



KEEP IT SIMPLE

A NEW TAKE ON REGULATION

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Scholar



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The complexity of the modern world can seem overwhelming. The world moves faster every day, and despite obvious advances in technology and living standards, public officials see the chaos of life and seek ways to soften the world's edges. The great temptation is to match the world's growing complexity with corresponding rules and programs that help citizens and firms navigate the tumult.

Evidence increasingly suggests, however, that the content, number, and unforeseen interplay of these multiplying rules are doing far more harm than good. The economy's continued underperformance, therefore, offers an opportunity to fundamentally reexamine our approaches to regulation and public finance. We believe that such a reexamination will suggest a stark new path—one that demands simple rules for a complex world.¹

This paper highlights two examples where complex rule sets are damaging the economy and proposes attributes and examples of good rules and bad rules. The goal is to build a framework to evaluate public policy in a systematic way.

COMPLEXITY IS WEALTH

Complexity is acknowledged in this paper to be a fundamental good. In many ways, complexity is wealth. More complexity means more division of labor, more specialization, and more diverse products and services. It means new technology, longer lives, more and faster interactions among people and firms, and a multiplicity of diverse choices across all life's dimensions, from where we live to what we do for a living. Complexity means a richer world in every sense of the word.

Complexity, moreover, depends on having a few simple rules that allow information to flow freely and flexibly. It is no coincidence that the Industrial Revolution took off when we combined the scientific method with private property rights and the rule of law. Basic laws, rules, and norms allow diverse people to interact, cooperate, and experiment in order to create new ideas, new products, and new values. Without rules, we get chaos. With too many or too onerous laws, we get stagnation.

This begs a big question: How do we know which rules are helpful and which are harmful? Some examples may help. Rules offer a stable, regular platform upon which to build unpredictable, irregular ideas and products. We mentioned the rule of law and property rights, the bedrock of Western civilization and capitalism. If we look beyond public policy, though, we see other norms that facilitate complexity and growth. Consider, for instance, standardized metrics like the volt, meter, or gram. These units of measure are invaluable tools in discovery and engineering. The dollar (or currency in general) plays a similar role in economic life. It acts as a store of value and provides



a standard unit of account upon which to conduct an unlimited range of transactions. These simple metrics, or rules, facilitate the transmission of all-important information.

So do the rule sets that we call languages, such as English, Mandarin, or even IP (the Internet protocol). Or consider basic infrastructure like roads, shipping containers, and industrial clusters: these are also platforms that speed the free flow of products and information.

We might say that good rules are as follows:

- Simple
- Maximize degrees of freedom
- Facilitate information flow, creativity, and error correction
- Do not interact with other rules in unpredictable ways

Bad rules, in contrast, are as follows:

- Complex
- Limit degrees of freedom
- Impose overly broad uniformity and rigidity
- Discourage information flow, creativity, and error correction
- Interact with other rules in unpredictable ways

All of us can name dozens of bad rules, whether those we didn't like as children or those imposed by corporate or government bureaucracies today. What are the common links, however? Why do we impose bad rules? And is there any way to discourage bad rules and encourage good ones?

