s theory runs into difficulty when applied to the birth (or death) of regulation. Some regulation is plausibly acquired by the industry, but too much cannot be so seen. Instances of industry opposition to new regulations seem too numerous to ignore. To this day, we lack a good theory of regulatory entry and exit. This may be a casualty of the dying out of interest in general theories of regulation.

Capture theory’s main contribution is to the understanding of what happens after a new regulatory initiative is launched. It is not that the new institutions and rulings will be designed solely to maximize industry rents. Soon after Stigler, such “strong form” capture gave way to one of competition and negotiation among varied interests. What endures is that the public choice elements of the capture theory assure that the industry interest will be heard and heeded and that any other interest that is also politically effective will have to organize, articulate, and deliver political pressure. That insight is probably Stigler’s greatest accomplishment in “The Theory of Economic Regulation.”

The Tyranny of Status Quo

The distinction I want to pursue is between the creation (the “acquired” part of Stigler’s famous quote) and the output (design and operation) of regulatory bodies. Even casual history suggests that these often respond to different political forces and interest groups. In particular, the industry often—perhaps mainly—resists the establishment of regulation. The affected industries resisted the consumer reforms of the Progressive Era, the labor reforms of the New Deal, and the social regulation of the 1970s. But, once confronted with the reality of the regulation, the industry interest usually plays a prominent role in what these agencies do.
A common thread in industry resistance to new regulation is a preference for the status quo. That preference is often shared by other politically relevant interests. There is an investment and organizational aspect to collective action. The actors are trying to deal with and influence a specific set of institutions. Over time they learn how to best cope with these institutions. Significant institutional disruption, such as new regulation or substantial change in old regulation (e.g., deregulation) would render this investment in knowledge and skills obsolete. No wonder the investors resist change.

My lone foray into regulatory policy provides an illustrative story. In 1970–71, I was on the staff of President Nixon’s Council of Economic Advisers. This put me on an interagency committee charged with considering reform of transportation regulation. Our main focus was surface freight, more specifically railroads and common carrier trucking. Both were regulated by the Interstate Commerce Commission, the granddaddy of all independent federal regulatory agencies. Every relevant economic interest was represented on our committee through members from the various federal agencies. Competition and efficiency were represented by the council, the Department of Justice, and the Office of Management and Budget.

The time for regulatory reform seemed right. The railroads were in financial turmoil. The largest railroad by revenue, the Penn Central, had just filed for bankruptcy. Others in the Northeast and Midwest were headed the same way. Congress created Amtrak to socialize the railroads’ passenger losses, but it was not going to be enough to stanch the flow of red ink. These financial difficulties mirrored the unraveling of an intricate system of cross subsidies financed by rents generated by the regulated price structure. Those rents had disappeared from the railroad industry. The main beneficiaries of the regulation were the truckers and their unionized workers. Overall, there was enormous inefficiency, high prices for shippers, and a spreading financial crisis for the railroads. None of this came as a surprise to transportation economists, who had long understood the source of these problems. And we representatives of competition and efficiency were advocating these economists’ solution, which was to allow more competition within and between the trucks and rails.
We seemed to be making slow progress. The political operatives in the White House were generally supportive. Opposition from within our committee appeared to be abating. The main puzzle was the uneven reaction from K Street. The truckers and teamsters were lobbying actively for the status quo, which was unsurprising. But neither the railroads nor the various shippers, who stood to gain from more competition, were actively lobbying for change. So it went until one day I was called to a meeting in the West Wing. The large room was crowded with everyone involved with the project.

The meeting had been called by the Republican Minority Leader of the House of Representatives. He minced no words. We got a stern lecture in applied public choice to explain why transportation reform was a bad idea. Most of the 435 representatives, he told us, had a few truckers and a teamsters local in their district. He described the vigorous lobbying of these constituents and how this had frightened many of the members, especially the minority Republicans who might have to take a very tough vote if the administration sent a reform bill to Congress. He was emphatic. Our initiative needed to be killed. And so it was.

Some years later, the late Paul MacAvoy and I conversed about the council in the 1970s. MacAvoy served on the council during the Ford administration. He told me that the day he arrived for work, he was called into the Oval Office. President Ford said that he knew the council was studying transportation deregulation. Ford told MacAvoy to make that project the council’s highest priority. He wanted to have a bill on his desk within 18 months. Perhaps you know the rest of this story: Within five years of this meeting, every item on my committee’s 1971 agenda had been enacted into law. The fearsome trucker-teamster lobby had essentially disintegrated, transportation prices declined, and the railroads regained health. Perhaps you also know that President Ford, who deserves credit for relaunching the push for deregulation in 1975, is the same man who had effectively killed it in 1971.
What can account for this volte-face? It is not enough to say “same man, but different job
description,” because the President also has to worry about the political welfare of his
party’s congressmen. I would argue for “same man, different times.” The status quo was
coming under pressure in 1971, but not enough. All sides could still prefer the devil they
knew to the one they knew not. But as the 1970s wore on, the cracks grew wider. Stagflation
reared its head. By the time Ford took office, Nixon’s wage and price controls had failed and
inflation was accelerating. The ability to point to a major sector with falling prices became
politically valuable. The status quo was also becoming more expensive. The Penn Central
was nationalized (renamed Conrail) and Congress had to cover the losses on budget. These
mounted into the several billions of dollars, which was real money in those days. Eventually,
Congress decided it had better things to spend those billions on. Once that decision was
made the only realistic alternative was to let the railroads shrink into viability and then
compete for profitable traffic, which is essentially what regulatory reform did.

The moral of this long story is that the status quo exerts a powerful political grip but when
the status quo is no longer viable politically, major regulatory change can occur whether or
not sought by the regulated industry. Once the change occurs, however, the public choice
calculus of Stigler becomes salient. The industry, perhaps now with different firms and
different personnel, will inevitably play a prominent role in shaping the new institutions and
policy. The capture theory and the subsequent economic theories do have something to
say about institutional change. But the failure of these theories to distinguish change from
operation is a significant limitation.

Sam Peltzman
Sam Peltzman is the Ralph and Dorothy Keller Distinguished Service Professor Emeritus of Economics at the University of Chicago Booth School of Business. He received his PhD in economics from the University of Chicago in 1965, and he has previously taught at the University of California, Los Angeles. He also served as senior staff economist for the President’s Council of Economic Advisers. He has been on the faculty of Chicago Booth since 1973.
George Stigler and the Challenge of Democracy

By Anat Admati

We are all victims of what George Stigler described as “the pervasive use of state support of special groups” and of governance failures everywhere. But we should not be helpless, writes Anat Admati.
In his 1971 article on the theory of economic regulation, George Stigler noted insightfully that the engagement of corporations with governments affects economic outcomes, and that imbalances of power and expertise can distort democracy and harm society. “Until the basic logic of political life is developed,” Stigler lamented in the conclusion, “victims of the pervasive use of state support of special groups will be helpless to protect themselves.”

Stigler’s article appeared shortly after his colleague Milton Friedman published an impactful essay urging business managers to “make as much money as possible while conforming to the basic rules of society” to fulfill their “social responsibility.” In his essay, Friedman accepted that government actions should be guided by democratic processes, but he ignored the possibility that managers who follow his dictum to increase profits may seek to distort these democratic processes, so that the “rules of society” benefit their special interest even against society’s interest. Stigler, on the other hand, asserted that such distortions happen “as a rule” in the context of regulations.

Whereas Friedman based his recommendations on a presumption that managers operate in “free and competitive markets without deception and fraud,” Stigler asserted that corporations often coerce governments to create regulations that prevent competition. In reality, corporations engage with governments at every level of policy. This engagement can have an impact throughout the often lengthy and complex processes of the writing and enforcement of laws, regulations, and trade agreements. In addition, governments often enter transactions with corporations to buy goods and services, which involves choosing providers and setting and enforcing the contract terms.

As Cass Sunstein argued, Stigler’s “thesis” and the notion of industries “acquiring” regulations are false if taken literally. Steven Vogel noted that corporations often lobby against regulation. Regulatory capture may actually lead to inadequate yet overly complex rules that create revolving job opportunities for those familiar with the details. Complexity can obscure the regulations’ poor design and ineffectiveness.

But Stigler also presented a more nuanced and balanced view of the process by which rules are set that applies beyond regulations to legislatures and other related contexts (e.g., the
setting of accounting standards). Institutional decisions, in government and elsewhere, especially the setting of rules, are determined through political processes. According to Stigler, politics “is an imponderable, a constantly and unpredictably shifting mixture of forces of the most diverse nature, comprehending acts of great moral virtues (the emancipation of slaves) and of the most vulgar venality (the congressman feathering his own nest).” Political processes, in other words, are complex and messy and their outcomes may benefit society or instead reflect corruption and abuse of power.

In August 1971, shortly after the publication of Stigler’s article, Lewis Powell, a corporate lawyer later appointed to the Supreme Court, sent a memorandum to the education director of the US Chamber of Commerce that called for corporate America to become aggressive in molding society’s thinking about business, government, politics, and law. The memorandum inspired campaigns to insert anti-government and anti-regulation narratives into channels of intellectual and political influence. Ronald Reagan reflected such attitudes, famously saying in his 1981 inaugural address “Government is not the solution to our problem, government is the problem.”

Political battles involve people and groups trying to influence those with power to make important decisions. As Stigler recognized, these people and groups may have conflicting preferences and may also differ in their levels of resources and knowledge of the issues. These asymmetries can have significant effect on the outcome. In a 2014 study, for example, Martin Gilens and Benjamin Page showed that “economic elites and organized groups representing business interests have substantial independent impacts on US government policy, while average citizens and mass-based interest groups have little or no independent influence.”

In The Business of America Is Lobbying, Lee Drutman described the growth in lobbying activities by corporations and trade organizations in recent decades. Alex Hertel Fernandez explored how business groups and wealthy activists have reshaped American policy through coordinated efforts state by state in State Capture and elsewhere. As Jane Mayer exposed in Dark Money, the influence of money on political outcomes is often invisible to the public. Conflicted “experts” can impact policy disproportionately when issues are not salient.
Economists and the Importance of Engagement

Economists often naively assume that “social planners” make decisions in the public interest. Stigler was right to debunk this Panglossian view of regulations. His call to economists to study political behavior highlights the blind spots to the importance of politics that Milton Friedman displayed in his 1970 essay and that continue to pervade mainstream economics and other areas in business schools and beyond.

The financial sector provides stark illustrations of how political processes can lead to persistent government failures to counter the distorted incentives within a powerful industry. In May 2009, shortly after the near implosion of the financial system and the extraordinary supports numerous institutions at the center of the “free market” system received from the government and central banks, Illinois Senator Richard Durbin (D-IL) said that “banks are still the most powerful lobby on Capitol Hill and they frankly own the place.”

A memoir titled *Payoff: Why Wall Street Always Wins* by Jeff Connaughton, who spent 25 years in a variety of jobs in Washington, DC, including in government and as a lobbyist, explains how banks have come to “own” the US federal government, including regulatory agencies. In one scene in the book, former Federal Reserve Chair Paul Volcker tells Delaware Senator Ted Kaufman that the threats bankers make about the consequences of regulations they dislike are “all bullshit.”

Since getting involved in the policy debate on financial regulations after the 2007–09 financial crisis, I have witnessed firsthand the political process by which policy gets distorted and I have encountered many false and misleading claims (the “bullshit” to which Volcker referred) that affect important policy. If powerful people choose to maintain or enact bad policies and refuse to engage on how to improve them, they may get away with it if not enough people understand the issues.

