

REGULATING REGULATORS: GOVERNMENT VS. MARKETS

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Quis custodiet ipsos custodes?

—Juvenal, *Satires*

Regulation by market forces works better than government regulation. It does so because of the way each process is itself regulated, or not. Government regulatory agencies are in practice unregulated monopolies unaccountable to the public in any meaningful way. By contrast, the process whereby market forces regulate industries is itself effectively regulated by market forces.

To regulate is to make regular and orderly, to hold to a standard, to control according to rule, as a thermostat regulates the temperature in a building. Market forces do this continuously as competing businesses offer what they hope will be good value, customers choose among the various offerings, competing businesses react to those customer choices, and then customers choose again. That process is the market's regulator.

The public seem unaware of this regulation by market forces. In the semantics of the day, "regulation" means "government regulation" only. It means restriction by statute. When people complain

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that we are overregulated, they don't mean that we have an excess of the desirable aims of regulation: regularity and predictability in markets, and decent quality and reasonable prices for the goods and services we buy; they mean that government agencies impose too many restrictions and mandates on us, and that we chafe under the burdens they impose.

Yet because the public, blind to the market regulation all around them, believe government regulation to be the only means to attain the desirable ends of regulation, they grudgingly accept a vast array of meddlesome, wrongheaded, and often counterproductive government mandates and restrictions we would be better off without.

Government regulation is not the only kind of regulation. We should stop talking about regulation versus deregulation, about regulated markets versus unregulated markets. There are no unregulated markets, because market forces regulate. We should start talking about the choice we face between government regulation and regulation by market forces. And we should notice and show others that regulation by market forces works better. What follows explores why.¹

Market Forces Regulate

Most of the regulation that occurs in a market economy is regulation by market forces. To take the most obvious example, market forces regulate market prices. In healthy industries, market forces are the only regulator of prices. The terms of exchange offered by some restrict the terms of exchange others can offer in any realistic hope that they'll be accepted. If the Giant supermarket near my home is charging \$2.00 a pound for red peppers, the nearby Eddie's Market will not be able to charge a whole lot more than \$2.00 a pound and still sell many peppers. Neither will other grocery store chains or the farm stands that open nearby in the summer. All will charge nearly the same price. There is strong regularity to the prices of red peppers at any place and time. This regulation is accomplished

¹Israel Kirzner (1985) investigates the problems with government regulation as (implicitly) compared to regulation by market forces in "The Perils of Regulation: a Market-Process Approach." This article is deeply indebted to that work. But notice that Kirzner, too, uses "regulation" to mean "government regulation" only.

by each seller's reaction to the actions of his customers and competitors. In short, market forces regulate prices.

The same goes for quality. Customers won't buy peppers that aren't fresh and firm as long as they think they can get better peppers at another store. Grocers might wish they could sell peppers that are getting soft, but customers, along with the self-interested actions of other stores, won't let them. Their customers' choices and competitors' actions constrain—regulate—even the quality of produce they can offer for sale—let alone actually sell—because discerning customers spurn stores whose produce is consistently shabbier than that offered nearby. Stores in competitive markets cannot afford to put off these customers, so they maintain decent quality, even if they would prefer not to. In this manner, market forces regulate quality.

The example demonstrates a key fact: there is no such thing as an unregulated market, so long as the market is competitive and market entry is legal. Markets, by their nature, can never be unregulated. They are inherently self-regulating. The actions of every market participant constrain and influence the actions of other market participants in ways that make actions more or less predictable.

Thus, we face a choice not between regulation and deregulation, but between distinct categories of regulation: government regulation and regulation by market forces. The question naturally arises: Which process serves us better? That in turn depends on which of these processes is itself better regulated. Government regulation and regulation by market forces have quite distinct, and in some ways diametrically opposed, processes for their own regulation.

The process of government regulation is itself poorly regulated, because government regulatory agencies are legal monopolies, regulated by political bodies which are, in turn, poorly regulated as well. This political process of regulation, in which ultimate accountability is to the public as voters, is ineffective at assuring the quality of regulation itself. The process of regulation by market forces, by contrast, is itself well regulated because the enterprises that set standards of quality and safety in this process are themselves regulated by market forces. This market process of regulation, in which accountability is ultimately to the public as consumers of the regulated goods and services, is much more effective at assuring the quality of regulation.

Government Regulatory Agencies Are Unregulated, Unaccountable Legal Monopolies

Government agencies that regulate quality and safety are legal monopolies. Those they regulate are required to abide by the regulatory agencies' decisions; the regulated have no freedom to use different quality-assurance services from some competing entity instead. Government regulatory agencies are thus free of regulation by market forces and therefore not directly accountable to the public they are supposed to serve. They are indirectly accountable to the public through the political process, but that process puts such distance between the public and the government regulator as to leave that regulator effectively unregulated.

Consider some examples:

- Taxicab service is regulated by public service commissions (PSCs). Taxicab and limousine companies may not decline to follow the standards set by the PSCs and sign on instead with alternative enterprises with different standards of quality and different methods of quality assurance; the PSCs face no competition as they impose their standards, be they sensible or silly, cost effective or wasteful. The PSCs have a monopoly on the service of assuring the quality and safety of taxicabs and limousines.
- Bank capital is regulated by a web of agencies including the Federal Reserve ("the Fed") and the Federal Deposit Insurance Corporation (FDIC). Banks may not decline the attentions of the Fed and FDIC and instead choose to be inspected and certified as safe by, say, independent associations of banks that mutually guarantee one another's deposits. Hence the Fed and FDIC face no competition as they impose their standards, good or bad, systemically stabilizing or destabilizing. They have a monopoly on the service of assuring the soundness of banks and the safety of depositors' money.
- Drugs are regulated by the Food and Drug Administration (FDA). Pharmaceutical companies may not choose any other agency to test their products and certify their safety and effectiveness (at least for on-label use). The FDA faces no competition in setting these standards, even though the standards it imposes and the processes it mandates are excessively strict,

time-consuming, and expensive. It has a monopoly on the service of assuring the quality and safety of drugs.