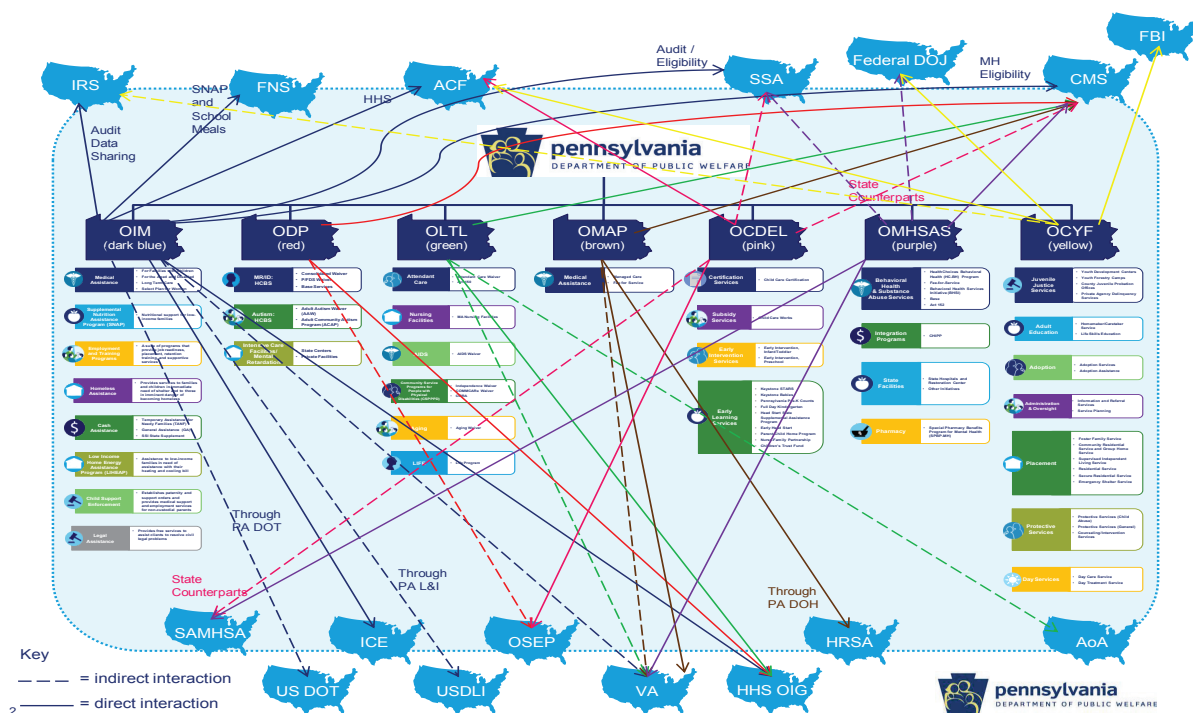
The two examples highlighted in this paper—of the labor market and capital market—suggest that bad rules often begin with the very best intentions. Yet the results can be catastrophic.

A LABOR MARKET EXAMPLE

In the wake of the Great Recession, something strange has happened in the labor markets. The unemployment rate has remained elevated for a longer stretch than at any time since the Great Depression. Even more worrisome, though, is the dramatic plunge in other metrics of work. Labor force participation, for example, has dropped to around 63% from around 67% in the late 1990s and early 2000s. Another measure, the employment-to-population ratio, has dropped to around 58% from an average in the decade preceding the Great Recession of around 63%. Beyond the official unemployment rate, millions of Americans have stopped working. The initial wave of baby boomer retirements explains only a small part of this work slump.

A range of economic and societal factors, no doubt, combine to yield this phenomenon. Consider one of the prime culprits—our well-meaning but complex social safety net, which too often hurts the people it is meant to help.

In a recent presentation, Gary Alexander, the public welfare commissioner of Pennsylvania, summarized the complexity and perversity of the safety net in two graphics.² In Figure 1, he showed the web of state and federal programs designed to help low income Americans under the title “Chaos in the Federal-State Relationship.”