Realizing that regulatory reforms were overly complex and yet entirely inadequate, four of us academics posted a paper debunking some “fallacies, irrelevant facts and myths” in summer
2010. After a year of additional efforts by a small group to impact policy through media and other channels (which did not move the needle), Martin Hellwig and I wrote the book *The Bankers’ New Clothes*, which explains the issues, including the confusing jargon, accessibly in the hope of enabling more people to participate in the debate and create political will to improve the rules.

The book received much praise and opened more venues for potential impact, but even with additional advocacy, the ultimate impact was limited. Despite the spectacular failures of pre-crisis regulation and the harm from the Great Recession, policy failures persist and flawed claims continue to obscure this fact and impact policy. The many enablers of the system, including academics, may have conflicted interests or stay passive to focus on more rewarding objectives and avoid politics and “controversy.” (Challenging people is not fun!) Often, however, they appear to display willful blindness and other forms of subtle capture, including what Sunstein called “epistemic capture.” The fact that the financial system did not collapse during the COVID-19 pandemic does not prove that it is resilient or efficient.

Even the purportedly apolitical and blind justice system is subject to the political forces that Stigler lamented. Michael Lewis ended his 2010 book *The Big Short* with a reflection on the persistent banking culture he first described in his 1989 book *Liar’s Poker* and the possibility that investment banks becoming public corporations (instead of partnerships) led to governance breakdowns and recklessness with other people’s money. The 2015 movie *The Big Short* brought up fraud and ended instead by noting that no executive went to jail after the financial crisis.

To be sure, much of the recklessness *The Big Short* book and movie describe was legal and tolerated by the flawed regulations in place. But fraud and deception were, and remain, pervasive in finance and beyond. As Vikramaditya Khanna explained, whether corporations and executives are held accountable depends on the legal system. Numerous examples suggest, as I discussed in this ProMarket post, that legal systems, particularly in the United States, often fail to create proper accountability and deliver justice in the corporate context.
In a powerful recent book titled *Why the Innocent Plead Guilty and the Guilty Go Free; And Other Paradoxes of Our Broken Legal System*, Judge Jed Rakoff discusses the justice system in the United States that he has observed from different perspectives for decades, and he points to political forces within this system quite related to Stigler and to the challenge of democracy in creating and enforcing proper rules. Rakoff laments that in the United States “we imprison thousands of poor Black men for relatively modest crimes but almost never prosecute rich, white, high-level executives who commit crimes having far greater impact.” Rakoff aims, as Martin Hellwig and I did in writing our book, to educate and expand the circle of advocates for better policy.

Focusing on injustices that fall disproportionately on poor people, Rakoff explains how the system “too frequently convicts innocent people—often on the basis of dubious forensic science and shaky eyewitness testimony—and sometimes even coerces them into pleading guilty to crimes they never committed.” The underlying causes of this situation involve societal and political forces, including “tough on crime” attitudes and declared “wars” on drugs or terror, as well as the cost of legal representation and the incentives of individuals across the political and legal systems. Here again, the political processes distort the outcome.

Bad systems can persist when the issues are not salient to the public. Change requires that people in a position to challenge “the tyranny of the status quo” speak up and help to create political will for change. In the context of the justice system, as in finance, too many remain silent. Rakoff observes that among the enablers of the broken justice system are judges who fail to use their opportunities to speak up and hold power to account. Elected judges may find it politically unpalatable to appear “soft on crime,” but Rakoff forcefully challenges federal judges, who have lifetime tenure and are held in high regard by the public, to do more. Noting the inhumane treatment of people found guilty in the current system, he asks: “Unless we judges make more effort to speak out about this inhumanity, how can we call ourselves instruments of justice?”
The broad applicability of Stigler's insights demonstrates just how much politicians, economists, and lawyers have in common, and how much we need to engage with one another across silos. Recent scandals such as Wirecard in Germany, Carillion in the UK, and Purdue and Boeing in the United States, suggest that much remains to be done.

We cannot always trust that generic drugs work as promised, that children's products are safe, or that our tap water is clean. Those who benefit at the expense of others and who can but fail to prevent harm prefer to obscure the facts, leading people to make false assumptions about the workings of the system and the trustworthiness of people and institutions. We are all victims of what Stigler described as “the pervasive use of state support of special groups” and of governance failures everywhere. But we should not be helpless.

It is on all of us, particularly unconflicted experts, to find ways to engage with the processes by which rules are written and enforced in the private sector and in government if we want markets, corporations, and democracy to serve society. By engaging, we can try to move the “imponderable” politics towards high moral goals and away from cronyism and corruption.

Anat Admati

Anat R. Admati is the George G.C. Parker Professor of Finance and Economics at Stanford University Graduate School of Business (GSB), a director of the GSB Corporations and Society Initiative, and a senior fellow at Stanford Institute for Economic Policy Research. She is an economist with broad cross-disciplinary interests in the interactions between business, law, and policy, and an advocate for better governance and accountability in the private sector and in government. She is also the author of The Bankers’ New Clothes: What’s Wrong with Banking and What to Do About It (Princeton University Press, 2013).
Let’s Not Forget George Stigler’s Lessons About Regulatory Capture

By Susan E. Dudley

George Stigler’s theory of economic regulation opened our eyes to the rent-seeking that undermines the public interest. Yet many in positions to influence policy today do not appreciate the beneficial innovation and increased consumer choice that economic deregulation and competition brought.
Fifty years ago, most of the administrative agencies in the United States issued “economic regulations,” constraining economic activities of particular industries using controls such as price ceilings or floors, quantity restrictions, or service conditions. While the “public interest theory” of regulation suggested that legislators and regulators took regulatory action to protect consumers from the exercise of producers’ market power and other market failures, it was becoming increasingly evident that the economic regulation of the time tended to keep prices higher than necessary, to the benefit of regulated industries, and at the expense of consumers.

George Stigler’s 1971 article offered a clear, testable theory that explained the type of economic regulation observed in different industries. It also raised awareness of the incentives and wealth-redistribution consequences of economic regulation. Stigler started with the basic premise that the government’s main “resource” is the “power to coerce.” Thus, a rational, utility-maximizing interest group will seek to convince the government to use its coercive power to the group’s own benefit.

Stigler’s work—generalized by Sam Peltzman, Gordon Tullock, James Buchanan, and others—hypothesized that regulation is supplied in response to the demands of well-organized interest groups acting to maximize their own well-being at the expense of diffuse interests. It explained why air travel between states, regulated by the Civil Aeronautics Board (CAB), was much more expensive per passenger mile than intrastate air travel not subject to the same regulation. CAB regulation controlled which airlines could fly which routes, protecting incumbent airlines by keeping prices higher than necessary. Similarly, it explained why the Interstate Commerce Commission’s (ICC’s) trucking regulations, supported by railroads that viewed trucking as an emerging competitor, led to inefficiencies and high costs.
Policy entrepreneurs at think tanks championed these insights and policymakers followed suit. The late Senator Ted Kennedy (D-MA), staffed by the then-young law professor (now Supreme Court Justice) Stephen Breyer, held a series of hearings investigating airline and then trucking regulation and its impact on consumers. In his first State of the Union address, President Jimmy Carter committed to “do a better job of reducing government regulation that drives up costs and drives up prices.” Thus, bipartisan efforts across all three branches of government eventually led to the removal of unnecessary regulation in several previously regulated industries, and the eventual abolition of agencies such as the CAB and the ICC.

Within a decade or two, the deregulation of trucking, railroads, airlines, and telecommunications had brought about efficiency improvements equivalent to a 7–9 percent increase in GDP, with consumers receiving most of the benefits. Competitive markets have not just reallocated resources but generated tens of billions of dollars per year in benefits for consumers and society as a whole, and markets have evolved in beneficial ways unanticipated prior to deregulation. (For example, the hub-and-spoke system for air travel emerged to address prederegulation concerns that a competitive market would underserve remote areas.)

Despite this enormous success, many in positions to influence policy today seem to have forgotten the lessons from Stigler’s landmark work and do not appreciate the beneficial innovation and increased consumer choice that economic deregulation and competition brought. In sharp contrast to the bipartisan support for deregulation 50 years ago, we now see efforts across the political spectrum to apply the economic regulation tools that so harmed competition and consumers just a few decades ago. For example, Senators Elizabeth Warren and Josh Hawley are both calling for breaking up Big Tech and ensuring fair practices, harkening the golden era of the ICC’s railroad regulation. Like supporters of economic regulation before them, they assume regulators will have the information, skills, and incentives to rein in behavior they dislike, and that consumers will somehow benefit—hope again triumphs over experience.
Stigler’s theory does not always predict when regulations will be issued, as Sam Peltzman observes in this series, but it does often shed light on the form regulations take. Once regulation is inevitable, industry works to ensure that it is implemented in a way that best serves its interests. This may explain why Facebook now supports politicians’ calls for new regulations related to privacy, security, and content moderation—regulations with which potential competitors may be less able to comply. It may also explain why, in 2009, the auto manufacturers joined President Obama on the White House lawn to endorse tighter fuel-economy standards (fending off varying state-level regulations and foreign competitors).

As Bruce Yandle observed, industries often hide behind public interest arguments when supporting regulation, as did the bootleggers of the early twentieth century south who quietly supported laws—publicly championed by Baptists—to ban liquor sales on Sundays. They can influence the design of regulations to protect vested interests, while allowing politicians to claim public-spirited goals. This may explain why Amazon and other large companies support an increase in the federal minimum wage; it would disproportionately harm their smaller competitors.

However, it isn’t always organized businesses who capture regulators, as Stigler originally hypothesized in his seminal article. Peltzman and others generalized the theory to show that other interests can also “organize, articulate, and deliver political pressure.” Social media makes it easier now for other politically-connected groups to capture agencies’ agendas. For example, in 2015, EPA administrator Gina McCarthy defended a water quality rule to a senate committee saying that, of the millions of comments the agency had received on its proposal, almost 90 percent supported the changes.

In 2014, television comedian John Oliver aired a segment critical of the Federal Communications Commission’s (FCC’s) proposed approach to regulating broadband. His episode sparked almost 80,000 nearly-identical comments (compared to just 3,000 comments submitted the previous week). The FCC responded by reclassifying the internet
as a “common carrier” service, paving the way for pre-Stigler style economic regulation of rates and service. When, two years later, the FCC proposed to repeal the 2015 classification, another mass comment campaign ensued (now the subject of a high-profile New York Attorney General investigation). In these rulemakings, businesses lined up on both sides of the debate, as Stigler would have predicted. Internet service providers (ISPs) generally oppose being regulated as public utilities, while internet content providers (Amazon, Netflix, Facebook), who ride on the ISP networks, support such regulation of the ISPs (though not for themselves).

George Stigler’s theory of economic regulation opened our eyes to the rent-seeking that undermines the public interest. His insights contributed to the economic deregulation of the 1970s and 1980s that enjoyed bipartisan support from all branches of government and created lasting positive impacts by increasing competition, encouraging innovation, and lowering consumer prices. We should not let today’s legislators and regulators ignore those lessons.

