By Maureen K. Ohlhausen*

In Greek mythology, Procrustes was a rogue blacksmith, a son of the sea god Poseidon, who offered weary travelers a bed for the night. He built an iron bed especially for his tired guests, but there was a catch: if the visitor was too small for the bed, Procrustes would forcefully stretch the guest's limbs until they fit. If the visitor was too large, Procrustes would amputate limbs as necessary to fit the guest to the bed. Eventually, Procrustes met his demise at the hand of Greek hero Theseus, who fit Procrustes to his own bed by cutting off his head.

The story of Procrustes warns against our human tendency to squeeze complicated things into simple boxes, to take complicated ideas, technologies, or people, and force them to fit our preconceived models. We often do not recognize this backward fitting tendency, observes risk analyst Nassim Taleb, or are even oddly proud of our cleverness in reducing something complicated to something simple.¹

Regulators should embrace the lesson of Procrustes. They should resist the urge to simplify, make every effort to tolerate complexity, and develop institutions that are robust in the face of complex and rapidly changing phenomena. Unfortunately, due to regulators' limited knowledge and foresight, regulation too often is a procrustean bed for the regulated industry. And when the regulated industry rapidly evolves, yesterday's comfortable regulatory bed can quickly become a torture rack for tomorrow's technologies.

How can we avoid this dire scenario? I propose three key principles for regulators. First, approach issues with regulatory humility, recognizing the fundamental limits of regulatory action. Second, prioritize such action to address real consumer harm. Third, use the appropriate regulatory tools. Regulators and regulatory institutions that embrace these three principles will better promote innovation and avoid procrustean regulation.

I. Embrace Regulatory Humility

It is exceedingly difficult to predict the path of technology and its effects on society. The massive benefits of perhaps the most influential technology in history, the Internet, in large part have been a result of entrepreneurs' freedom to experiment with different technologies and business models. The best of these experiments have survived and thrived, even in the face of initial unfamiliarity and unease about the impact on consumers and competitors. For example, there was early widespread skepticism of online shopping. Now,

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I would like to acknowledge the important contributions of my attorney advisor, Neil Chilson, to this article. This article reflects my views, not necessarily those of the Federal Trade Commission or FTC Staff. online shopping is an every-day occurrence. Early skepticism does not predict potential consumer harm. Conversely, as the failures of thousands of dotcoms show, early enthusiasm does not predict consumer benefit.

Because it is so difficult to predict the future of technology, government officials, like myself, must approach new technologies and new business models with a significant dose of regulatory humility, recognizing the inherent limitations of regulation and acting according to those limits.

Of course, the idea that regulatory action has inherent limits is much older than my use of this term.² Nobel-prize winning economist F.A. Hayek spent much of his illustrious career demonstrating the limits of centralized planning as compared to decentralized market structures, and his insights apply equally to regulation by the administrative state. Hayek's 1945 paper, *The Use of Knowledge in Society*, describes regulators' fundamental knowledge problem, which limits the effective reach of regulation.³ As Hayek explained, a regulator must acquire knowledge about the present state and future trends of the industry being regulated. The more prescriptive the regulation, and the more complex the industry, the more detailed knowledge the regulator must collect. But regulators simply cannot gather all the information relevant to every problem.

What limits the ability of regulators to collect such information? First, collecting and analyzing such information is very time-consuming because such knowledge is generally distributed throughout the industry, in what Hayek calls "the dispersed bits of incomplete and frequently contradictory knowledge."⁴

Second, in most cases, critical information lies latent in the minds of the individuals or in the institutional structures of the industry involved. That is, even those directly involved in the industry itself cannot themselves fully explain how things get done. James C. Scott, in his book Seeing Like a State, uses the Greek term "metis" to describe this "practical knowledge," or "the wide array of practical skills and acquired intelligence in responding to a constantly changing natural and human environment."5 These are the types of skills that can only be learned by doing - think of riding a bike, for example, or speaking a language, or conducting an effective board meeting. Much of human knowledge falls into this category. And Scott argues quite convincingly that although formal organizations, including regulatory bodies, fail to recognize and capture such knowledge, they rely heavily on it. In fact, Scott indicates that regulation "is always and to some considerable degree parasitic on informal processes, which the formal scheme does not recognize, without which it could not exist, and which it alone cannot create or maintain."6 In short, regulation cannot effectively capture practical knowledge.