- Government schooling is regulated by boards of education and state departments of education. Government schools may not set their own standards for curriculum and teacher performance, nor embrace a different kind of curriculum, such as the Montessori approach. They may not choose to be accredited by some independent enterprise maintaining different standards. School boards face no competition in standard setting for government schools. They have a monopoly on the service of assuring the quality of K–12 (government) schooling.

Of course, the regulatory agencies discussed above do not have monopolies in the sense that no other provider of quality assurance is allowed to operate. For example, some taxi companies may distinguish themselves by enforcing particularly high standards of cleanliness and punctuality; banks could join associations that certify their exceptionally large capital cushions; and name-brand drug manufacturers try to distinguish their products as better than generics. In all these cases, however, the government regulator is the only quality assurer to whose standards all the enterprises in the industry must by law conform. Additional, optional requirements over and above what the government requires are allowed, but the government's requirements are mandatory for all. In this sense government regulators have monopolies.

The legal monopoly status of government regulatory agencies such as the PSCs, the Fed and FDIC, the FDA, and school boards is a problem. It means that when and if these agencies do a bad job of assuring quality in their industries, the public is stuck, because there are no systemic forces to improve the agencies' performance or replace them with better quality-assurance providers. And, often, the government agencies do a very poor job indeed.

First, consider taxis and other city ride services. Entrepreneurs have recently used smartphone and GPS technology to create new city ride services. All one must do to summon an Uber car is to push a button on one's smartphone. The Uber software signals the nearest available Uber car and shows it approaching on a smartphone map. The rider gets in, gives the driver a destination, rides there, gets out, says thank you, and walks away. Uber charges the rider's credit card, pays the driver, and takes its percentage of the fare. The service is not

much more expensive in money (under normal circumstances) than a regular taxi, and it's less expensive in time and hassle. The public loves it.

Yet in many places city and state regulatory agencies have responded to this marvelous innovation with obstruction and restriction. The Maryland Public Service Commission, for example, has proposed regulating Uber as a taxi operator and preventing Uber from using its "surge pricing" system that ensures prompt service in all areas of the regions Uber serves. Virginia officials sent letters to Uber and Lyft, ordering each to cease and desist until each obtained proper authority. In Europe, many city governments have banned Uber altogether.

This interference with the growth of Uber is regulation against the public interest. The regulatory system that produces this response is broken. A properly functioning regulatory system—one tuned to delivering to the public highly valued bundles of features, as judged by the public—would leave the field open to Uber. Indeed, it would establish conditions that encourage disruptive innovation by Uber and others like it, and would not restrict their operation in any way unless a serious problem comes to light that cannot be addressed judicially. There may be no such problems.

Second, consider bank capital regulation. The Basel capital adequacy rules imposed by the FDIC, the Fed, and other bank regulators likely contributed to the housing boom of the early 2000s, and almost certainly helped generate a financial crisis in 2008 out of the housing bust. Those government regulator-imposed rules assigned relatively low risk weights to private-label mortgage-backed securities (i.e., ones not issued by Fannie Mae or Freddie Mac) rated AAA or AA by the "Big Three" credit rating agencies. This meant banks could decrease their regulatory capital requirement for a given dollar value of assets by increasing their holdings of mortgage-backed securities and decreasing their holdings of, say, business loans. Many did just that: "U.S. banks overall invested three times as heavily in AAA-rated, privately-issued securities as did non-bank investors" (Baetjer 2013: 266; see also Friedman and Krauss 2011 and Kling 2009).

In consequence, the housing bust disproportionately weakened banks. The banking system is not naturally fragile; bank regulation has made it fragile (White 2013; Calomiris and Haber 2014). Regulations intended to assure banks' capital adequacy have reduced

it instead. The system that produces such regulation is broken. A properly functioning system of bank regulation would select out destructive rules such as the Basel rules and replace them with better ones. It would select out whole regulatory bodies and replace them with better ones. But there is no such selection in the current government-monopoly system.

Third, consider FDA regulation of pharmaceuticals. The delays and expense of new drug approval are notorious. The FDA's obstruction of the flow of possibly beneficial drugs has even been expressed in popular culture. In the movie *Dallas Buyers Club*, FDA agents are the bad guys; they prevent AIDS patients from getting drugs they want to use. Michael Mandel of the Progressive Policy Institute put it like this: "The FDA, for all the best reasons in the world, has turned into a perfect machine for squelching disruptive innovation." Economists Daniel Klein and Alexander Tabarrok (2001) carried out a thorough review of academic writing on the FDA and found that "FDA regulation of the medical industry has suppressed and delayed new drugs and devices, and has increased costs, with a net result of more morbidity and mortality. A large body of academic research has investigated the FDA and with unusual consensus has reached the same conclusion."

A properly functioning system of pharmaceutical regulation would strike an appropriate balance—indeed, different balances for people with different risk tolerance—between confidence of drug safety and efficacy on the one hand, and speed to market, rapid innovation, and low cost of testing on the other.

Finally, consider regulation of K–12 education by government school bureaucracies. Even before the publication of *A Nation at Risk* (National Commission on Excellence in Education 1983), which asserted that, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war," American government schooling was stubbornly mediocre. Since then nothing material has changed. There are some superb government schools, but there are also many in poor areas that are atrocious, and even the average government school produces mediocre education at high cost (Schaefer 2010). For example, Baltimore City Public Schools spent \$15,464 per child in the 2010–11 academic year. Meanwhile, the median tuition charged by private schools attended by students receiving partial scholarships from

the Children's Scholarship Fund (CSF) Baltimore was \$5,050 (Baetjer 2013: 314–15). And these are schools considered so much better by the children's parents that they willingly pay out-of-pocket to send their children there! The numbers are not directly comparable because many of the CSF Baltimore schools include only grades K–8, while the Baltimore City Public Schools include high schools, which are more expensive. Nevertheless, the numbers suggest that Baltimore could get better schooling for less than half of what's spent in government schools, if only the quality of those schools were decently regulated.

A properly regulated system—or perhaps we should say a properly regulated *market* offering a wide range of approaches to K–12 education—would quickly weed out bad schools and teachers, and reliably weed out mediocre schools and teachers over time. It would foster innovation in curriculum, school organization, and use of information technology. It would lower costs and increase choice.