**Susan E. Dudley**

Susan E. Dudley is founder and director of the George Washington University Regulatory Studies Center and distinguished professor of practice in the Trachtenberg School of Public Policy and Public Administration. She was administrator of the White House Office of Information and Regulatory Affairs from 2007 to 2009. She chairs the Regulatory Transparency Project regulatory process working group, is a senior fellow with the Administrative Conference of the United States, a National Academy of Public Administration fellow, a past president of the Society for Benefit Cost Analysis, and on the board of Economists Incorporated. She has authored numerous articles on regulation, as well as the book, *Regulation: A Primer*, with Jerry Brito.
Stigler’s Interest-Group Theory of Regulation: A Skeptical Note

By Cass Sunstein

As a rule, regulation is not acquired by “the industry,” and it is not designed and operated primarily for its benefit. The mechanisms behind the promulgation of regulations are multiple, and almost all of the time, it greatly matters whether regulators believe that regulations will, all things considered, have good consequences. In terms of understanding the sources of regulations, it would therefore be valuable to obtain more clarity about the sources of regulators’ beliefs—about what information they receive and find credible, and why.
Consider the following regulations:

1. In 2010, the Department of Justice issued new regulations under the Americans with Disabilities Act. The regulations established requirements for facilities such as detention facilities and courtrooms, amusement rides, boating facilities, golf and miniature golf facilities, swimming pools, and play areas.

2. In 2011, the Department of Transportation issued a final rule, the first in a series of “passenger protection rules.” Among other things, the 2011 rule (1) enhanced protections afforded passengers in oversales situations, for example by increasing the maximum denied boarding compensation airlines must pay to passengers bumped from flights; (2) required carriers to notify consumers of optional fees related to air transportation and of increases in baggage fees; (3) prohibited post-purchase price increases; and (4) required carriers to provide passengers timely notice of flight status changes such as delays and cancellations.

3. In 2011, the Department of Transportation and the Environmental Protection Agency issued a final rule, calling for new labels on motor vehicles. Among other things, the new labels offer information about annual fuel costs, about greenhouse gas emissions, and about five-year costs or savings, compared to the average new vehicle.

4. In 2012, the Department of Justice issued a final rule, containing new standards designed to reduce sexual abuse in confinement facilities. The standards are numerous, and they cover prevention, detection, and responses to sexual abuse. With respect to detection, the standards required, among other things, that facilities (1) inform inmates how to report sexual abuse; (2) provide multiple channels for inmates to report such abuse, including by contacting an outside entity; (3) allow inmates to report abuse anonymously upon request; and (4) provide a method for staff and other third parties to report abuse on behalf of an inmate.

5. In 2014, the Department of Transportation issued a final rule, mandating rearview cameras in new motor vehicles. The rule was strenuously opposed by automobile companies. It was projected to impose more than $600 million in annual costs.
6. In 2015, the Environmental Protection Agency issued a final rule, designed to reduce greenhouse gas emissions from stationary sources. The rule was opposed by numerous electricity providers, who vigorously objected to the costs of the rule.

7. In 2021, the Department of Homeland Security issued an interim final rule requiring the US Postal Service to collect advance electronic data (AED) on certain packages arriving from other nations. The main goal of the rule was to reduce the supply of opioids, and it was also expected to reduce the arrival of other unlawful goods into the United States.

These are but a few examples of thousands of regulations in which I have had some involvement while in government as administrator of the Office of Information and Regulatory Affairs (OIRA) from 2009 to 2012 and as senior counselor and regulatory policy officer at the Department of Homeland Security in 2021. Experience with the federal regulatory process makes it exceedingly hard to credit George Stigler’s claim, in his influential 1971 article, that “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.” That claim is false, even a kind of fairy tale (albeit a Grimm one).

To be sure, Stigler was onto a real phenomenon, and there would be much less ground for objection if Stigler had not spoken of “a rule,” had spoken less universally, and had said, for example, that “in some important cases, regulation is acquired by the industry and is designed and operated primarily for its benefit.” (Even so: What does “is acquired by” mean? I will get to that.)

Stigler urged that a “major public resource commonly sought by an industry is control over entry by new rivals.” Hence he proposed “the general hypothesis: every industry or occupation that has enough political power to utilize the state will seek to control entry. In addition, the regulatory policy will often be so fashioned as to retard the rate of growth of new firms.” He drew particular attention to the “class of public policies sought by an industry” that “is directed to price-fixing. Even the industry that has achieved entry control will often want price controls administered by a body with coercive powers.”
Is this really meant as a general theory of regulation? Suppose that an environmental regulator takes steps to reduce greenhouse gas emissions from power plants, or to control levels of particulate matter in the ambient air. Should we say that air pollution regulation was acquired by the industry and operates for its benefit? Always? Most of the time? Once in a while? To begin to make sense of any such claim, we might want to distinguish between necessary and sufficient conditions. Is it a necessary condition that “the industry” wants the regulation? Is that condition sufficient? I suggest that in the examples with which I started, it is exceptionally difficult to argue that support from “the industry” was either necessary or sufficient. (And what’s “the industry”? The answer is not at all obvious. There are often a lot of industries, and within any single one, the goals of industry members might not be uniform.)

The better explanation is that in each of these cases, regulators (and I was one of them) concluded that the new regulation was a good idea, in the sense that in their view (and mine) it would have net benefits (however we make that assessment). In most of the cases, those who were regulated affirmatively opposed the regulation. They did not welcome it, or argue on its behalf.

Stigler was in the grip of a picture, provided by examples that were especially salient to him. He was much concerned with occupational licensing, where it is entirely plausible to argue that supposedly public-spirited restrictions are favored and often sought by those seeking to freeze out new entrants. If a city bans Uber, it might well be because taxi companies are able to organize in support of the ban, to the detriment of the public as a whole. If a city restricts the number of landscape architects through licensing restrictions, it might be making an effort to authorize a kind of cartel. Stigler drew attention to “cartels in the closet,” and he was certainly right to notice the phenomenon. But in my view, his influential essay was less empirical social science than literature, a kind of narrative.

This claim is not meant to deny that Stigler did notice a real phenomenon, and to some extent, he documented it. No one can doubt that ostensibly public-spirited regulation is made possible by, or facilitated by, powerful interest groups. If regulators impose costly regulation on coal companies, solar and wind companies might applaud, and the same might be true of natural gas companies. We could imagine airlines that already provide passenger protections;
they might favor a regulatory mandate to that effect as a way of reducing competition (as when companies that do not provide those protections offer lower ticket prices). If some companies provide rearview mirrors voluntarily, they might want to restrict competition by seeking a regulation requiring all companies to do what they already do. This kind of thing certainly does happen: Companies seek regulation as a way of preventing competitors from underselling them along some important dimension. (Note we cannot say, from that fact, that the resulting regulation reduces social welfare. It might improve it. To know that, we need to know something about costs and benefits.)

But let me return to my main point. Stigler offered, but did not adequately defend, the proposition that “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.” That proposition is false. As a rule, regulation is not acquired by the industry, and it is not designed and operated for its benefit (primarily or otherwise).

There is an additional problem: What is meant by the term “acquired by?” Regulations are not bought and sold. To understand what Stigler had in mind, we should distinguish—as Stigler did not—between legislation and regulation. In the context of legislation, the claim might be that “the industry” pressures legislators to favor regulation, perhaps through campaign donations, perhaps by threats to donate to opponents. But was the Cameron Gulbransen Kids Transportation Safety Act of 2012, which led to the rear visibility regulation, produced in this way? That would be an absurd claim. Is that the best explanation of the Synthetics Trafficking and Overdose Prevention Act of 2018, which led to opioid regulation? That would also be absurd.

In the context of regulation, we also need to specify the mechanisms. “The industry” can and certainly does ask for meetings, in which it might argue for and against various approaches. We could imagine efforts to impose pressure on the executive branch, with “the industry” urging, for example, that it will give money and support to an opposing presidential candidate, or mount a public relations campaign, or seek to energize activists and journalists. And it is certainly true that in some cases, “the industry” does make threats or promises of this kind—most often, by the way, to argue against regulation, not to argue for it.
But it is not clear whether any of these possibilities justifies the use of the term “acquired by.” Perhaps we could say that if a threat or a promise gets an agency to issue a regulation that it would not otherwise issue, we have an example of what Stigler had in mind. Surely there are such examples, but they are not “the general rule.” I conclude that the success and influence of Stigler’s argument owed a great deal, not to its accuracy, but to its iconoclasm, its sense of knowingness, its smarter-than-thou, cooler-than-thou cynicism (appealing to many), its mischievousness, and its partial (!) truth.

Let me end on a positive note, meant to suggest a direction for future work: If regulators are mandating reductions in greenhouse gas emissions, calling for new safety technology in cars, or requiring passenger protections in connection with air travel, it is highly likely that they believe that the relevant regulations are a good idea, all things considered. They might well believe that the regulations would have net benefits, as required by Executive Order 12866 and Executive Order 13563. They might believe that the regulations are justified on grounds of fairness, or that they would be desirable on distributional grounds.

But why, exactly, do they believe such things? There are two main answers. The first involves the information they receive: What do they learn, and from whom do they learn it? In some cases, “the industry” is relevant; in other cases, journalists matter; political parties, public interest groups, think tanks, and academics might matter as well. Some regulators live in echo chambers; others do not. In many cases, we might well be able to speak of “epistemic capture,” which occurs not when regulators are literally pressured (threatened or promised), but when what they believe to be true is only a subset of the truth, or not true at all.

The second main answer involves the motivations of the regulators themselves. What do they want to believe, and what do they want to dismiss? To see the importance of this question, consider a key moment in the development of the screenplay for *Return of the Jedi*, the third *Star Wars* film, George Lucas, the mastermind of the series, had a heated debate with
his collaborator Lawrence Kasdan. Kasdan strongly advised Lucas, “I think you should kill Luke and have Leia take over.” Lucas promptly rejected the idea. Kasdan responded with a heartfelt claim about the nature of cinema. He explained to Lucas that “the movie has more emotional weight if someone you love is lost along the way; the journey has more impact.”

Lucas’s response was quick and unequivocal: “I don’t like that and I don’t believe that.” Notice the sequence here: not liking precedes not believing and helps account for it. As for the plot of Star Wars movies, so for regulations: Whether people believe that depends on whether they like that. Understanding what people end up hearing and crediting, and also what they want to hear and credit, would enable us to make real progress in specifying the mechanisms that lead to regulation.

**Cass Sunstein**

The Many Faces of Stigler’s Theory of Economic Regulation: Interest Group Politics Still Thrives—but Industry Often Comes Second

By Richard Epstein

Stigler treats industry groups as the heavyweights in regulatory contests. But surprisingly often, groups of farmers and workers knock them for a loop in political combat.
George Stigler’s modest 19-page essay “The Theory of Economic Regulation,” published in the Bell Journal of Economics and Management Science in the spring of 1971, is one of the landmarks of economic thought. Some sense of Stigler’s general mindset is evident from the subtle ambition of his essay’s title—“the”—which implies the one and only. That “the” captured his mindset perfectly. Stigler could never be bothered with subtle qualifications, even though he was keenly aware that those complications existed. For him, academic work was about seizing the main chance, staking out a strong position, and then letting lesser minds (and in Stigler’s case, there were many) nibble around the edges in the effort to undermine, even slightly, his main thesis.

As a rhetorical device, that tactic has continued to pay handsome dividends some 50 years after the paper was first published. Stigler has his passionate defenders, such as Susan Dudley; his thoughtful expositors, such as Anat Admati; his gentle critics, such as Andrei Shleifer; and his persistent skeptics, such as Cass Sunstein.

I am in the odd position of thinking that Stigler’s work is sufficiently rich and textured that all four of these authors have a point, even though their positions are in evident tension with each other.