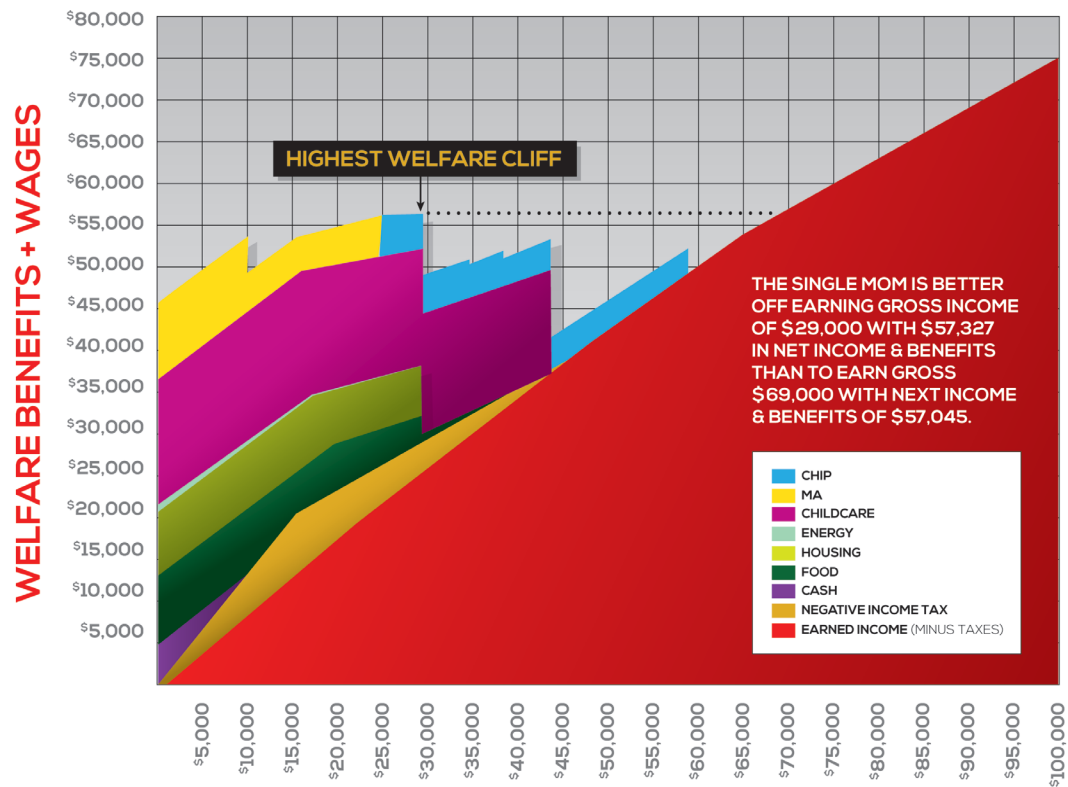
SOURCE: Secretary Gary B. Alexander, Pennsylvania Department of Public Welfare

FIGURE 1: CHAOS IN THE FEDERAL-STATE RELATIONSHIP

These programs include Medicaid, food stamps, the earned income tax credit (EITC) and other cash support, child care, Head Start, and housing, heating, and transportation subsidies. As Alexander testifies, this web of programs is an administrative nightmare. Far worse than the confusion and waste that accompanies bureaucratic overhead is the damage inflicted on individuals and families. Each of these programs is intended to mitigate hardship or, as in the case of the EITC, actually encourage work. The compounding effect of these programs, however, often discourages work and, over time, depletes human capital.

In Figure 2, Alexander shows the perverse impact that occurs as these programs add up. Because the transfer programs are based on income and asset levels, the value of the transfers is high when income and assets are low and gradually tapers off as income and assets rise. Common sense, one might say. Yet look at the effect. As Alexander demonstrates, a single mother, taking advantage of the transfer programs, is better off earning \$29,000 a year than she is earning \$69,000 a year. The value of the benefits declines much faster than her income rises. The two additional dashed black lines show other extreme perversities: In terms of total net income and transfers, the Pennsylvania single mother is better off making \$9,000 than \$64,000. She is even better off earning zero than she is earning \$50,000! At many points along the income curve, her marginal tax rate is more than 100%.

Indeed, taking into account a narrower range of transfer programs, the Congressional Budget Office (CBO) showed that the average marginal tax rate for those earning \$18,000 to \$20,000 is 95%.³ Then, between \$20,000 and \$40,000, CBO says that in 2014 a single parent with one child will face a marginal rate of more than 60%. Who wants to do an extra dollar's worth of work for an extra 5 cents of pay? Or worse, who wants to do an extra 10, 20, or 50 thousand dollars' worth of work for less pay?



SOURCE: Secretary Gary B. Alexander, Pennsylvania Department of Public Welfare

FIGURE 2: THE WELFARE CLIFF

Casey Mulligan, an economist at the University of Chicago, thinks that these and other support programs, such as unemployment and disability insurance, are a chief cause of the prolonged economic slump. In his book *The Redistribution Recession*, Mulligan estimates that as unemployment, food stamps, disability, and other programs were expanded during the downturn, the average marginal tax rate for this income range jumped to 48% from 40%.⁴ This means that the marginal rate for many individuals is much higher than 48%.