In all the cases outlined above, government regulators are doing a demonstrably bad job. They are service providers, providing the important service of assuring quality in their respective fields. But they are not assuring quality. In the cases of city rides and schooling they are actively blocking innovations that improve quality (ride sharing in the former and school choice in the latter). The question is, why? Why aren't these regulators held to account and pressured to assure the quality they are supposed to assure? In short, why aren't these regulators better regulated?

The answer, from a systemic standpoint, is that they themselves, being government-granted monopolies with a captive “client” base, are in practice unregulated. There is no robust regulation of their performance. There is no quality-assurance regulation of the job these regulators do. They are not accountable to the public in a meaningful way, at least through the official regulatory channels. In theory, government regulatory agencies are regulated by the political process, but the political process is so ineffective at regulating regulators that the regulators are *de facto* unregulated.

Take schooling as an example. How does government regulation of schooling work? Suppose, somewhere in the country, instruction of children is poor. Suppose further that the problem is not lack of money, but that the schools are like those in Baltimore, where per pupil funding is nearly the highest in the state, and far higher than the average tuition in private-sector schools in the same area.

Who is immediately responsible for regulating the quality of instruction? The principals are. It's their job to make sure the teachers do a good job. But not all principals do a good job of making sure the teachers do a good job. They may allow the poor instruction to continue because they lack the necessary authority, or experience, or competence, or motivation, or support from their own superiors. Whatever the reason(s) may be, when principals don't do a good job, who is accountable? Who or what regulates the performance of principals?

The school board does. It hires the principals; it is supposed to make sure the principals are getting good performance from teachers so that students can learn. But suppose the school board does a bad job—how is its performance to be regulated? A bad school board might not recognize the problems in its schools. Its members might have personal connections with poorly performing principals. Or they might be doing the best they can, but be so tied down by the teachers' union contract that they can't require the changes they think are needed. Or, despite the best will in the world, they might simply not know what to do to improve a mediocre school district. Whatever the reason, in such cases the unsatisfactory performance of the school board must not be tolerated. The school board itself must be regulated, held accountable, and required to do a better job. Who or what is to do that?

In most states, school board members are democratically elected, so the citizens of the district, in their capacity as voters, are responsible for regulating school board quality. If a particular board is doing a poor job, then vote it out and vote in a good board—one that can recognize problems in its districts and schools, resist the temptation to hire (or not fire) personal friends, stand up to teachers unions, and, most essentially, know enough about teaching, learning, and management to regulate well the schools it oversees. But voters as a whole are unlikely to be sufficiently well informed and motivated to hold school boards to account at the ballot box. Most voters have no school-age children of their own. Voters realize that any one person's vote is most unlikely to decide an election, and researching different candidates' qualifications takes time. Hence it does not make sense for most voters to inform themselves of candidates' qualifications. They are "rationally ignorant."

In some states, state departments of education take responsibility for regulating the school boards. In extreme cases, some state

government bureaucracy takes over underperforming schools or school districts and installs new management. But that begs the same question. State departments of education may also perform well or badly, for the same reasons school boards do. Who or what regulates the state departments of education? Well, the state legislatures do. And if a state legislature is doing a poor job of regulating the department of education, the citizens, in their capacity as voters, must vote out the legislators who are not regulating the departments of education well and vote in new legislators who will.

We could consider the regulatory role the federal government has taken on with President Bush's "No Child Left Behind" policy, President Obama's "Race to the Top" policy, and the current push to implement "Common Core." The essential structure of government regulation of schooling remains the same, however, no matter how many layers of government overseers are added on. Government schooling is regulated in a monolithic, top-down manner by a chain of political authority. Teachers are regulated by principals, who are regulated by school boards, who are regulated by state departments of education, who are regulated by state legislatures, who are regulated by voters.

Where, in all this, are the parents, the people with the most knowledge of their children's needs and the greatest incentive to see them educated well? Ultimately parents do have some decisionmaking authority over the government schools their children attend. But what a dreadfully attenuated kind of control the parents exert. Only once every two years do the parents have any actual choice to make that affects this political structure, and that choice is generally among a handful of candidates who may know or care little about education, and whose positions on a host of issues other than education they must also consider. Parents' votes are diluted by the votes of non-parents who also vote, and each voter's vote has a vanishingly small chance of deciding the election.

In this process of government regulation of schooling, each higher level of authority is further and further distant from the students, classrooms, and teachers. At every remove from principal to school board to department of education, the regulators have less and less knowledge of the students, the teachers, the school's culture, and teaching itself. At every remove, the incentives to act become more about politics and less about learning. This is a deeply flawed way to regulate the quality of schooling.

This political process for regulating school quality, for exerting pressure on teachers, principals, and schools to improve, lacks any process for self-improvement. It is undisciplined, irregular, lacking in quality control. It lacks any agency or process that forces the poor teachers and principals and school boards to improve and replaces them if they don't. The system does not assure quality. It is, in short, very poorly regulated.

The same can be said of the other industries considered above. By impeding the expansion of ride-sharing services such as Uber and Lyft, state and municipal PSCs are not assuring quality in city transport, but blocking quality improvement. What is supposed to regulate their performance? The state legislatures are. And if the state legislatures fail in their job of assuring the quality of the PSCs' performance, then, again, it's up to the voters to turn out the legislators at fault. But the majority of voters are either rationally ignorant or rationally irrational (Caplan 2008), so this is no check whatsoever and the PSCs are effectively unregulated.

With banking and pharmaceuticals we have the same difficulties but on a national scale. When officials in the FDA drive up the cost of drugs and stifle innovation with excessive caution, and when bank regulators in the Fed and FDIC make the banking system more fragile by imposing capital regulations that herd banks into similar investments, what is supposed to regulate their performance and push them to improve their regulating? Congress is. But if Congress does no more than tinker with the status quo and thereby fails in its job of assuring the quality of pharmaceutical and bank capital regulation, who or what is to regulate Congress? Again, the ultimate responsibility lies with voters, who are rationally ignorant or rationally irrational. This means that, like school boards and PSCs, the FDA, the Fed, and the FDIC are effectively unregulated. They have no accountability to consumers of medicines or banking services as consumers, rather than as voters.