The key question is how these apparent opposites cohere, to which I think that the best answer turns on one simple point. The field of regulation is rich, varied, and far more extensive today than when Stigler wrote. The key to understanding the puzzle is that the many commentators on Stigler all look at the overall picture from the point of view of their own area of expertise and specialization. Stigler made it pretty clear from the outset that his focus is on industry: “The state—the machinery and power of the state—is a potential resource or threat to every industry in society.” There are of course lots of groups in society that are not classified as industries; these include not only charitable and religious organizations, which were well represented in Stigler’s time, but also a vast array of new interest groups with a very different focus, such as environmental groups, disability groups, and civil rights groups.
To take one example, the American Association of Retired People (AARP) was formed in 1958, and today has about 38 million members. It was clearly instrumental back in the 1960s in dealing with the major legislative initiative that brought about the passage of Medicare and Medicaid, two huge programs that fell outside of Stigler’s main interests in airlines, motor vehicles, petroleum, agriculture, and the like. The same could be said about organizations like the NAACP and the ACLU, which took an active role on matters of race relations and civil rights, which led, for example, to the passage of the Civil Rights Act of 1964, the Voting Rights Act of 1965, and the Fair Housing Act of 1968. A fuller picture of regulation would include these various initiatives to which many businesses were far from indifferent, but it seems to make sense to first deal with the areas in which Stigler concentrated his firepower.

As is commonly understood, Stigler thinks of the entire problem as one that takes place within the legislative and administrative arenas, involving statutes like the Interstate Commerce Act of 1887, the Motor Vehicle Act (MVA) of 1935, Civil Aeronautics Act (CAA) of 1938, Agricultural Adjustment Acts (AAA) of 1935, and the Fair Labor Standards Act (FLSA) of 1938. Each of these statutes represents the outcome of interest group politics, but the variety of winners should give us pause about Stigler’s positive theory that has industry coming out on top. The many iterations of the Interstate Commerce Act had industry score big wins, but suffer big losses. The MVA was passed to protect drivers in a non-concentrated industry; the CAA fits Stigler’s model of protecting incumbent firms; the AAA protected farms in a decentralized industry; ditto with labor (and its unions with the FLSA). The Stigler model presupposes in general that the organized access and clout of these regulated industries enable them to call the shots. As he writes:

“A central thesis of this paper is that, as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit. There are regulations whose net effects upon the regulated industry are undeniably onerous; a simple example is the differentially heavy taxation of the industry’s product (whiskey, playing cards). These onerous regulations, however, are exceptional and can be explained by the same theory that explains beneficial (we may call it ‘acquired’) regulation.”
It is important to look at this thesis with some degree of care. Stigler states that, in general, regulation is acquired (i.e., obtained by lobbying and other forms of influence) for the benefit of the regulated industry. His rival was the public interest theory, which assumed that righteous legislators protected the public at large from the action of dangerous industries. The clear subtext is that Stigler thinks that in most cases, what industry wants, industry gets. The correct thesis seems to be a split verdict: the public interest theory still comes out in second place, but in partisan struggles industry loses far more often than Stigler supposed, both before 1970 and afterwards. To see why, it is necessary to look at regulation through a broader lens.

**From Madison to Stigler and Beyond**

It is worth noting that Stigler’s view of the imperfections of the political process resonates well with James Madison’s views of faction in *Federalist Number 10*, which is the origin of modern interest group theory that anticipates Stigler’s view that legislative cabals, whether majority or minority, can upset market institutions. Without going into the details, it is clear that even with the economic issues that Stigler identifies, the overall analysis is quite a bit more complicated than he perceived. Here are two major omissions from his account, but which fit quite comfortably into Madison’s:

First, Stigler makes no reference to the systems of regulation of the antitrust statutes, most notably the Sherman Act of 1890 and the Clayton Act of 1914—two Acts that both of us would describe as unwelcome industry regulation. But history takes odd turns. The passage of Sections 6 and 20 of the Clayton Act does not square with Stigler’s prediction of likely winners. Business lost because Section 6 exempted labor and agricultural groups from the Sherman Act. Business also lost because Section 7 of the Act allowed the federal government to attack any merger on the ground that it “substantially lessened competition or tend to create a monopoly.” Progressive politics won out both times.
Nonetheless, even this institutional account is incomplete because it ignores, as did Stigler, the role of courts in dealing with these economic rivalries. The omission is huge because various forms of rate and safety regulation were among the most frequently litigated issues in the Supreme Court during the period between the end of the Civil War and the start of the Second World War. Throughout this period, the Supreme Court took two positions. The first was that rate regulation was proper with respect to those industries “affected with the public interest,” which at the beginning of this period basically covered industries like common carriers and public utilities. The second was that the regulations could not be so confiscatory as to deny the carrier or utility a reasonable rate of return on its investment, which was defined, roughly, as a risk-adjusted rate of return on its initial. The subject is highly intricate, but in my view the performance of the court in this period was in general admirable. I do not attribute that result to interest group pressures but rather to a level of economic sophistication that all too often modern judges seem to lack. In the aftermath of the New Deal, the Supreme Court relaxed its scrutiny of these economic transactions, again under the influence of progressive thought. Simple solutions are hard to come by, but a complete theory of economic regulation needs to discuss these constitutional dimensions.

The same observation applies to the regulation of labor markets, already alluded to above. Indeed, the entire history of labor regulation during the first 40 years of the twentieth century revealed the might of organized labor in overcoming a set of two hostile judicial decisions: Adair v. United States, which struck down a federal collective bargaining statute in 1908, and Coppage v. Kansas did the same for state labor statutes in 1915. These were overcome in favor of labor with the passage of the Norris-LaGuardia Act in 1932, the National Labor Relations Act in 1935, and the Fair Labor Standards Act in 1938.

**Popular Majorities versus Organized Minorities**

We need a theory to explain why the results of interest group struggles can veer in both directions. I think that it is possible to supply one that is in the spirit of Stigler’s article. Roughly speaking, there is a division between types of legislative struggles, with many intermediate variations. On the one side lie those cases that have such great notoriety that the well-organized industry group are just overwhelmed by popular pressure—which was the
fate of the 1908 unanimous Supreme Court decision in *Loewe v. Lawlor* that provoked a fierce progressive outcry that directly led to the passage of the Clayton Act. On the other hand, there are many smaller issues that fall below some visibility threshold, when these industry groups can work successfully under the radar to make small tweaks in statutes that have major consequences for some industry group. In practice, a major issue precipitates a big new regime, whose effect may be whittled away by industry groups once the public’s eyes move on to the other issues.

Note that this approach helps explain one class of cases that Stigler wishes to push off to one side—the so-called “sin” taxes that apply, as he noted, to whiskey and playing cards. These cases fall under what has been traditionally called the “morals” head of the police power. The power of the state to regulate private morals was at the heart of a sprawling class of cases that included such issues as polygamy, where in 1878, the Supreme Court in *Reynolds v. United States* hit hard at the Mormons who practiced it by disenfranchising them from all their properties. The relentless efforts of the temperance movement led to the adoption of the Eighteenth Amendment that ushered in the Prohibition era. Restrictions on gaming and lotteries were also common, as were prohibitions of many forms of sexual conduct outside of marriage, and of course, abortion, which was commonly criminalized at the time.

The success of these movements depended heavily on popular support from religious and social groups, which kept them on the center stage throughout that period. The best explanation for the loosening of these prohibitions is that in the 1960s and 1970s, those older interest groups lost their clout. In rapid succession *Griswold v. Connecticut* (1965), protecting the purchase of contraceptives, and *Roe v. Wade* (1973), allowing an unfettered right of abortion in the first trimester, transformed the constitutional dimensions of “morals” regulation. Those forms of conduct went from criminally prosecuted to constitutionally protected, albeit by judicial means. Nonetheless, once in place, these two decisions enjoyed such widespread public support that they could not be dislodged by contrary legislation. Abortion has provoked multiple pitched battles, but virtually no one has ever tried to block the sale of contraceptives.
Then and Now
In summary, Stigler gets a partial vindication from the study of the pre-1970 period, during which the emphasis was on various forms of regulation of rates and prices. It should never be forgotten that these forms of regulation still persist where the tension between popular and industry support remains active.

One such area is of course rent control, which has its origins in this earlier period. As a matter of principle, rent control should carry a big, fat target on its back because it is a form of price control that has the capacity to distort markets in the long- and short-term. Indeed, in their only joint publication “Roofs or Ceilings?”, Milton Friedman and George Stigler denounced it and showed that San Francisco’s real estate markets after the 1906 earthquake roared back to life in the absence of government price and rent controls.

Yet rent controls are all too often the preferred response to social dislocation, including the two-year moratorium on rent increases in the Washington, DC market in the aftermath of the World War I. That restriction was upheld in Block v. Hirsh, which then ushered in ever more restrictive systems of rent control in the decades to follow because of this simple public choice dynamic. All tenants are local, and many landlords are not. As such, the electoral system is powerfully rigged in favor of tenants, so that once the system gets entrenched it will take a constitutional revolution to remove it, which is not likely to happen at either the state or federal level today. Quite the opposite, the most restrictive rent control in New York City was passed in 2019. The real estate interest groups have largely been ineffectual, even though they are calling not for special protections but for a return to competitive markets.

But if the old order still remains, the new order has radically shifted the market in so many areas that it is hard to keep track. Cass Sunstein opens up his skeptical commentary on the Stigler hypothesis with a set of regulations that came out during the Obama administration. A taste of what has been done is offered by his first entry:

“In 2010, the Department of Justice issued new regulations under the Americans with Disabilities Act. The regulations established requirements for facilities such as detention facilities and courtrooms, amusement rides, boating facilities, golf and miniature golf facilities, swimming pools, and play areas.”
Noticeably absent from his simple description is any justification as to why this huge response is superior to market responses to the same problem. Clearly the two will work in different directions, if only because we should expect that in a market tailored institutions will arise that can best cater to these special needs. Yet the public regulations are always universal in impact, and thus cover all sorts of places where they are highly unlikely to be cost-effective, as Mario Loyola and I tried to demonstrate some years ago, but it all falls on deaf ears. The key explanation lies in the transaction costs account given before. Now it is easy for any interest group to organize through a variety of websites, and in my experience, high-profile landlords fearing reputational losses often cave without a lawsuit to avoid adverse publicity.

The same can be said about civil rights groups, which were able quickly to overturn General Electric Co. v. Gilbert (1976), by the quick passage of the Pregnancy Discrimination Act of 1978, which treated discrimination on grounds of pregnancy as a form of sex discrimination. Similarly, when Wards Cove Packing Co. v. Atonio (1989) threatened to undermine the disparate impact of Griggs v. Duke Power (1971), under the 1964 Civil Rights Act, the Civil Rights Act of 1990 quickly gave Griggs a stronger legal foundation.