These policies don't affect everyone the same way. Many people will not take advantage of all the programs available, and individuals will have different life circumstances and work-leisure preferences. At the margin, nevertheless, these policies discourage work and human capital formation—and thus economic growth.

Could we think of a simple rule to replace this complex anti-work web? For instance, what about replacing all these programs with a simple, flat cash grant of, say, \$10,000 for every adult that gradually tapers off as need declines?⁵ This would provide substantial support for low-income Americans—\$20,000 for a couple—yet it would almost eliminate the complex interaction of taxes and phaseouts of transfers and deductions that create the anti-work cliffs and distortions.

A CAPITAL MARKETS EXAMPLE

As complex as our safety net programs are, there is another example where the interaction of multiple well-intended rules has been even more dynamic, unpredictable, and acutely harmful. The financial panic of 2008 was the biggest economic calamity since the Great Depression. It is still changing the course of history. The proximate cause was a housing boom and bust, especially in subprime mortgages. Yet as Federal Reserve Chairman Ben Bernanke said, “You know, the stock market goes up and down every day more than the entire value of the subprime mortgages in the country.”⁶ The collapse was far sharper, bigger, and more complicated than a mere housing downturn could explain.

There are many theories of the financial crisis. Here is one highly condensed argument that some consider to be correct and powerful. Even if one does not agree that this thesis is as central to the crisis, the harmful, complex interactions should be readily apparent and reinforce the theme of this paper.

Consider four sets of well-meaning and seemingly unrelated policies, offered by smart and reasonable people:



- Through the late 1990s and 2000s, prompted by Washington, Fannie Mae, Freddie Mac, and other housing lenders lowered down payment and other loan quality requirements in an effort to encourage home ownership.
- In the early and mid-2000s, the Federal Reserve cut the Fed Funds rate to a historically low 1% and then kept rates low for years in an attempt to avoid deflation. The Treasury Department, meanwhile, pursued a weak-dollar policy meant to help the U.S. manufacturing economy and reduce the trade deficit.^{7 8 9}
- Beginning in the 1980s, international bank regulators agreed on capital guidelines, known as the Basel Accords, designed to encourage investment in “safe assets” and ensure healthy bank capital cushions. In anticipation of the Basel II guidelines, the United States in 2001 adopted the Recourse Rule,¹⁰ again attempting to ensure healthy capital buffers composed of safe assets.
- Attempting to boost financial transparency, the Financial Accounting Standards Board revived mark-to-market (fair value) accounting, beginning with FAS 115 in 1993, followed by FAS 157 in 2006.

Each of these policies could be defended at the time, and many smart people defend these policies even in retrospect. Some of the policies even achieved their intended effects. One does not have to oppose these policies, in part or in whole, to acknowledge how they mixed to form a poisonous brew.

Look at what occurred from just a slightly different perspective:

- Fannie Mae and Freddie Mac subsidized irresponsible lending and borrowing.
- The Fed’s 1% rate (and subsequent negative real interest rates), along with Treasury’s weak-dollar policy, inflated prices of hard assets such as homes, oil, and other commodities.
- Basel capital guidelines and the Recourse Rule of 2001 created an insatiable demand for supposedly AAA securities. Regulators gave attractive risk weights to mortgage-backed securities (MBS), asset-backed securities (ABS), and even asset-backed commercial paper (ABCP) compared with raw mortgages or business loans. Wall Street and the ratings agencies complied in delivering mountainous piles of these AAA securities.¹¹ (In a good example of regulatory inflation, Basel I was 30 pages, while Basel II grew to 347 pages.)
- Instead of encouraging transparency, mark-to-market accounting created opacity and helped detonate and sustain a panic.¹²

In 2006, the housing market peaked and subprime mortgage delinquencies and defaults began to rise. As Fed Chairman Ben Bernanke noted, the size of this market was not nearly large enough to sink the entire economy. In 2007, several institutions, watching subprime defaults and a down-tick in MBS indexes (known as ABX) marked down some of their MBS investments. For instance, two mortgage-focused Bear Stearns hedge funds collapsed in July 2007. Later that year, Goldman Sachs, based on similar mark downs, demanded payments from AIG, which insured huge volumes of mortgage-backed securities with instruments known as credit default swaps (CDS).¹³ CDS prices rose to reflect possible losses in MBS.