Toward a Theory of Regulation by Market Forces

The alternative to monopolized regulation by government agencies is decentralized, competitive regulation. It works through an ongoing process of action and response between goods and service providers and their customers. In response to experience, competing businesses offer goods and services with various different

characteristics, including different standards of quality and safety, which they hope will attract customers. Then customers choose among the various offerings, rewarding with profits (monetary, reputational, and/or psychic) those whose standards and prices satisfy them best, and punishing with losses (again, monetary, reputational, and/or psychic) those whose overall value falls short. The competing businesses then respond to this response from their customers. Those that have experienced losses work to improve their standards or else go out of business; the others work to maintain their standards or improve on them to increase their competitive advantage. Customers respond again in their turn, and so the process goes.

This process obviously applies to final goods and services such as the red peppers discussed above. Businesses selling them must meet the current standard of quality in order to stay in business. But the process also applies to another useful kind of product—the service of quality assurance. Enterprises that sell or provide assurance of safety and quality—call them quality-assuring enterprises (QAEs)—are subject to the same kind of regulation by market forces as are goods and service providers. They compete for clients or customers by establishing and offering different standards for product quality and safety and/or different approaches to assuring that those standards are met. The customers of these QAEs are the goods and service providers whose products will be more attractive to customers if the products come with reliable assurance of quality and safety. Those QAEs that give their customers (the goods and service providers) better packages of quality assurance at reasonable prices will win business, earn profits (or improved reputation), and expand. Those that give their customers worse packages of the same will lose business, make losses, and contract.

Direct Regulation by Customer Choice;

Indirect Regulation by QAEs

Regulation by market forces thus occurs in both a direct and an indirect manner. Enterprises are directly regulated by their (potential) customers' choices and their competitors' actions. Such regulation is always present in a free market. For many product or service characteristics, no regulator other than customer choice is necessary, because customers can directly evaluate them. Examples include

price, color, freshness, location, size, and whether or not the product actually functions properly (e.g., a lawn mower or toaster).

For other product characteristics, however, such as quality and safety, direct regulation by customer choice is insufficient for potential customers because they cannot easily judge quality and safety for themselves, or cannot judge it before actually using the good or service for a while and thus exposing themselves to danger. They would like to know ahead of time, for instance, that a taxi company they call will provide a safe ride in a clean car, that a bank they choose will keep their deposits safe, that the medicine they take will be safe and effective, or that a school they choose will teach their children well. Lacking the ability or opportunity to assess quality ahead of time in cases like these, potential customers need to rely on assurances of quality and safety based on the experience and knowledge of others. In some cases a formal or informal certification of quality is a necessary feature of the product for customers. As Daniel Klein (2002) has pointed out, where there is a demand for assurance, supply will arise to meet it.

Goods and service providers, too, may want outside assurance of the quality and safety of their products. For example, drug makers and banks may want outside examiners to judge how safe their drugs or capital standards are. They might not be sure how their products stack up against their competitors' offerings in these respects. Or they may find it difficult to assure their customers of the quality and safety of their products. In such cases some outside assurance is valuable to providers as well.

Hence the emergence of QAEs of one kind or another. These establish and (try to) maintain standards that good or service providers in an industry must meet as a condition of earning that QAE's public assurance that its standards have been met. That assurance is a valuable feature of the good or service to which it applies, and both goods and service providers and their customers are willing to pay for it.

The regulatory service provided by QAEs is itself regulated by competition among QAEs for the business of companies in the industry they regulate. This means that regulation by market forces is recursive, with customer satisfaction directing the whole process. This contrasts with government regulation in that the *de facto* regulator—that which constrains and directs the enterprises in an industry—is not a monopoly entity with power to coerce, but a web

of market forces, consisting of competing standard setters selected directly or indirectly by the choices of the consumers of the good or service being regulated.

Categories of Quality Assurance

There are many kinds of suppliers of quality and safety assurance (Klein 2002). This article considers three main kinds: membership in a network or association in which membership is contingent on quality; third-party certification; and insurance.

Network Membership. A ubiquitous type of QAE is a network with a public identity, such as an association, franchise, or brand. This kind of QAE sets standards that its members must meet in order to carry the brand name or join or stay in the network. Network membership is an indirect kind of certification. By accepting any particular good or service provider into the network, the network effectively certifies the enterprise as having met its standards. The enterprise takes on the reputation of the brand or network, and its customers can then rely on that reputation. Network membership is a desirable feature of the product that customers value more or less highly as they accumulate experience with the products offered by network members and the network's reputation accordingly improves or degrades. For customers, dealing with members of established networks reduces information costs: they don't have to assess an individual enterprise within a network because they can rely on their own and the public's assessment of the network instead. The more difficult it is for customers to assess quality on their own, the more valuable this quality-assurance function becomes.

We can observe regulation via network membership in the city ride industry today, where Uber is a QAE with a strong regulatory function. Uber sets standards for various aspects of its ride-sharing business, such as the kinds and conditions of cars that may be used, the insurance coverage drivers must have, drivers' backgrounds and legal records, and the minimum average customer ratings that drivers must maintain. Uber's customers can count on those standards being met. For aspects of the service that customers care about, Uber's competitors, such as Lyft and traditional taxi companies, are constrained to maintain standards of their own that at least approximate those of Uber if they are not to lose market share. If the traditional taxicab industry were not so heavily restricted in the minutiae of the business, individual taxicab companies might also differentiate

themselves by forming associations that maintain particular standards of quality to which their competitors would have to respond. Of course, such differentiation along quality lines would be much more likely if the associations were allowed to benefit from their investments in higher quality by charging more, which they are currently not permitted to do.