The knowledge problem has a third characteristic:

even when a regulator manages to collect information, that information quickly becomes outdated as a regulated industry continues to evolve. Obsolete data is a particular concern for regulators of fast-changing technological fields.

The knowledge problem means that centralized problem solving cannot make full use of the available knowledge about a problem and, therefore, in many cases offers worse solutions when compared to distributed decision-making.

Hayek's insight is actually not very controversial today. At the time Hayek wrote his paper, centralized planning was the en vogue solution for just about every social ill. Today, there is a strong consensus that markets and other distributed social learning mechanisms are much better at solving the vast majority of problems. And even the most interventionist regulators often talk about preferring market mechanisms and "light touch" regulation. Yet, despite the lip service paid, regulators still too often instinctually react to apparent problems by proposing top-down solutions. This instinct is the opposite of regulatory humility. And to be more effective regulators, we must suppress this instinct.

The modern age offers a potential new source of regulatory hubris. The success of information technology means that regulators can now gather large amounts of data. Much more of the world has become "legible" to regulators. This data certainly can help enhance regulatory decisions. But data isn't knowledge or wisdom. Data cannot capture much of the practical knowledge Scott describes. So "data-driven" decisions can be wrong. Even worse, data-driven decisions can *seem* right while being wrong. Political polling and statistics expert Nate Silver notes, "One of the pervasive risks that we face in the information age ... is that even if the amount of knowledge in the world is increasing, the gap between *what we know* and what *we think* we know may be widening."⁷ Regulatory humility can help narrow that gap.

So, Principle One is to recognize the limits of regulation and embrace regulatory humility. Having done so, then what? Congress has tasked agencies such as the FTC with regulatory tasks—some of them quite important—so how can a decision maker act with regulatory humility and still carry out its mission? My next two principles address this practical problem.

II. Focus on Identifying and Addressing Real Consumer Harm

My second principle, and a key way to practice regulatory humility, is to focus on identifying and addressing real consumer harm. As noted in the FTC at 100 Report, "[T]he improvement of consumer welfare is the proper objective of the agency's competition and consumer protection work."⁸ The most effective way to improve consumer welfare under the FTC's mandate is to find and address the most severe consumer harms.

At the FTC, this focus is part of our statute. Congress charged us in Section 5 of the FTC Act with preventing deceptive or unfair acts and practices. Deceptive acts violate Section 5 only if they are material—that is, if they actually harm consumers. And practices are only unfair if there is a substantial harm that consumer cannot avoid and that outweighs any benefits to consumers or competition. In both cases, the law concerns itself with addressing actual consumer harms. Likewise, the FTC carefully evaluates consumer welfare (or, its corollary, consumer harm) when it exercises its antitrust authority to challenge unfair methods of competition.

Not only does the law require the FTC to focus on consumer harm; such a focus is also good policy. Agencies have limited resources. We should generally spend those resources to stop existing or likely harms, rather than trying to prevent speculative or insubstantial harms.

When we analyze harms and benefits, both in our enforcement efforts and in policy making more generally, we ought to follow the advice of Frederic Bastiat. In 1850, in a famous essay titled That Which is Seen, and That Which is Not Seen, Bastiat argued that he could tell the difference between a good and a bad economist based on single methodological habit.9 A bad economist, he said, judges a policy or action based only on the "seen," first order effects of that action. In contrast, a good economist takes account "both of the effects which are seen, and also of those which it is necessary to foresee."10 Bastiat explained that the bad economist's myopic analysis might lead him to prevent a small present harm, yet trigger a much bigger overall harm. In contrast, the good economist's thorough analysis will lead her to be more tolerant of the risk of a small present harm, if it will avoid a much larger harm later.

Regulators face the same challenge and should therefore engage in diligent cost-benefit analysis. The appropriate depth of such analysis might vary, depending on the situation. In cases of clear fraud by a single party, where there are no consumer benefits, the costs and benefits need not necessarily be detailed exhaustively. However, for cases where there are both costs and benefits, and the decision could affect a wide range of parties, regulators ought to carefully assess consumer harms and benefits. This will help keep the agency resources focused on where they can do the most good.

When the FTC has properly focused on practices that are actually harming or likely to harm consumers, it has generally limited its forays into speculative harms, thereby preserving its resources for clear violations. Such self-restraint has been important to the FTC's success in alleviating a wide range of disparate consumer harms without disrupting innovation. I think this is a model worth replicating.