Arguments erupted about the true value of MBS securities. These arguments would stretch out for years, but because of the practice of mark-to-market accounting, these “marks” were now treated as real prices and filtered through financial markets. FAS 157, which took effect in 2007, said that firms should value assets based on prices of similar securities observed elsewhere in the markets. FAS 157 said that even a rise in the price of CDS insurance should be used to mark down whole classes of securities.

“Thus,” write Jeffrey Friedman and Wladimir Kraus, authors of the most detailed treatment of this regulatory interplay, “the observable prices for CDS insurance on PLMBS [Private Label Mortgage Backed Securities] were used to mark down the type of asset that they insured. Eighty-two percent of assets marked down by banks in an SEC study of [mark-to-market] were valued in this fashion, with only 11% marked against actual prices.”¹⁴

Yet even “actual prices” were hard to find. The industry had packaged millions of mortgages into complex securities designed to achieve AAA ratings. The inclusion of faltering subprime mortgages in some of these AAA bonds meant that some of the AAA ratings were suspect. Many, or even most, of the world’s AAA bonds were, in fact, fairly described as AAA. The rules, regulators, and accountants, however, found it very difficult to discriminate. Firms were forced to mark “prices” in an illiquid, nonfunctioning market.

These indiscriminate markdowns spread in waves across the financial landscape.¹⁵ Markdowns reduced bank capital. As capital fell, banks and other financial institutions, such as AIG, ran up against the capital floors imposed by bank regulators. Capital buffers are, in theory, designed to cushion losses from bad investments or long economic downturns. But if a capital cushion cannot be touched, it is not much of a buffer. To maintain their capital floors, firms had to sell more assets. Prices fell further. Capital plunged again. Ad infinitum. It was a fire sale, a panic.