One can like or dislike these decisions, but two points stand out: First, as a descriptive matter, industry loses out to well-organized interest groups; Second, these groups are no more in favor of competitive solutions than the industry cartels of old. Indeed, I shall end on this somewhat distressing result. It is generally more difficult to get legislation that restores competition—an example is the Airline Deregulation Act of 1978. Nothing has gotten easier in the age of environmental protection and global warming. Stigler was right to think that there is less romanticism in politics than the public interest theory presupposed. But the constellation of forces has changed much in the past 50 years, which means we, like Stigler, must be alert to the risks of partisan politics.
Richard Epstein

Richard A. Epstein is the inaugural Laurence A. Tisch Professor of Law, The New York University School of Law; the Peter and Kirsten Bedford Senior Fellow, The Hoover Institution, the James Parker Hall Distinguished Service Professor of Law Emeritus, and Senior Lecturer, the University of Chicago Law School. He is a former editor of the *Journal of Legal Studies* and the *Journal of Law and Economics*. Among his books, are *Takings: Private Property and the Power of Eminent Domain* (1985); *Simple Rules for a Complex World* (1995); *The Classical Liberal Constitution: The Uncertain Quest for Limited Government* (20145). He has served as a member of the American Academy of Arts and Sciences since 1985, and won the Bradley Prize in 2011.
George Stigler’s Paper on Regulation and the Rise of Political Economy

By Andrei Shleifer

George Stigler’s “The Theory of Economic Regulation” is not just the founding paper of economics of regulation. It is also a founding paper of political economy. Before Stigler, economists thought about politics in terms of voting and the median voter theorem. Stigler’s paper taught us that the right way to think about economic policies is not just in those terms, but rather in terms of exchange between politicians and firms, or politicians and private sector actors.
I would like to make three points. The first point is that George Stigler’s paper is understood by all of us as the fundamental—and probably the single most important—contribution to the economics of regulation because it changed the perspective of the field. Before Stigler, regulation was seen as a policy pursued by a benevolent government to cure market failures. Stigler showed that the government is far from benevolent and that, in fact, regulation is acquired by the industry to protect its market power.

This idea has been confirmed, illustrated, and used productively to analyze regulation in many instances. But Stigler’s is not just the founding paper of economics of regulation—it is also a founding paper of political economy. Before Stigler, economists thought about politics in terms of voting and the median voter theorem and other similar ideas. Stigler’s paper taught us that the right way to think about economic policies is not just in those terms, but rather in terms of exchange between politicians and firms, or politicians and private sector actors.

On their end, politicians provide policies that benefit particular constituencies, whether it is firms or groups of voters, and whether they use regulatory policy, or protection, or just direct financial benefits. In exchange, politicians get something from those they regulate. What is that something? Of course, in some instances, it’s going to be votes from their favored entities. But there are many other forms of payment, such as campaign contributions or campaign cash. Thinking about this fundamental exchange came out of Stigler’s work. Revolving doors—whereby politicians come and take up jobs at the firms they regulate—is another form of payment. Perhaps most interesting, the Stigler perspective suggests that one way in which politicians get something in return for their policies is bribes.

Much of the economics of corruption, which has actually become quite a significant industry in economic research with a great deal of empirical evidence, is based on this Stiglerian idea of exchange between politicians and firms, which is to say some of what politicians get in return for favorable policies are in effect bribes. There is no denial of the empirical significance of that idea.
“It’s a mistake to think that all bad regulatory or economic policies come from the Stiglerian exchange or from capture. In many instances, ideology, ignorance, or narrow objectives play a big role.”

In the original Stiglerian conception, the initiating parties of regulation are the firms that seek protection from politicians. Of course, that’s not always the case. You can flip the argument around, which is a lot of what we see in the world and in the data, and see politicians initiating burdensome regulations and then collecting favors or bribes or money in return for relief from regulation. Some years ago, I was part of a project on the regulation of entry by small firms around the world. In this setting, it became very clear that one of the reasons for this regulation is precisely for politicians to be able to extract bribes in exchange for relief. And so again, this Stigler-inspired line of work that led to many things, including the World Bank’s “Doing Business Report,” which empirically describes—in many spheres of economic activity and around the world—the consequences of the very broad Stiglerian idea of exchange between politicians and the entities they regulate. I give Stigler an enormous amount of credit for directing political economy toward this goal.

The second point I want to make is that although I think that Stigler’s is probably the single most important reason for bad economic policies, or regulatory policies, there are other key reasons: regulator ideology, regulator ignorance, bad ideas, and regulators’ narrow mission. It’s a mistake to think that all bad regulatory or economic policies come from the Stiglerian exchange or from capture. In many instances, ideology, ignorance, or narrow objectives play a big role. I’m going to illustrate this with some ideas from the fight against COVID-19. And I want to stress that both the left and the right are culpable.

Let’s start with President Donald Trump’s COVID-19 denialism and aggressive policies against masks, against testing, and so on, which probably have cost the United States tens of thousands of lives, and maybe millions of infections. Now, you can make the argument that somehow Trump was trying to exchange these policies for votes. But that argument seems to me to be a bit strained in the sense that you could have perfectly imagined a patriotic appeal to voters that would, in fact, seek support for the rapid end of
the pandemic. Yet none of that happened. Why? Well, it seems to me that we can take the evidence at face value that the people around the president, and the president himself, were ideologically motivated to deny the dangers of COVID-19 and wished to pursue policies that turned out to be pretty damaging. I think of this as an instance in which you can argue from both the Stiglerian and the ignorance perspectives, although I would guess the latter played a big role.

As another example, consider the European Union and the acquisition of vaccines. I don’t have any insider knowledge on this, but it seems to be pretty obvious what has happened: the task has been allocated to the EU procurement agency, which felt that their goal was to get the best price. They did get very low prices, but also got subcontracts that had the best efforts nature, which basically meant that when there were higher bids from elsewhere, there were no vaccines for the European Union. My point is that this is not a Stiglerian exchange: This is an atrocious policy that has caused the European Union hundreds of billions of dollars in lost output and probably thousands or tens of thousands of lives. This is not capture. It’s pure incompetence, but the source of that incompetence, I think most likely, is just narrow incentives of the bureaucracy to get the best price, rather than to think about the costs of delay. Bad policies come from incentives and ignorance, not capture.

Just to be fair to the Europeans, let’s consider the US Food and Drug Administration’s (FDA) slowdown and temporary stop of the use of the Johnson & Johnson vaccine after seven million doses, seven episodes of blood clotting, and I believe one death—a policy that will surely cause tens of thousands of additional infections and maybe a few deaths. What is driving this? Is it capture? Is it the efforts by the competitors? No, it’s not that. Rather, it’s that the FDA bears no consequences if thousands of extra people get infected
but suffer severe consequences if a couple of extra people die. And so you have tremendous distortions in regulatory policies resulting from bad incentives in the public sector, rather than from capture per se.

The $15 minimum wage is another moment of intended self-inflicted damage. Almost a third of the working people in the United States make less than $15 an hour. Some of them work for the large and profitable firms that may be able to sustain the wage increases, the stereotypes produced by the advocates of the policy. Probably half of the people who make less than $15 an hour work for extremely unproductive firms that are going to have to close—there is no way in which they’re productive enough to pay those wages. In fact, the chain restaurants and large retailers will probably benefit from the closure of their small competitors. Raising the minimum wage sharply strikes me as a purely ideological approach, which is likely to be harmful. Again, I don’t think that capture is the right theory.

One last example of this is that often capture interacts in an interesting way with ideology. My favorite example comes from the work of Harvard PhD student Josh Hurwitz. Between 1987 and 2017, over a 30-year period, the number of fires in the United States has fallen by 43 percent and the number of firefighters has increased by 54 percent. If you look at the United Kingdom, the number of fires has fallen tremendously as well, but so has the number of firefighters. How can this happen in the United States? It is not because firefighters prevent fires. Firefighters don’t prevent fires—they extinguish them. So what is happening? Well, it’s a combination of capture and ignorance.

Today, firefighters in the United States do not just fight fires; they also race ambulances to be the first ones to arrive for 911 health emergency calls. If you actually do the calculations, the benefits of this for lives saved are negligible, if any, mostly because fire trucks typically come second, but also because the vast majority of 911 calls are not a matter of life and death, and
definitely not a matter of a few seconds. In the meantime, the costs of this increase in the number of firefighters are billions of dollars that municipalities could be spending on schools. A truly bizarre policy, based on superstition rather than evidence. But this is where Stigler comes in: Once these policies were put in place by people who didn’t really understand the facts and the data, they are now extremely strongly supported by firefighter unions and impossible to get rid of. So it’s the combination of bad ideas and capture that sustains bad policies.

The last point I’m going to make is that there is another line of thought that Stigler’s work has started. It is probably not what Stigler intended, because it seems to me that a lot of regulations are in fact extremely useful. Even though we do see distortions in regulatory policy, it is also the case that in a civilized society, we’re used to having many regulations that we think are on net beneficial. We like flying on safe planes. We like that the food that we eat is safe. We like that the water we drink and swim in is clean. We like that the air that we breathe is less polluted. We like to drive safe cars.

Now, you can say that the market would have taken care of those problems, but it would be wrong to say that because we have plentiful evidence from early twentieth century in the United States, as well as specific evidence from cases of water and air pollution, that markets do not take care of many problems. You can say that the courts would have taken care of market failures, but that also would be wrong. In many situations, the courts fail to cure market failures, either for ideological reasons, but also because in litigation, in many instances, firms tend to be much more powerful, much richer, have better lawyers, and better resources to subvert justice than the affected consumers or employees. And so, in fact, historically, regulation, more often than not, is actually an efficient response to failures in the marketplace.

“Stigler’s is not just a great paper; it is also living paper. It’s a paper that even today, 50 years after its publication, provides intellectual inspiration.”
This is, in some sense, an argument that takes you away from Stigler. But, in another sense, it is something that Stigler and Harold Demsetz should get a tremendous amount of credit for because in order to think about economic policy, we need to focus on alternative solutions to the problems of market failure. In many cases, it is the most efficient solutions, including regulation, that survive the competition with others. And so, it seems to me that even that way of thinking, which is pretty central to many of the ideas in law and economics, owes a lot to George Stigler. Ed Glaeser and I have been pursuing these ideas for the past 20 years, and we owe a great intellectual debt to Coase, Demsetz, and, of course, Stigler.

Stigler’s is not just a great paper; it is also living paper. It’s a paper that even today, 50 years after its publication, provides intellectual inspiration. Even when one disagrees with it, it opens up avenues for going in new directions, for exploring the world that we live in. For this, we should all be extremely grateful and appreciative.

Andrei Shleifer

Andrei Shleifer is John L. Loeb Professor of Economics at Harvard University. He has an undergraduate degree from Harvard and a PhD from the Massachusetts Institute of Technology. Before coming to Harvard in 1991, he taught at Princeton and the University of Chicago Booth School of Business. Shleifer has worked in the areas of comparative corporate governance, law and finance, behavioral finance, as well as institutional economics. He has published seven books, including The Grabbing Hand (with Robert Vishny), Inefficient Markets: An Introduction to Behavioral Finance, and A Crisis of Beliefs: Investor Psychology and Financial Fragility (with Nicola Gennaioli), as well as over a hundred articles. Shleifer is an editor of the Quarterly Journal of Economics and a fellow of the Econometric Society, the American Academy of Arts and Sciences, and the American Finance Association. In 1999, Shleifer won the John Bates Clark Medal of the American Economic Association. According to RePEc, Shleifer is the most cited economist in the world.
George Stigler’s Errors and Their Virtues

By Daniel Carpenter

George Stigler might have been wrong in his essay on economic regulation, but his influence is undeniable. The unity of purpose in his writings on regulation forced those who defend regulations to tighten their theories, to produce new evidence, and to defend particular regulations and regulators using better evidence and metrics. Considering Stigler’s errors and their virtues, it might be time to retire the term “capture” altogether.
Where does regulation come from? Whose interests does it serve? How does it become stable in an often turbulent political and economic world? In his landmark essay “The Theory of Economic Regulation,” George Stigler put forward a joint and systematically political answer to these questions. His characteristically elegant prose—a reminder of a time when any number of social scientists were, however mathematical, statistical or technological their craft, better writers than many of their successors—combined with an equilibrium logic rendered these ideas powerful, portable, and enduring. Stigler was joining a movement already launched by the historian Gabriel Kolko and the political scientists Sam Huntington and Marver Bernstein (the latter a teacher of mine in college).