A similar kind of regulation via network membership can and did work in banking. Before being crowded out (in the United States) by the Fed, the FDIC, and other government regulators, bank capital and bank soundness were regulated by the market-imposed necessity of membership in a clearinghouse association. Because clearinghouse membership so greatly reduces any bank's cost of operation (absent such membership, the bank would have to redeem banknotes and checks with every other bank individually), in free-market banking every bank must maintain membership in one or more clearinghouse associations. Every bank in a clearinghouse association wants reliable assurance that other banks in the association are solvent and liquid and therefore able to meet their clearing obligations. Accordingly the banks in the associations set capital and liquidity standards for themselves and enforced them with periodic examinations of member banks' books (Selgin 1988: 28). Clearinghouse associations were QAEs for the banking industry, and would probably be so again if banking regulation were left to market forces.²

Regulation via network membership is also visible in K–12 schooling in the United States today, both in the fully private sector and in the charter school sector, which is free of much of the government regulation on traditional government or “public” schools. Networks of schools such as Montessori schools, traditional Catholic schools, and Christo Rey schools, and charter school chains such as the KIPP (Knowledge is Power Program) schools, Uncommon Schools, and Green Dot Schools establish and maintain particular standards of quality. These networks and enterprises each set standards for many aspects of schooling—for teacher-student ratios, curricula, length of school day, teacher performance, class size, facilities, and the like. No school is allowed to be a KIPP school, for example, and enjoy the

²Of course many banks did fail before the Fed and FDIC, and there were periodic banking crises. As Selgin (1988) and Horwitz (1992) among others have shown, however, these problems resulted from legal restrictions on the banks, such as prohibitions on branching and requirements that they back their notes with government bonds.

benefits of the KIPP name, network, and proprietary techniques unless it meets these standards. Furthermore, the owners of the KIPP brand may tighten or loosen its standards, add new ones, or drop old ones as they see fit in response to profit or loss or the advent of new technologies and community needs.

The standards set by QAEs such as Uber in ride service, clearinghouse associations in banking, and KIPP in schooling can and must change over time in response to customer desires and competition from other standards set by competitors. In this they differ from standards set by government regulatory bodies, which face no competition in their particular domains.

Note that the quality-assurance role played by brands and networks (as opposed to that played by certifiers) need not be the network's main function. It comes as a byproduct of its trying to please customers by maintaining desirable standards and, in the case of clearinghouse associations, protecting its members from losses. Nonetheless, any brand or network's standards of quality and safety become an element of the market environment to which other enterprises must adjust themselves.

Third-Party Certification. Another kind of quality-assuring enterprise is a third-party certifier. Third-party certification is particularly valuable for products and services that have important aspects of quality which the customers cannot easily discern, even while using the product. This is the familiar problem of asymmetric information. Riders in taxis and Uber cars can readily judge the cleanliness of a car and how quickly drivers answer requests for service. Likewise, parents of school children can, given a little time, judge the attitudes of teachers and how well their children are learning. But most bank customers cannot judge a bank's capital adequacy, and users of a medicine cannot judge its long-term side effects or interactions with other drugs without facing unacceptable risk. Users of electrical appliances cannot judge their fire safety. For products such as these, some expert, third-party judgments are wanted.

Sometimes quality assurance is an enterprise's primary business. Examples abound. For example, the National Institute for Automotive Service Excellence (ASE) certifies auto mechanics for a wide range of specialties, and individual vehicle makers also certify mechanics as competent to work on their particular brands. Various companies certify gemstones. Diplomas, degrees, and

certificates certify competence in a host of fields from medicine to plumbing. Eminent among enterprises whose primary business is certification is Underwriters' Laboratories (UL), which certifies the safety of thousands of potentially dangerous products, including insulation, electrical devices, and bulletproof vests. These third-party certifiers set standards that outside applicants must meet in order to gain their certifications. The certification itself, once granted, becomes a feature of the product or service that, as long as the certifier maintains its good reputation, makes the product more valuable in the eyes of potential customers. It can increase sales and hence profitability. In other cases, "certification" is less explicit and direct; it's an ancillary function of an enterprise. Doctors or medical teams at a hospital, for example, may primarily treat patients, but secondarily and simultaneously research different treatments, publish the results, and thereby in effect certify (or not) the treatments they evaluate.

What manner of certification do we find in the four industries we have been considering? I know of no private-sector certifier of taxicab drivers or taxicab companies. In the past, such certification might have been more trouble than it was worth, in part because PSCs license companies and drivers, and in part because a rider can directly judge the quality of taxi service, so no certification would have been worth its expense. In the era of the Internet, however, virtually every rider becomes an inspector and certifier, because riders can rate the quality of service in real time at trivial cost. Uber's app invites riders to rate their drivers and the cleanliness of the cars, and Uber denies drivers access to the service if their customer ratings fall below a high level.

Clearinghouse associations would (and did) regulate banking in a hybrid manner, offering both membership in a trusted network and a kind of certification. The bank examinations that clearinghouse association members imposed on one another out of concern for their own safety were a kind of certification test. The fact that a bank is a member in good standing effectively certifies that the bank has passed examination. It seems conceivable, too, that in a mature free-banking system, third-party examination companies might emerge to which the clearinghouse associations would contract out the work of bank examination. Were that to happen, the bank examination specialist would be a third-party certifier in the full sense.

With respect to the drug industry, the case of UL is instructive. UL is a nonprofit enterprise created initially by insurance companies that wanted to know how safe were the products sold by the companies they insured. Insurance companies need, and will pay for, the same kind of information about the drug companies they insure. Accordingly, if the FDA's legal monopoly on certifying drugs were to be eliminated, some UL equivalent(s) would likely be created to test and certify drugs. In practice, however, if new drug testing and certification were free of the FDA monopoly, much would probably be carried out in a more distributed and small-scale way than by big enterprises such as UL. As Klein and Tabarrok (2003) document, a vast amount of the testing and certification of drug efficacy today is done outside the scope of government regulation. Regulation by market forces is the only kind of regulation that exists for *off-label* uses of drugs that have been approved by the FDA for some specified ("on-label") use. How effective and safe a drug might be in treating an off-label use is explored by physicians and hospitals, often working with scientists and medical researchers. They offer their customers—their patients—new kinds of treatment based on theory or evidence that the drug might be effective in a particular off-label use. Patients—customers—respond, both in the sense of choosing whether or not to give the care provider repeat business, and also in the physiological sense of responding for better or worse to the treatment. If the treatment is successful, or promising, physicians who have tried it write it up and submit it to a kind of certification process carried out by peer reviewers, attendees at conference presentations, researchers, and other doctors and hospitals which try the treatment. These are all in effect certifiers of the treatments described in the studies and presentations. There is even a standard reference work, the *U.S. Pharmacopeia Drug Information (Pharmacopeia)* which "uses expert committees to compile and evaluate the dosing, indications, interactions, pharmacology/pharmacokinetics, and side/adverse effects of drugs for both labeled and off-label uses" (Klein and Tabarrok 2003).