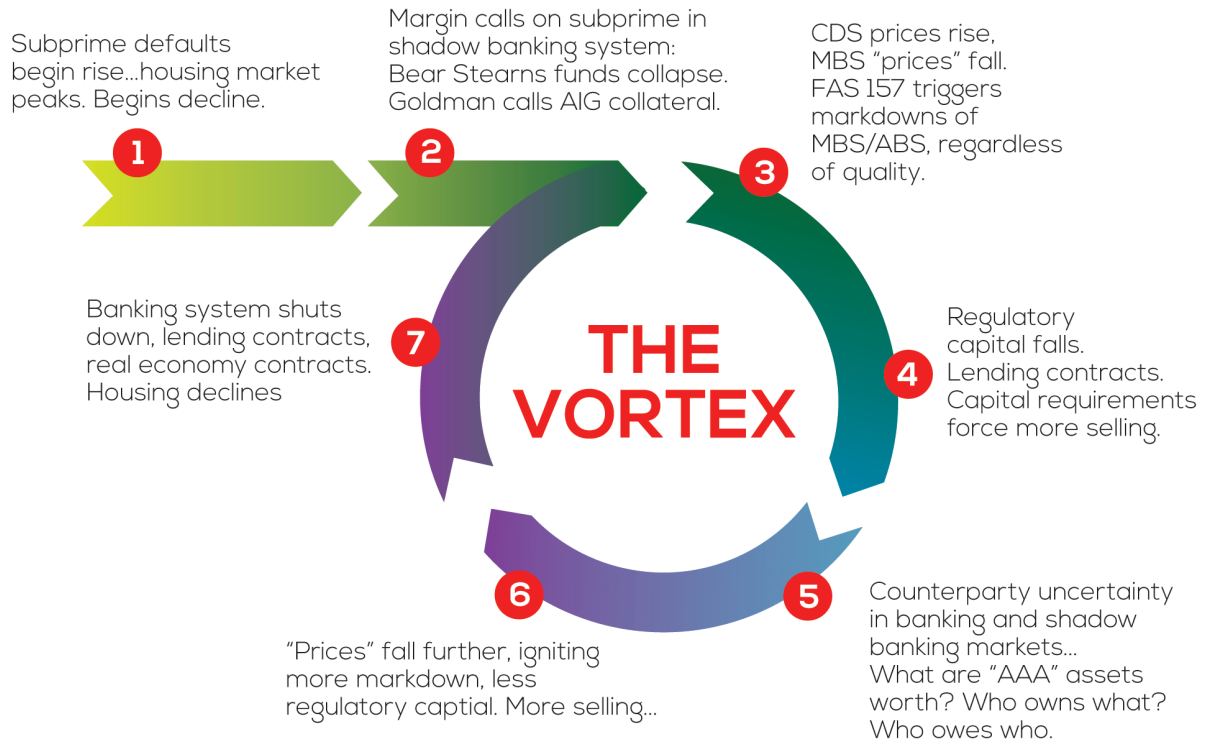


FIGURE 3: THE MARKET VORTEX

This series of events led to historic lending contraction. In all, \$500 billion in markdowns of MBS, ABS, and ABCP could have, in principle, led to reduced lending capacity of \$5 trillion. Because many banks were operating above their capital floors, and because of the extraordinary actions of the government, the credit crunch was not quite that severe. Yet as a further example of the impact of the capital guidelines, new business loans, which were labeled with high-risk weights, declined by an astounding 67%.¹⁶ The downturn in the real economy put even further downward pressure on housing and securitized assets.

This indiscriminate plunge in bank capital and thus lending was, arguably, the primary reason the economic downturn was so broad and deep. Yet it did not have to happen. Yes, housing was inflated. Yes, the housing correction was always going to hit the economy, perhaps even causing a recession. The interaction of housing and monetary policy and capital and accounting guidelines, however, amplified the impact beyond almost anyone's worst imagination.

“Although this could not be known in 2007,” the Financial Crisis Inquiry Commission found, “at the end of 2010 most of the triple-A tranches of mortgage-backed securities have avoided actual losses in cash flow through 2010 and may avoid significant realized losses going forward”¹⁷ (emphasis added). The panic did not have to happen. Banks would have taken losses. Some banks might even have failed. The opacity and feedback loops created by the capital and accounting guidelines inflated the value of mark-to-market losses beyond reality. Or, as John Allison, the former CEO of BB&T bank concluded, “Accounting systems should never drive economic activity. They should reflect it. Fair-value accounting significantly contributed to the collapse of liquidity in capital markets (2007–2009).”¹⁸

Jeffrey Friedman and Wladimir Kraus summed up the dangers of regulation:

Given what they knew at the time, it is hard to see how the regulators could have crafted a better rule. But by the very act of crafting any rule, they reduced market heterogeneity, making the financial system more vulnerable to a black swan. If the penalties imposed by a regulation have their intended effect, they homogenize the behavior of those who are subject to it, increasing the system’s fragility by reducing its diversity. The paradoxical lesson of the Recourse Rule is that regulation can create systemic risk even when the regulators are aiming at systemic stability.¹⁹

A PATH TO PRO-GROWTH POLICY

We could easily supplement the preceding two stories. The U.S. tax code, for example, is an infamous morass. Or consider that even as we write rules for a new Internet age, the Communications Act of 1934 still mandates the deployment and maintenance of copper wires and telephone switching equipment that ever fewer people use. On and on we could go. As shown, complex rules can distort markets and hurt the economy directly. They also do so indirectly by diverting resources toward unproductive activities. Vast subindustries of lawyers, accountants, and consultants are needed to navigate, avoid, and exploit government’s complex web.

The challenge is to show that this way of doing business is hurting the economy in a systematic way. Moreover, we must develop a case persuasive enough so that we can begin looking at public policy through a new lens and perhaps even engage in a fundamental overhaul of the complex administrative state.

The challenge is greater than ever because policymakers and regulators are increasingly succumbing to the temptation to regulate and, in so doing, offer ever more complex rules for a complex world. Two obvious and recent examples prove the point. The Dodd-Frank



financial reforms fill 2,319 pages and call for 243 new rules. The Volcker Rule alone is 298 pages. Obamacare is more than 900 pages, and regulators have already issued more than 3 million words of accompanying rules, with many more to come. We may guess without too much hesitation that these laws will not work out exactly as planned.