Stigler’s answers were simple. Economic regulation serves the interests of incumbent firms, or incumbent providers or producers (“the industry”). It is either designed from the get-go or “acquired” ex post by those incumbents, as a way of giving to incumbents another non-market tool of competition against smaller or potentially new competitors. What we see as a public interest serving regulation to keep heavy trucks off the roads or to ensure that practitioners of a craft have advanced training is—once read through the lens of political economy—actually a way of producing and protecting market rents. This explains, in Stigler’s writing, why regulations could systematically fail to achieve their announced aims and yet systematically endure.

For many reasons, I think Stigler was wrong. But before I get to why, let me say that I think his errors were illuminating and a good example of the kinds of productive discourse that happens in political economy and the social sciences in general. Good science and good academic inquiry do not advance unless we can falsify hypotheses and arguments, and for that we need plausible, persuasive targets. Stigler’s unity of purpose in his writings on regulation forced those who defend regulations to tighten their theories, to produce new evidence, and to defend particular regulations and regulators using better evidence and metrics. Stigler was not alone in causing these improvements, but his influence is undeniable.
Nonetheless, I think Stigler was largely in the wrong in his essay. The first reason is that for many regulations, Stigler’s theory of incumbent protection simply does not apply. I agree with Cass Sunstein on this point, though for different reasons. The kind of rules that Sunstein lists in his well-argued note of skepticism were not, in the main, the kind of regulations that Stigler had in mind. I think Stigler was more apt to think of regulatory regimes, not just the trucking weight limits in his classic multistate regression but the entire congeries of restrictions imposed upon entrants to the trucking industry at the time—the 1920s, in his data, and by railroad interests, in the main—including admissible freight regulations, regulations governing drivers and their hours. Stigler might also respond to Sunstein and other critics in this thread that, just because there are counterexamples to the “acquisition” regulation by industry does not mean that there are not strong examples. Stigler’s is a model, after all, and Stigler and Stiglerian thinkers might argue that licensing regimes for occupations like barbers, physical trainers, health providers, and thousands of other jobs make for readier examples.

But a range of regulations that emerged at the time that Stigler was writing—including environmental regulation and approval regulation in medicines—fit poorly with the Stiglerian model. Pharmaceutical regulation in the early- to mid-twentieth century certainly raised the costs of entry into the industry, but as Steven Vogel has argued more generally, Stigler’s “industry” usually fights the regulations that will purportedly benefit it. In the medicines realm, for instance, the incumbents who stood most to benefit from the 1938 Food, Drug and Cosmetic Act and the 1962 Kefauver-Harris Amendments fought these laws tooth and nail. So too with environmental regulations, which undoubtedly gave some implicit advantages to larger firms that could more easily shoulder their burdens, but were also vociferously (and expensively) opposed by those same interests.

Second, Stigler’s politics of capture was focused upon anti-competitive capture, but as David Moss and I have argued, there is another form, deregulatory or corrosive capture (see
also Steven Vogel’s essay in this conversation. (This, in my reading, is the kind of capture to which Anat Admati gestures in her thoughtful essay.) Deregulatory capture (or one form of it) occurs when a legislature or agency intends to advance a public-interest-serving rule, but the application or interpretation of the rule gets watered down by a captured agency.

Corrosive capture is a real possibility, but proving it is not easy. The scholarly trick in these cases is both theoretical and methodological. Theoretically, one would have to have some sort of real public interest that regulation were to serve, a public interest that was somehow established theoretically or empirically. The abundant theory and consensus in economics behind free trade would offer one such rationale (thus casting doubts upon protectionist regulations that limited commerce). Meanwhile, the abundant evidence on the health harms associated with tobacco use might offer a more empirically-based rationale for a “public interest” in which the uses of these products were regulated.

Third, and perhaps most important, I think Stigler set up a kind of thin-evidence functionalism that regarded observable regulatory benefit as a kind of proof for the hypothesis that policies that delivered that benefit were designed or influenced by the “industry.” The positive side of Stigler’s legacy was a rigorous critique of accounts of regulation that assumed it served a public interest. The negative side is this functionalist residue in economics, political science and related fields. This kind of thinking was in the original Bell Journal of Economics and Management Science essay, but Stigler doubled down on it when he published the essay in a 1975 book:

“The theory [of economic regulation] tells us to look, as precisely and carefully as we can, at who gains and who loses, and how much, when we seek to explain a regulatory policy … It is of course true that the theory would be contradicted if, for a given regulatory policy, we found the group with larger benefits and lower costs of political action being dominated by another group with lesser benefits and higher cost of political action …
“The first purpose of the empirical studies is to identify the purpose of the legislation! The announced goals of a policy are sometimes unrelated or perversely related to its actual effects, and the truly intended effects should be deduced from the actual effects.”

As I demonstrated in an applied mathematical essay in 2004, this principle is logically incorrect. A regulation can end up giving distinct and enduring advantages to larger, older firms in an industry while having been originally designed in a way that was entirely neutral. In a world where a regulator understood as rational in the pure Bayesian sense regulated a population of firms and their new products, the regulator would have less uncertainty about the incumbents. There is simply more data on them. In this way, larger, older firms might be “trusted” by the regulator in an uncertain world, and the repeated interaction of a Bayesian regulator would produce systematic decision advantages (what looks like forbearance but is in fact a rational balancing of risk) for what Stigler called “the industry.” As my colleagues and I showed in a follow-on paper, this model of pharmaceutical regulation fits the FDA’s behavior far better than does the Stiglerian perspective.

At the end of the day, I confess that I have doubts about the use of the term capture. In some ways the word has become too sexy for its own (or our) good. It can be too easily and too lazily applied to all manner of phenomena, often when … the capture-lamenting critic is disappointed with the policy outcome in question.”

“The word ‘capture’ has become too sexy for its own (or our) good. It can be too easily and too lazily applied to all manner of phenomena, often when … the capture-lamenting critic is disappointed with the policy outcome in question.”
At the same time, the kind of things that capture describes are important. If some form of what Cass Sunstein calls “epistemic capture” is partly responsible for mitigating our collective response to climate change or to systemic financial risk, then trillions of dollars and billions of human lives are at stake. The trick, it seems to me, is to thoughtfully advance models and studies of regulatory corrosion without, in so doing, tethering the phenomenon to a word (“capture”) that invokes so many possible models, mechanisms, and stories as to have surrendered a good deal of its meaning.

Daniel Carpenter

Daniel Carpenter is the Allie S. Freed Professor of Government in the Faculty of Arts and Sciences and director of the Social Sciences at the Harvard Radcliffe Institute at Harvard University. Professor Carpenter graduated from Georgetown University in 1989 with distinction in honors government and received his doctorate in political science from the University of Chicago in 1996. He taught previously at Princeton University (1995–98) and the University of Michigan (1998–2002). He joined the Harvard University faculty in 2002. Beginning July 2021, he will serve as faculty director of the Social Sciences at the Radcliffe Institute for Advanced Study, a position he also held from 2013 to 2020.
Assessing George Stigler’s Economic Theory of Regulation

By Cary Coglianese

Despite its flaws and limitations, Stigler’s seminal article on the theory of economic regulation remains an important piece of scholarship worthy of continued engagement, decades after its publication.
George Stigler’s article “The Theory of Economic Regulation” is one of the most influential political economy accounts of regulation. More than perhaps any other article, it shifted the prevailing explanation for regulation from a public interest model to a rational choice model. That is, it shifted regulatory scholars’ thinking from a model that once viewed regulation as emerging almost naturally from the mere existence of market failures to a model that instead sees regulation as a response to influence by businesses seeking to erect barriers against potential competitors.

Published fifty years ago, “The Theory of Economic Regulation” still repays reading. Today’s readers, though, might well wonder at first why the article has received so much praise. Its weaknesses are not hard to spot. In fact, these weaknesses may be so readily apparent that they can easily obscure the article’s contributions. To appreciate Stigler’s article, then, one need not deny its limitations. By acknowledging forthrightly these limitations, we may even better see past them to understand its major contributions.

So let me first clear away some of the underbrush and flag five core weaknesses in “The Theory of Economic Regulation” before turning to a consideration of its virtues.

First, and perhaps most notably, Stigler overclaims. His article’s most famous line constitutes Exhibit A: “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.” This wording immediately prompts the reader to ask, Really? “As a rule”? Some readers can quickly dismiss Stigler for just these three words. By saying “as a rule,” Stigler sounds as if he is asserting an iron law that regulation only serves industry. Yet it is easy enough to point to selected examples where businesses have almost certainly not benefited from regulatory policies.
Second, Stigler leaves key concepts poorly defined or treated in simplistic terms. At times, for example, he refers to businesses in monolithic terms—“the industry”—even though regulatory conflict frequently exists across different businesses. Stigler further treats business influence over regulation in binary terms, with regulators either being subservient to business interests or not affected by them at all. He also treats the state (or the regulator) as a monolith, with the impetus for legislation left undifferentiated from the impetus for agency-created rules. (In the years that followed Stigler’s article, the relationship between agencies and other parts of the state, especially the legislature, garnered much attention by political economy scholars.)

Third, Stigler’s main observation—that businesses seek regulation to disadvantage their competitors—was hardly novel at the time he published “The Theory of Economic Regulation.” Years before, political scientists and historians such as Marver Bernstein, Samuel Huntington, Gabriel Kolko, and Theodore Lowi separately provided accounts of much the same kind of regulatory phenomena. And in economics, Mancur Olson and others had already worked out the basic political economy logic underlying almost all of Stigler’s analysis.

Fourth, Stigler’s empirical analysis is crude, and his findings are far from compelling. He provides two brief case studies of state trucking regulation and state occupational licensing laws—hardly a comprehensive account of regulation in general. He offers some statistical analysis in each of his cases, but that analysis comprises the most basic regressions with no robustness checks. Stigler himself acknowledges the limits of his empirical analysis. He admits that the empirical support for his theory rests on only a “modicum” of evidence. He describes his analysis as “illustrative” and acknowledges the “crudity of the data” on which he relies.

Finally, from the vantage point of history, Stigler’s theoretical claims seem to have been quickly overtaken by events on the ground. Notwithstanding his claim that business influence leads to economic regulation—that is, regulation of market entry, prices, and outputs—major swaths of such economic regulation disappeared in the United States during the 1970s and
early 1980s in sectors such as trucking, airlines, natural gas, and telecommunications. It is far from clear how a political economy theory that emphasizes incumbent firms using regulation to restrict entry to new competitors can also explain the repeal of the very regulations that had supposedly advantaged incumbent firms. Nor does Stigler’s theory necessarily explain the emergence of extensive consumer and environmental regulation in the 1970s.

And yet, here we are, 50 years after Stigler published his theory, still celebrating the article. The University of Chicago Booth School of Business’s Stigler Center for the Study of the Economy and the State has even convened a virtual gathering of leading regulatory scholars to reflect on, and extol, the virtues and lasting legacy of “The Theory of Economic Regulation.” That kind of attention is indeed deserved. Despite its flaws and limitations, Stigler’s article remains an important piece of scholarship worthy of continued engagement decades after its publication.

Stigler’s extensive influence on regulatory scholarship probably helps explain why a graduate student reading his article today could be forgiven for not immediately appreciating its significance. This is because, in important respects, we are all Stiglerians now. The political economy approach to regulation has won over the field and it is now common sensical to look for how business interests influence the regulatory process for their own benefit. It seems naïve to explain patterns of regulation simply in terms of the public interest. But that was far from the prevailing view in the years before Stigler.