For schools, there are various accrediting boards. As suggested above, parents are pretty well able to judge the quality of the schools their children attend, given enough time, so third-party certification in this industry is not extensive and may not be especially valuable. To the extent that it is, however, we would expect that independent accreditors would arise in a free market for schooling.

Insurance. A third kind of QAE is an insurance company. Assuring the quality and safety of the goods and services produced by the companies it insures is not the main purpose and product of an insurance company, of course. Nevertheless, in order to protect itself from paying excessive damages, an insurance company has a strong interest in assuring itself that the goods and services its clients provide are reasonably safe. Insurance companies that insure taxicab companies and ride-sharing companies such as Uber will want to assure themselves that the cars used are in good repair and that the drivers are competent and law-abiding. Companies that might insure bank deposits in a free market for banking would want to assure themselves that the banks were adequately capitalized. Companies that insure pharmaceutical companies certainly want the drugs their clients sell to have been carefully tested for safety. Companies that insure schools want to know that the buildings are fire-safe and sanitary. Insurance companies therefore will inspect and test the products and processes of their clients (or contract out this inspection and testing, as they do to UL). Consequently the riders, depositors, medicine-takers, and schoolchild parents of insured institutions can all free-ride on the self-interest of their insurance companies.

Market Forces Regulate Market Regulators

QAEs in effect regulate their industries by setting the standards producers must meet to gain credibility with customers. In turn, QAEs are themselves regulated by market forces. Final customers drive this regulation. Their choices provide profit-and-loss feedback to goods and services providers (GSPs), and based on that feedback GSPs choose or reject QAEs' services. As long as the quality assurance a QAE provides is sufficiently valuable to GSPs' customers, GSPs will pay for it and that QAE will flourish. Otherwise the QAE will fail. In this manner consumers' choices regulate the QAEs and thus, indirectly, the standards they set.

In a free market any number of certifiers, brands, or networks may exist in an industry at the same time, and each may—probably will—maintain different standards. This variety is a crucial feature of regulation by market forces because these are the variations among which the market process selects, clearing away regulations that are too costly and putting in place regulations that create value overall.

It is important to note that under regulation by market forces, any producer is free to switch QAEs or go it alone outside any brand or network and without any certification or insurance.

- Drivers who contract with Uber are free to reject Uber's terms and work with Lyft instead. Under regulation by market forces they would also be free simply to cruise as independent taxis.³
- Banks could withdraw from any clearinghouse association they found oppressive and join a different one, or start their own.
- Pharmaceutical companies could pick and choose the quality-assuring enterprises they employ, probably using different certifiers for different drugs. We can imagine quality-assuring enterprises competitively developing specialized expertise and testing technologies targeted at certain classes of drugs.
- A school not doing well in one network or brand might be taken over—bought out—by a schooling enterprise of another brand (e.g., KIPP), or renounce any brand and go independent.

Freedom of exit, including freedom to go without external quality assurance, is another crucial characteristic of regulation by market forces (and a fundamental difference from government regulation by legal monopolies whose “services” GSPs are required to use). The profitability and growth of GSPs that try to go it alone are likely to suffer, however, in industries where large numbers of their potential customers want the kind of information only a QAE can provide. Importantly, GSPs that do not choose to join a particular network or get their products certified are still regulated by market forces, in that they still must respond to the expectations of quality those networks and certifiers create in industry customers. They must pretty closely meet the standards established by their competitors who do join the networks or gain the certifications, in order to sell their own products successfully.

The process of regulation by market forces selects for the standards and the standard-setters (QAEs) in the same way it selects for the goods and services produced and those who produce them. That's logical, because a QAE's product *is* its standards. QAEs are a subset of GSPs; they provide the service of setting standards and

³Congestion problems may arise when anyone is free to operate a taxi in cities where roads are a publicly owned commons. Some government regulations might be necessary on government-owned roads (See Klein 1998).

evaluating and certifying the quality of the GSPs' products. Just as competition among GSPs for their customers' business regulates the price and quality of final products, competition among brands, networks, and certifiers regulates the price and quality of the regulation QAEs provide.

Regulation by Market Forces Weakens as Markets Become Less Free

Regulation by market forces weakens as a market becomes less free. Imagine a grocery store with a legal monopoly on red peppers. Such a store, lacking competition or potential competition, could charge a fairly wide range of prices, and offer a fairly wide range of quality of its red peppers, and still be able to sell them. After all, its customers would have nowhere else to turn. The same would apply if there were many competing grocery stores, but restrictions on the importation of red peppers as to quantity or place of origin. In such cases the pressure to maintain quality and hold down price—the regulation of quality and price—would be reduced.

It is the very freedom of the market that makes regulation by market forces tight. Competing grocery stores are free to sell red peppers; red pepper customers are free to take their business elsewhere or go without. Similarly, where the service sold is quality assurance, competing QAEs must be free to enter the business if they are to discipline other QAEs and maintain pressure for better standards. And customer GSPs must be free to take their business elsewhere or go without. Where such freedom reigns, the quality and cost of regulation are themselves tightly regulated. But salutary regulation by market forces weakens as markets become less free.

Hence a paradox: the less a market is restricted by government, the more it is regulated by market forces. The less government restricts market forces, the more market forces regulate. The more government restriction, the less market discipline, and vice versa. There is a direct tradeoff between the two modes of regulation.