Sometimes it is useful to get back to basics. Some of the very best rules are those that prohibit the enactment of bad rules—for example, “Congress shall make no law ...”

The U.S. Constitution was chiefly a platform to prevent the creation and imposition of bad rules. It explicitly banned a number of bad rules, and through its system of checks and balances (three branches in a federal system) it implicitly sought to discourage bad rules. Many of the Constitution’s anti-bad rule protections have, however, been eroded. The Commerce Clause, for example, was originally a rule prohibiting states from enacting bad rules that could block the free flow of commerce.

Today, one may say that we have an anti-Commerce Clause. The clause has been turned upside down to enable the government to do almost anything it wants.

The ultimate form of bad rules is rule by man: Man is unconstrained, unpredictable, and can be arbitrary and capricious. As we have seen in the initial implementation of Obamacare, regulators are issuing waivers to favored groups, firms, and states, while insisting on the onerous imposition of rules on the unfavored. This is not the rule of law.

As a first step toward the development of a systematic way of evaluating public policy, the following lists some attributes of both good rules and bad.

	GOOD RULES	BAD RULES
ATTRIBUTES	SIMPLE	COMPLEX
	FEW	MANY
	CLEAR	MURKY
	INERT	INTERACTIVE
	ENCOURAGE NEGATIVE FEEDBACK	ENCOURAGE POSITIVE FEEDBACK
	BASIC PRINCIPLES	DETAILED PRESCRIPTIONS
	COMPETING STANDARDS	ONE SIZE FITS ALL
	BOTTOM-UP	TOP-DOWN
	ENCOURAGE COOPERATION	ENCOURAGE COERCION
	OFFER AN EXIT	OFFER NO EXIT
ACTIONS	ADAPTIVE	RIGID
	TRANSMIT INFORMATION	BLOCK INFORMATION
	CORRECT ERRORS	REINFORCE ERRORS
	PROMOTE ACCOUNTABILITY	PROMOTE AMBIGUITY
	PROMOTE HETEROGENEITY	PROMOTE HOMOGENEITY
	ALLOW INNOVATION	PRESCRIBE / PROSCRIBE ACTIONS
	ENCOURAGE NEW	LOCK IN OLD
	PROHIBIT BAD RULES	REQUIRE EVER MORE RULES
	CONSTITUTION / RULE OF LAW	RULE OF MAN
	COMMON LAW	BUREAUCRACY
EXAMPLES	CIVIL SOCIETY	ADMINISTRATIVE STATE
	COMMERCE CLAUSE	TODAY'S ANTI-COMMERCE CLAUSE
	FLAT CASH GRANT	TODAY'S SAFETY NET
	FLAT TAX	TODAY'S TAX CODE
	SOUND MONEY	MONETARY HYPERACTIVITY

TABLE 1: ATTRIBUTES OF GOOD RULES AND BAD RULES



In a remarkable essay called “The Dog and the Frisbee,” Andrew G. Haldane of the Bank of England perhaps said it best:

Because complexity generates uncertainty, not risk, it requires a regulatory response grounded in simplicity, not complexity.

Delivering that would require an about-turn from the regulatory community from the path followed for the better part of the past 50 years. If a once-in-a-lifetime crisis is not able to deliver that change, it is not clear what will. To ask today’s regulators to save us from tomorrow’s crisis using yesterday’s toolbox is to ask a border collie to catch a frisbee by first applying Newton’s Law of Gravity.²⁰



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Bret Swanson is president of Entropy Economics, a research firm focused on technology and the global economy, and of Entropy Capital, a venture firm that invests in early-stage technology companies. Swanson is also a visiting fellow at Digital Society and a scholar at the U.S. Chamber of Commerce Foundation.

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Swanson studies innovation, globalization, China, Internet traffic, information theory, the stock market, and entrepreneurial economics. He is guided by the Laws of Say, Metcalfe, and Moore; the Theorem of Shannon; and the Curve of Laffer. Swanson’s most pioneering and speculative research, however, concerns forces even more powerful and enigmatic—his four children, ages nine and under.

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