Stigler’s approach to regulation came to fit with the work of other economists and political scientists in a burgeoning rational choice approach to the analysis of political behavior. His article’s influence, though, extended well beyond an audience of other social scientists. Over the past 50 years, legislators and judges have responded to the Stiglerian account of regulation by seeking to apply its insights to the design of regulatory institutions. Lawyers and legal scholars now seek to use administrative law to combat the tendencies toward regulatory capture that Stigler revealed, such as by requiring governmental transparency, imposing limitations on interest group meetings with agency officials, and demanding that courts take a hard look at the justifications for government regulations.
Concerns about regulatory capture took off in the field of administrative law in the years following the publication of Stigler's article. As one measure of the impact Stigler has had, consider the frequency with which his article has been cited in the nation’s leading law journals compared with citations to the major works of his predecessors Bernstein, Huntington, Kolko, and Lowi. Stigler’s article has been cited three times as often as the works of all four of these other scholars combined.

What might account for the prominence and staying power of Stigler’s article despite its flaws? I see three principal reasons:

1. **Drama.** Stigler’s article presents a dramatic story. Its drama comes from turning what most people had accepted as the hero into the villain. Under the public interest theory of regulation, regulation derives from efforts to promote public welfare; it amounts to a savior in the face of market failure. But then along comes Stigler who reveals that reality can be quite different. What appear to be regulatory policies grounded in the public interest are actually policies that protect the private interests of industry, to the detriment of consumers and the broader public.

   In this way, Stigler’s article is like a mystery novel in which the unsuspecting character turns out to be the murderer. Or, to offer a simile from the panoply of contemporary Disney movies, Stigler’s dramatic element works a lot like the major plot twist in the animated film, Frozen. In the film, the seemingly charming Prince Hans appears to have fallen earnestly in love with Princess Anna, but is later revealed only to be manipulating her to marry him as part of an evil scheme to take control of her kingdom. This same dramatic element that works in fiction and popular entertainment has undoubtedly captivated regulatory scholars too.
2. **Verisimilitude.** Stigler’s account was more than just a compelling dramatic story. It also captured an important part of the reality of the regulatory process: business interests do exert a lot of influence over the existence and design of regulation. The public interest theory that held sway in the 1950s and 1960s was indeed too pollyannaish and naïve.

Of course, this is not to say that business always wins. Counterexamples to business dominance can be found, such as in the economic deregulation of the 1970s and the rise of consumer and environmental regulation. But there is also no denying the power of industry. Even though the 1970s saw the passage of much environmental legislation, for example, very little such legislation has passed since. Serious and prominent calls for addressing climate change have existed for at least the past three decades but still no federal climate legislation exists, and the climate policies adopted by the US Environmental Protection Agency have been both limited and resisted. In other domains, too, business power is quite evident. Stigler’s concerns about occupational licensing, for instance, still ring true to this day. As a long line of political scientists from E.E. Schattschneider to Paul Pierson and Jacob Hacker have documented, the policy process often sings with a business bias.

Stigler was also clearly right to have noted, at the end of his article, that the way to protect the integrity of institutions is not just to preach goodness and fairmindedness to government officials, but to think also about how to shape their incentives. If those who serve as regulators—whether as legislators or agency officials—have little incentive to serve the public interest, it will be hard to expect that they will do so to a sufficient degree. The design of regulatory institutions can shape these incentives, and it is certainly worth considering how to create procedures and processes that might help foster better regulatory policies.
3. **Fertile soil.** The influence of Stigler’s article was surely affected by the fact that he published it at a time when academics and the rest of society were ready for his ideas. Overall public trust in the federal government peaked in 1964, when 77 percent of the public reported that they could trust Washington to do what is right at least most of the time. Within a decade, that trust had dropped by more than a half, to 36 percent. Vietnam, the Civil Rights Movement, and Watergate all added to the broader milieu that fit well with what Stigler was saying right in the middle of this period—namely, that the public cannot necessarily trust the government to be working on behalf of its overall interest.

At that time, skepticism about regulation was shared by both the left and the right. The left saw the government as in the pockets of the corporations, while the right saw government as interfering with positive market forces. Even today, with even more extreme partisan polarization, politicians on both ends of the ideological spectrum can agree to deplore regulatory capture—even though they approach it through different lenses.

In the end, Stigler’s article is important for bringing to light a crucial mechanism underlying much regulatory policy—namely, self-interest—and for pointing toward the need for thinking harder about how to design institutions with self-interest in mind.

His article ultimately offers not just a theory of economic regulation—as its title reads—but an economic theory of regulation. It was influential in foreshadowing and inspiring an extensive body of rational choice scholarship on regulation in the decades that followed. Even regulatory procedures and institutional designs have now been fruitfully studied from a rational choice framework and it has become well understood (if frustratingly so) that procedures and institutions can themselves be manipulated, contested, and influenced for political gain and the advancement of self-interest.
Nevertheless, if we are to make the world a better place through better regulatory institutions and policies, we must do what Stigler did so well: separate the empirical from the normative; think hard about the underlying causes of both market and government failures; and strive to apply a realistic understanding of the world as it does operate, so as to keep working to make the world closer to what it should be.

**Cary Coglianese**

Cary Coglianese is the Edward B. Shils Professor of Law and professor of political science at the University of Pennsylvania, where he founded and directs the Penn Program on Regulation and serves as the faculty advisor to *The Regulatory Review*. He studies issues of administrative law, business-government relations, technology policy, and environmental regulation.
The Metaphysics of Regulatory Capture

By Karthik Ramanna

Stiglerian capture and corrosive cultural capture, its left-leaning parallel, are ostensibly symbionts, two attempts at identifying impediments to keeping markets competitive by preventing the regulated from dictating the rules of the game. Yet Stiglerian capture is too coarse to be generally true, and corrosive cultural capture cannot be empirically identified either. Karthik Ramanna responds to ProMarket’s Stigler 50 Years Later series.
Reading the Stigler Center’s fascinating commemorative series of articles on capture prompted me to reflect on the potential weaponization of the term “capture” in a polarized professoriate. The commentators have included a distinguished panel of capture adherents and capture deniers—one might think we were engaged in a theological debate.

Part of the issue is that the origins of economic capture theory are dubiously political. George Stigler was right-leaning, and his theory of capture came from a right-leaning environment that privileged markets and suspected governments. In fact, William Novak’s engaging intellectual history of “capture” suggests that this idea was well-understood long before Stigler, and that the (Second) Chicago School was less novel for “discovering” the capture threat than for mainstreaming the claim that the preferred way to address it was deregulation. The economic theory of capture, no matter how rigorously articulated and elaborately feted, was then subsequently used by the political right to delegitimize regulation in the general. Writing for the Heritage Foundation’s quarterly in 1987 on “The Benefits of Deregulation,” Murray Weidenbaum, for instance, cites capture theory as “intellectual support” for deregulation starting in the 1970s, also acknowledging the value of Stigler’s Nobel prize in that vein.

The theory of corrosive cultural capture is a left-leaning response to traditional Stiglerian capture theory. It argues against the inevitability of Stiglerian capture (“strong capture”), which is sometimes caricatured as “bags of money” transfers from regulated to regulators; rather, in this theory, the regulators are corroded into thinking like (and doing the bidding of) the regulated through an indirect socialization process that is intentionally effected by the regulated. In extremis, corrosive cultural capture leads to deregulation in the whole, as the regulator puts itself out of business so that a monopolist can extract rents unfettered by bureaucrats. This theory is perhaps best articulated in the seminal 2013 book Preventing Regulatory Capture (across contributions by Daniel Carpenter, James Kwak, and David Moss), although its intellectual history predates Stigler and can be traced back to at least Antonio Gramsci’s notion of “cultural hegemony” and perhaps even Hegel’s discourse on “civil
society.” Corrosive cultural capture is used by the political left to delegitimize deregulation in the general. Even Senator Elizabeth Warren (D-MA) has invoked the theory in criticizing corporate resistance to regulation.

On one level, Stiglerian capture and corrosive cultural capture are symbionts, two attempts at identifying impediments to the same objective: keeping markets competitive by preventing the regulated from dictating the rules of the game. For instance, absent natural economies of scale, industry incumbents are well-served to engage in Stiglerian regulatory capture to erect entry barriers. Conversely, in industries with natural economies of scale, incumbents are better off engaging in corrosive capture to deregulate. But, for the Stiglerians, the solution to capture is always deregulation—a mathematically elegant static-equilibrium—and for adherents of corrosive cultural capture, the solution is continually developing checks and balances (i.e., new regulatory institutions) as old ones get corroded.

In these differences of solutions, we can infer a more profound polarization between the capture camps. For the Stiglerians, “government is the problem;” for those sympathetic to corrosive cultural capture, competitive markets are not a primitive moral end for society, but simply one of many eudemonic channels, subservient to a democratic government that can and should dynamically moderate the scope of markets in society.

Stiglerian capture theory, in its broad sense of “regulations benefit the regulated,” is too coarse to be generally true. This is because ideology, besides self-interest, motivates regulators. Joseph Kalt and Mark Zupan define ideology (for neo-classical economists) as “consistent sets of normative statements as to best or preferred states of the world.” Because of ideology, sometimes the regulators do what is in the public interest, notwithstanding the money in politics, thereby invalidating Stiglerian capture. But because of ideology, sometimes
“For the Stiglerians, ‘government is the problem;’ for those sympathetic to corrosive cultural capture, competitive markets are not a primitive moral end for society, but simply one of many eudemonic channels, subservient to a democratic government that can and should dynamically moderate the scope of markets in society.”

the regulators do the regulated’s bidding without the latter even having to (directly) ask. This case can be deemed cultural capture.

Of course, teasing apart the cases where ideology implies cultural capture requires an understanding of what is in the public interest, which in turn requires a generally accepted ideology upon which to benchmark the actions of regulators. Good luck finding such an ideology in today’s polarized world! Even pro-industry behavior by tobacco-sector regulators cannot be seen as dispositive evidence of cultural capture, as Daniel Carpenter suggests, because some would argue that such behavior is simply motivated by libertarian ideologies of protecting smokers’ choices. So, when ideology motivates regulators, it is also liable to be called capture, just not Stiglerian capture but cultural capture. Which means cultural capture theory (whether of a corrosive deregulatory bent or otherwise) is too coarse to be generally true as well.

Stiglerian capture, when it can be robustly identified empirically, is corruption. Few capturers are that stupid. They often find subtler ways to make wealth transfers to regulators, which then evade attention from prosecutors and detection by econometricians. Which means Stiglerian capture is unmeasurable for most practical purposes. Ernesto Dal Bo’s 2006 review of the economic literature on capture reports no shortage of theoretical extensions to Stigler’s model and still finds the evidence “well short of abundant.” But, for the reasons given above regarding the paucity of unifying ideologies, corrosive cultural capture cannot be empirically identified either.

I often wonder whether both Stiglerian capture and corrosive cultural capture are exemplars of the philosophical fallacy described by Russell’s Teapot. Writing in the 1950s on his skepticism about the existence of a god, Bertrand Russell said, “If I were to suggest that
between the Earth and Mars there is a china teapot revolving about the sun in an elliptical orbit, nobody would be able to disprove my assertion provided I were careful to add that the teapot is too small to be revealed even by our most powerful telescopes. But if I were to go on to say that, since my assertion cannot be disproved, it is intolerable presumption on the part of human reason to doubt it, I should rightly be thought to be talking nonsense.”