For illustration, consider the current controversy over ride-sharing companies such as Uber and Lyft. Those companies' high standards of responsiveness and convenience are putting pressure on traditional taxicab companies to improve. In effect, the higher performance standards of Uber and Lyft are regulating traditional taxicabs: if the taxicab companies in an area served by Uber and Lyft don't

improve their responsiveness, they stand to lose business. But if the cab companies can get the ride-sharing companies restricted by government in the ways taxis are restricted, that market regulation will ease up or disappear.

Consider K–12 schooling. Government schooling is of low quality because its quality-assurance process lacks market forces—its regulator is unregulated. But schooling in general does have freedom of entry for private-sector schools that compete with government schools. Private-sector schools, regulated by market forces, generally offer better quality at lower cost per student. Parents with enough wealth have freedom of exit from any particular school system by moving to another area. The growth of the school choice movement—charter schools, privately funded scholarship programs, education savings accounts, and tuition tax credit programs for companies that donate to scholarship-granting organizations—is also bringing more market forces into schooling.

All these market forces in schooling regulate government school quality from the outside to a certain degree, arguably more effectively than school boards do. The higher standards maintained by the charter and private-sector schools are compelling traditional government schools to improve or lose students and, ultimately, they fear, funding. When public outcry about the appalling failures of government schools gets loud enough, and the contrasts with private, parochial, or charter schools get embarrassing enough, the political apparatus lurches into motion and once again attempts to improve quality. The more school choice is limited by government policy, however—that is, the more completely a region's schools are dominated by government regulation—the weaker is this regulation by market forces and the easier it is for schools to stay mediocre or worse.

Why Market Forces Regulate Better than Government Agencies

To review the argument so far: Government regulatory agencies face no competition in providing their “services,” and their “clients” are required to use that “service”; the political process that oversees regulatory agencies’ performance is so ineffective that the agencies are essentially unregulated; and the alternative—quality and safety regulation by market forces—is a process that is itself effectively regulated by market forces. The following sections explore some of the

practical consequences of the differences between these two modes of regulation, which explain their very different effectiveness.

Systemic Learning

Government regulation differs from regulation by market forces in the amount of knowledge used in establishing, evaluating, and adjusting regulations. Monopoly regulators don't know what to require and what to ignore, or what new, less-costly processes they might use in evaluating quality and safety. This is not surprising. None of us can know for sure what to do to make the world a better place in the absence of a process that gives us both feedback from those we are trying to serve and an incentive to pay attention to it. Given that it lacks such a process, government regulation tends to be ill-informed and stagnant. Part of the problem is that government regulators face no competition; their "customers" have no one to turn to if those regulators do a bad job of regulating. Consider the following:

- City riders unsatisfied with the performance of taxis regulated by the PSC are forbidden from turning to taxis regulated in some other, better way, because taxi companies are not permitted to turn to other regulators.
- Small businesses frustrated at their inability to get a loan from their local banks, because such loans are deemed too risky according to the Fed's models, are forbidden to turn to other banks whose different regulators allow such loans in keeping with different judgments of risk. Why? Because all banks must comply with the Fed's risk regulation; there are no other bank regulators to choose.
- Sick people whose doctors believe a particular drug might be a good treatment for them may not use that drug until it has been approved by the FDA. Their doctors and insurance companies may not rely on the judgment of independent researchers that assess drug safety; no judgments other than those of the FDA count.
- Parents unsatisfied by the teaching standards at their children's government school cannot move their children to a better-regulated school unless they either physically leave the poor-performing district or else strand their tax dollars and pay again for a private-sector school, because all government schools in a district are regulated the same way.

By contrast:

- In response to pressure from their customers, competitors, and the media, Uber and Lyft are actively tuning their requirements for driver background checks, insurance, and surge pricing algorithms based on their customers' feedback and media attention. These standards are evolving with experience.
- In banking free of government regulation, different banks with different tolerance for risk and different ability to assess it would make different kinds of loans. Profit-and-loss feedback would tell banks and their clearinghouse associations which kinds of loans and which kinds of overall asset profiles are riskier, calling for more capital to back them. These standards, enforced by clearinghouse associations as conditions of membership, would evolve with experience. Clearinghouse associations whose standards are too strict would lose members to more liberal competitors, and those whose standards are too loose would lose members by attrition as weak or troubled banks were bought out by stronger ones.
- If doctors and hospitals were free to try new treatments according to their own judgment, new drugs and treatments would be regulated in the same way off-label uses of drugs are regulated now: that is, "by the consent of patients and the diverse forms of certification made by physicians and medical institutions" (Klein and Tabarrok 2003: 6).
- Schooling could be regulated almost entirely by market forces, even if governments continued to pay for schooling through a voucher system or some other mechanism for letting parents, rather than school boards, decide which schools receive their children's schooling dollars. In such a system parents unsatisfied with one school could put their children in another, better-regulated school. These choices would shape the evolving quality standards all schools must meet to stay in business.

This market process of feedback and discovery of what regulation is truly valuable to those who use goods and services is lacking in government regulation.

Incentives to Learn

The monopoly status of government regulatory agencies means that they get paid regardless of how badly their regulations serve and

satisfy the public. Officials in PSCs do not get paid by the satisfied-customer-mile. Officials in the Fed and FDIC don't get paid according to how efficiently banks get depositors' funds to credit-worthy borrowers. Officials in the FDA do not get paid according to the value of new drugs brought to market. School board members do not get paid according to how much children learn. Payments for government regulation are not made by the free choice of the regulated enterprises, as guided by the free choices of those enterprises' customers. Instead, the regulators get paid out of tax revenues, whether they do a good job or not.

This unconditional financing is unlike that for firms competing with each other and even private-sector monopolies, which lack the power to force customers to buy what they are selling. A government regulatory agency's revenue is paid out of taxes. Such an agency can provide a "product" its regulated enterprise "customers" actually find detrimental to their business—because it reduces the value they deliver their customers—and still get paid.

Because government regulators' funding is disconnected from their performance, government regulators lack a financial incentive to regulate well and to make improvements where they can. They have weak incentives to try out different standards and processes, and to eliminate regulations made obsolete by technological change. There is nothing in government regulation that rewards regulators for increasing the value they deliver to customers of the enterprises they regulate. Hence government regulators generally don't focus on the value delivered to customers.