III. Use Appropriate Tools

The final principle that will help regulators avoid procrustean regulation is to use appropriate tools. An agency using the wrong tools will be ineffective. For fast changing technologies, agencies need tools that are nimble, transparent, and incremental. A good example of a nimble, transparent, and incremental regulatory tool is the FTC's case-by-case enforcement process.

Often, we equate regulation with detailed agency rulemakings. Such ex ante rulemaking sets out rules, often covering an entire industry, to prevent future harms. For the reasons discussed above, including the knowledge problem, regulators struggle to construct effective ex ante rules and to update such rules in a timely manner. And such prescriptive ex ante regulations can hinder innovation. For example, if an innovative new project or service does not easily fit in a particular statutory or regulatory box, the innovator may be uncertain about how to comply with the law. Such legal uncertainty exacerbates the already risky effort to develop something new, which discourages innovation.

Regulation at the FTC is generally quite different. Although the Commission does have rulemaking authority, the vast majority of our actions are ex post case-by-case enforcement of our general Section 5 authority. This incremental approach, which we have been using for nearly 100 years, has significant benefits. Consistent with Hayek's thesis about the knowledge problem, it requires far less information to apply generally applicable, well-understood legal principles to a specific case at hand, for example, than it does to execute an industry-wide rulemaking to address more general concerns about future conduct. Thus, a case-bycase approach makes the knowledge problem more tractable. Furthermore, this ex post enforcement requires specific facts on the ground and a specifically alleged harm, and it generally only directly applies to the party to the enforcement action. Thus, an incrementalist approach better limits the potential unintended consequences of a regulatory action.

(As an aside, a case-by-case approach also dampens the incentives that fuel agency capture problems. But public choice challenges in regulatory design is a topic worthy of an entirely separate article.)

Perhaps somewhat paradoxically, incremental approaches are particularly well-suited to dealing with fastdeveloping areas of technology. Even small distortions in such fast-moving industries can quickly divert the industry from its previous trajectory. A case-by-case approach allows the regulatory body to address specific problems without derailing an entire industry, and it enables the law to evolve alongside the technology in a much more organic fashion.

Industry self-regulation is another nimble, transparent and incremental tool that is well suited to regulation in fast changing industries, with agency enforcement as a backstop. Compared to traditional government regulation, selfregulation has the potential to be more prompt, flexible, and responsive when business models or technologies change. Selfregulatory frameworks are easier to reconfigure than major regulatory systems that must be adjusted via legislation or agency rulemaking. Self-regulation can also be well attuned to market realities where self-regulatory organizations have obtained the support of member firms. A regulatory backstop that holds companies to the promises they make under a selfregulatory framework—like the FTC's deception authority ensures that companies take seriously their responsibilities under a self-regulatory framework.

Conclusion

Regulators will better fulfill their regulatory missions and minimize negative effects on innovation when they embrace regulatory humility, focus on identifying and addressing real consumer harms, and use the proper regulatory tools. Applying these principles can help avoid subjecting tomorrow's technologies to an ill-fitting procrustean bed of regulation.

Endnotes

1 NASSIM N. TALIB, THE BED OF PROCRUSTES, XII (2010).

2 I have focused on what I think is the most fundamental limitation of regulation, the knowledge problem. However, there are many other obstacles to effective regulation, as public choice scholars have well documented. *See, e.g.*, WILLIAM A. NISKANEN, JR., BUREAUCRACY AND PUBLIC ECONOMICS (1994).

3 Friedrich A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. Rev. 519-30 (1945).

4 Id.

5 JAMES C. SCOTT, SEEING LIKE A STATE: HOW CERTAIN SCHEMES TO IMPROVE THE HUMAN CONDITION HAVE FAILED 313 (1998).

7 NATE SILVER, THE SIGNAL AND THE NOISE: WHY SO MANY PREDICTIONS FAIL—BUT SOME DON'T 46 (2012).

8 WILLIAM E. KOVACIC, THE FEDERAL TRADE COMMISSION AT 100: INTO OUR 2ND CENTURY, THE CONTINUING PURSUIT OF BETTER PRACTICES at iii (Jan. 2009), *available at* https://www.ftc.gov/sites/default/files/documents/public_ statements/federal-trade-commission-100-our-second-century/ftc100rpt.pdf.

9 $\,$ Frederic Bastiat, That Which is Seen, and That Which is Not Seen (1850).

10 Id.



⁶ Id. at 310.