Stiglerian capture and corrosive cultural capture arguably make (metaphorical) assertions about undetectable teapots in solar orbit. But yet these concepts have endured, like human faith in god, albeit for not as long. Perhaps capture is the realm of the metaphysical, but perhaps these concepts endure because, at their core, they are common-sense propositions that align with our intuitions of how the world works.

Karthik Ramanna

Karthik Ramanna is a professor of business and public policy at Oxford university’s Blavatnik School of Government. Ramanna joined Oxford in 2016, after nearly a decade on the faculty of Harvard Business School. At Harvard, he also held the Henry B. Arthur Fellowship in ethics, the Marvin Bower Fellowship recognizing innovative faculty research, and a visiting fellowship at the Kennedy School of Government. Additionally, he is a faculty associate of the Weatherhead Center for International Affairs. He received his PhD in management from the Massachusetts Institute of Technology. Ramanna’s scholarship explores the role of business leadership in shaping the basic rules that govern capital-market societies. His book Political Standards (University of Chicago Press) studies the political and economic forces that have shaped corporate financial reporting standards over the past 30 years. He argues that accounting rulemaking is an allegory for the “thin political markets” where businesses shape—and sometimes subvert—the essential technical edifices of our economy. Ramanna has authored more than two-dozen HBS case materials and more than a dozen original research articles in leading professional outlets such as the Accounting Review, the California Management Review, and the Harvard Business Review. His scholarship has won awards from numerous bodies such as the American Accounting Association. He serves on the editorial boards of several scientific journals, including as co-editor of the interdisciplinary journal Accounting, Economics, and Law and as associate editor of the Journal of Accounting and Economics, the most-cited outlet in that field.
ELEVEN

Economic Regulation: The End of the Beginning

By Filippo Lancieri and Luigi Zingales

Regulatory capture certainly exists, but this does not mean that all regulation is acquired by special interests, nor that capture is the only source of regulatory distortion. To separate these processes, we need to better understand the mechanisms through which special interests influence policy. In a world of expanding government regulation and crony capitalism, the importance of this work has never been higher.
In the opening article of this e-book, we stressed how the groundbreaking insights of George Stigler—that regulation is not just shaped by the desire to correct market failures, but also by the self-interest of incumbent firms that are subject to it—changed academic and practical discussions around the regulatory state. Fifty years later, these insights remain as valid as ever and continue to impact economics, law, and real-world policymaking. As Cary Coglianese aptly summarized, despite the important limitations of Stigler’s article, we are all Stiglerian now: there is hardly anyone left who looks at regulatory policy without considering the business interests shaping it.

As the contributions to this e-book stress, however, the fact that regulatory capture exists does not mean that all regulation is the product of a capture process, nor that capture is the only source of regulatory distortion. In fact, Sam Peltzman is the first to admit that Stigler’s theory lacks a role for public interest advocacies. Greenpeace and the Sierra Club are important players in shaping environmental regulation, a role that is not easily explainable in Stigler’s framework. In many cases, the demand for regulation arises because there is a public-interest concern. All too often, however, this legitimate demand is used by special interests to pursue their own agenda, as Daniel Carpenter argues happened with the FDA in the past. Alternatively, Andrei Shleifer points out how ideology, ignorance, and regulators’ narrow mission can play a big role in the shaping of public policies that do more harm than good.

In spite of the importance of these regulatory distortions, it would be wrong to conclude that the optimal amount of regulation is zero. Stigler might have thought so, especially in light of the negative results contained in his 1962 paper on electricity regulation. Yet, the empirical result that regulation had no impact on prices was later found to be wrong: Electricity regulation was keeping prices lower, so it was beneficial to consumers. But at what cost, in terms of lack of entry and innovation? This is a much harder question to answer.
It is very hard to anticipate all the costs and benefits of a new piece of regulation before it is introduced. It is often hard to do so even after the regulation is in place, and many times, it is only after the regulation is removed that one can assess its true effect (it was only after the deregulation of trucking and airlines that we were able to properly assess the market distortions). Yet, ideal policymaking requires these calculations before a regulation is introduced or at least before it is removed. This mismatching between the timing a cost-benefit analysis of regulation is feasible and the timing that is needed represents a major problem from a policy point of view. In the absence of a feasible framework, the ex-ante cost-benefit analysis all too often boils down to an emphasis on the costs of regulation (which are relatively easier to measure), ignoring the benefits altogether. This area has attracted attention from many scholars, but there is still a lot of work to be done in improving these calculations.

Short of being able to directly calculate the costs and benefits of a piece of regulation, how can we identify when a governmental intervention is indeed “captured” by special interests? We propose a screaming test. The idea is best illustrated through an anecdote. The mother of one of us insisted on disinfecting the wounds of her children with alcohol, even when better (and less painful) disinfectants became widely available. Her reason was that she could tell from the screaming of her children that the disinfectant was working. The same idea can be applied to regulation. If a pro-consumer regulation is effective, it must hurt the industry a bit. If the industry does not scream against it, it must mean that it is ineffective or worse, beneficial to the industry incumbents. Fortunately, this screaming is easily measurable: it is the number of comments against a piece of regulation the industry produces, the amount of money spent in lobbying against a law, and the number of donations given to candidates who advocate for a repeal.
As economists, we must be concerned about the incentive compatibility of this test. Would the industry remain silent, even in the face of some pain caused by regulation, just to pretend a piece of regulation is ineffective, in the hope it will be removed? We doubt it, because it will require a lot of coordination of all the players involved. But even if it did, the test will reach the objective to keep effective regulation in place, since a governmental intervention is unlikely to be removed without industry lobbying!

In a forthcoming article, we (together with Eric Posner) try to implement a version of this test by looking at the three primary mechanisms through which special interests can unduly influence regulation: (i) the real “acquisition,” or the use of financial and other resources to directly influence policy, as described by Stigler; (ii) epistemological capture, or the control over the informational ecosystem, as described by Cass Sunstein; and (iii) a Chomsky effect, or the disproportional selection of biased experts to design regulations, building on the work of Noam Chomsky.

The first, “acquisition” itself, is reasonably straightforward and highlighted in earlier public choice work (including Stigler’s). It is a “follow the money” criterion. Regulators (like everybody else) care about their careers. Thus, an easy (and legal) way for large industry incumbents to capture the regulators is to offer lucrative jobs to them after they step down if they have behaved “well” when in office. Fortunately, there has been a growing interest in this revolving door test.

The second is the “epistemological regulatory capture” outlined by Sunstein in his article for this volume or the “academic capture” emphasized by Zingales almost 10 years ago. More technically, it can be defined as experts enacting policies after being disproportionally exposed to information/data that benefits the interest group. This mechanism relies on major information asymmetries between the industry and the interest group, which the latter uses to its advantage (see, for example, a discussion on how it may take place in data privacy policy).
Interestingly, this form of capture does not require cooption—regulators could be well-intended; they are made to believe that a policy that benefits the industry is in the general public’s interest when it is otherwise. Regulators are usually aware of this informational imbalance, and that is why interest groups enlist conflicted experts (in Anat Admati’s words) such as NGOs and think-tanks, academics, the media, and other “neutral” parties to push their agenda in a more stealthy way. Exactly because regulators are usually acting in good faith, this type of capture is much more difficult to identify, making it likely more pervasive but no less dangerous to welfare than the “acquisition” route.

A third mechanism is what we are coining the “Chomsky effect,” which takes place when experts are disproportionally selected from a pool of people that have an ideology or prior beliefs that disproportionally benefit the interest group. The name comes from Chomsky’s explanation in *Manufacturing Consent* on how companies use their control over advertising revenues to shape the companies that actually gain scale in mass communication, so that these media conglomerates promote these companies’ general views. The media conglomerates then select journalists who promote these views, shaping public opinion and governmental action. The best explanation of how this mechanism works comes from Chomsky himself. In an interview, Andrew Marr, a BBC journalist, challenged Chomsky’s argument by saying he was free to write what he wanted. Chomsky famously replied: “I am not saying you are self-censoring, I am saying that if you did not believe in what you believe, you would not be where you are.”

This form of capture is harder to identify, not least because politicians legitimately appoint experts to promote their political agendas through the regulatory state. How can we tell whether regulators have been chosen to implement the voters’ wishes or to protect the industry’s incumbents? The answer is in the consistency between a politician’s campaign promises and the quality of the regulator highlighted in the nomination and confirmation process. If a politician campaigns on a tough-on-crime platform and then appoints a judge who is tough on crime, this is an example of an appointment that implements the voters’ wishes. By contrast, if a politician campaigns on an antimonopoly platform and then appoints a justice that is very soft in antitrust enforcement, this is an example of capture via the Chomsky effect.
This is not meant to be an exclusive list of potential capture mechanisms, but rather an attempt to systematize some of the most important and pervasive methods interests groups rely on. Certainly, many others exist. In a world of expanding government regulation and crony capitalism, the importance of denouncing harmful policy has never been higher.

**What we need is both better theory and better empirics.** Ideally, a correct diagnostic of regulatory capture would involve researchers identifying: (i) a clear theoretical framework on why capture may have taken/will take place in a given industry; (ii) that a given policy negatively impacted overall welfare and benefited the interest group; and (iii) that at least one (or more) of the mechanisms we outlined above was clearly at play.

This is a growing and promising field, which will more and more require interdisciplinary collaborations. Fifty years after George Stigler, we have made much progress, but it somehow feels like our work has just begun.
Filippo Lancieri
Filippo Lancieri is a post-doctoral fellow at the ETH Zurich Center for Law and Economics and a research fellow at the Stigler Center at the University of Chicago Booth School of Business. He concluded his JSD at the University of Chicago Law School. Lancieri’s research explores the challenges associated with regulation of digital markets, with an emphasis on the enforcement of antitrust and data protection policies. He is trained as a lawyer and an economist and his academic and professional experience spans the United States, Europe, and Brazil. His work has been published or is forthcoming in *The University of Chicago Law Review, the Antitrust Law Journal, the Journal of Antitrust Enforcement, and the Stanford Journal of Law, Business & Finance*, among others.

Luigi Zingales
Luigi Zingales is the Robert C. McCormack Distinguished Service Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business. He is a research associate of the National Bureau of Economic Research, a research fellow of the Center for Economic Policy Research, and a fellow of the European Corporate Governance Institute. His research interests span from corporate governance to financial development, and from political economy to the economic effects of culture. He has published extensively in the major economics and financial journals. In 2003, Zingales received the Bernacer Prize for the best European young financial economist. In 2013, he has been named founding director of the Center for Economic Analysis of the PCAOB. In 2014, he served as president of the American Finance Association. He is co-author with Raghuram G. Rajan of *Saving Capitalism from the Capitalists* (2003) and author of *A Capitalism for the People: Recapturing the Lost Genius of American Prosperity* (2012). His latest book is *Europa o no* (2014).
Published by Stigler Center

Edited by:
Luigi Zingales, Faculty Director, Stigler Center
Jana Kasperkevic, Managing Editor, ProMarket
Asher Schechter, Writer and Editor, ProMarket
Filippo Lancieri, Research Fellow, Stigler Center

Suggested citation: Zingales, L. et al (Eds.), George Stigler 50 Years Later. 2022, Stigler Center.

Illustrations and Photography:
University of Chicago Photographic Archive, apf1-13366 and apf7-01345,
University of Chicago Library, Special Collections Research Center
Getty Images and iStockphoto