Even if a particular government-monopoly regulatory agency should wish to engage in trial-and-error discovery, that agency can try out only what it conceives. It has only its own ideas and knowledge to rely on. There is no trial-and-error learning through new entrants' offering a better package of regulation, because the regulator is not a dynamic system of providers; it's one provider. There is no way for government regulators to learn from competitors by observation, because they have no competitors. The monopoly privilege necessarily reduces discovery of better approaches to regulation.

The most important means by which market processes help people identify the best discoverable ways to provide a good or service—profit and loss—is entirely absent from government regulatory services. In competitive markets, enterprises often do not know why customers value their products, or even what their customers are using their

products for. Nevertheless, if they are earning profits they know they are doing something right, and are encouraged to do more of that kind of thing. Likewise they may not perceive how their product is failing to satisfy customers, or what their competitors are offering that they are not. Nevertheless, mounting losses tell them unmistakably that they are doing something wrong and, ultimately, force them to improve or to close down. Monopoly government regulators, lacking this profit-and-loss feedback, can never really know whether the regulatory services they provide are benefiting or harming the public on net.

Special Interest Influence

Monopoly government regulators also face perverse incentives to block innovation by maintaining regulations that hurt the public but benefit politically powerful insiders. This is the problem of rent seeking and regulatory capture. It is well enough understood that it will not be reviewed here in detail, beyond pointing out examples from the industries considered above.

- Taxicab companies around the world are protesting the growth of ride-sharing enterprises such as Uber and Lyft, and demanding that disruptive newcomers be restricted by the same regulations the taxis face. Such regulation would protect the profitability of the established taxi companies but hurt everyone else.
- The Basel I bank capital rules assigned zero risk weight to the bonds of all sovereign governments, regardless of their financial health. This absurd rule likely resulted from pressure on the Basel committee from sovereign governments who want no restraints on their borrowing.
- Government school administrations and teachers unions fight the advance of school choice—charter schools, vouchers, and tax credit programs that would expose government schools to more competition—on the grounds that all schools directly or indirectly funded by taxes should meet certain requirements on curricula and teacher qualifications. However, the real purpose of such resistance to competition in schooling is not to promote the well-being of school children, but to protect the flow of taxpayer dollars to the school systems and teachers unions.

Special interest influence depends on the monopoly power of the government regulatory agency to impose its standards. By contrast,

special interests cannot obstruct the establishment of better regulatory standards when regulation is by market forces, because in a free-market enterprises can opt out of bad regulation and choose a better alternative. Established taxicab companies cannot hamstring Uber and Lyft with senseless and costly restrictions as long as Uber and Lyft can keep themselves free of regulation as taxicabs. Banks would have no incentive to hold disproportionately large quantities of risky government bonds if their capital cushions had to meet the evolved standards of a clearinghouse association, rather than the one-size-fits-all Basel standards. Schools would be free to hire effective teachers without union cards and education degrees if their funding came from pleasing parents rather than pleasing the public school bureaucracy.

In other words, if regulation were by market forces, the special interests would lose their power to influence it in their favor.

Protection of “Turf” and Jobs

Another reason government regulation falls short of regulation by market forces is that there are strong incentives for government regulation to persist even when it is demonstrably bad. Government regulators don’t want to learn from experience that their regulations obstruct progress; they want to keep their jobs. If Uber and imitators are allowed to flourish unmolested, the old-fashioned taxi business will likely wither to insignificance. What, then, would be the point of an old-fashioned taxi regulator? The very success of Uber makes government regulation of city ride services look superfluous and anachronistic, as it may be. But regulators don’t like being seen as bureaucratic waste, so they are working to pull ride-sharing services under their control. When the financial crisis made manifest the failure of bank regulation to keep banks sound, the regulators’ response was not to say, “We have shown ourselves inadequate to our task; we should be relieved of our duties.” On the contrary, they asked for and received more authority to interfere with banking through the Dodd-Frank Act. The FDA has made medicine more expensive and less accessible for decades, but it does not close itself down. Charter schools operate outside the control of school boards, and voucher and tax credit programs let parents move their children to independent schools outside of the control of school boards. Accordingly, it is no surprise that the school boards fight charters, vouchers, and tax credit programs despite mounting evidence that competition regulates better than school boards do.

Conclusion

Regulation by market forces is imperfect, of course, but it is superior to government regulation in a number of important ways. The most crucial difference is that while government regulates through agencies that have a monopoly on the “service” they provide, market forces regulate through a dynamic, distributed, and competitive *process* in which both goods and service providers and quality-assurance enterprises respond to consumer choices. This means that while government regulations have to be *designed* based on the limited, centralized knowledge of legislators and bureaucrats, the standards imposed by market forces are free to *evolve* through a constant process of evaluation and adjustment based on the dispersed knowledge, values, and judgment of everyone operating in the marketplace.

Incentives and accountability also play a central role in the superiority of regulation by market forces. First, government regulatory agencies face no competition from alternative suppliers of quality and safety assurance, because the regulated have no right of exit from government regulation: they cannot choose a better supplier of regulation, even if they want to. Second, government regulators are paid out of tax revenue, so their budget, job security, and status have little to do with the quality of the “service” they provide. Third, the public can only hold regulators to account indirectly, via the votes they cast in legislative elections, and such accountability is so distant as to be almost entirely ineffectual. These factors add up to a very weak set of incentives for government regulators to do a good job. Where market forces regulate, by contrast, both goods and service providers and quality-assurance enterprises must continuously prove their value to consumers if they are to be successful. In this way, regulation by market forces is itself regulated by market forces; it is spontaneously self-improving, without the need for a central, organizing authority.

We live in a time when regulation has become synonymous with restriction, and government-monopoly regulatory agencies increasingly strangle the life out of enterprise and entrepreneurship, from boardrooms to classrooms and everywhere in between. Yet, advocates of free markets should resist calling for “deregulation,” since that term is too commonly taken to mean “no regulation at all.” Instead, their stated goal should be the replacement of government

regulation with a far more robust and effective guarantor of quality and safety: regulation by market forces.

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