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MARKET IMPERFECTIONS VERSUS REGULATORY IMPERFECTIONS[1]

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1. Introduction

Over the last thirty years the U.S. and many other countries have experienced a revolution in the extent and nature of the mechanisms used by government to regulate the structure, behavior and performance of many markets for goods and services (Winston 1993, 2006; Peltzman and Winston 2000; Joskow 2005; Joskow 2009). This era of reform is often referred to as the era of "deregulation." However, the phrase "deregulation" is a simplistic characterization of a much more complex process that involved the relaxation of government controls over prices and entry in some industries, industry restructuring and privatization to facilitate competition in these and other industries, the introduction of new regulatory mechanisms in industry segments that continued to be subject to price and entry regulation, the adoption of market-based mechanisms for controlling air pollution and tighter standards governing air and water emissions and land use, and changes in product quality and safety and workplace safety regulations.

With all of the recent hysteria about the evils of "deregulation," one would think that the market liberalization and regulatory reforms of the last decade have imposed enormous economic costs. To the contrary, while there are certainly exceptions, financial

[1] A longer discussion of these and related issues and an assessment of the performance of deregulation, regulatory reform and industry restructuring in several U.S. industries can be found in Joskow 2009. The views expressed here are my own and do not reflect those of the Alfred P. Sloan Foundation, MIT or any other organization with which I am affiliated.

market regulation being the leading contemporary case, just the opposite has been the reality. Commentators seem to have forgotten that many pre-1970s regulatory programs focused on protecting producers from competition rather than protecting consumers, created production and allocational inefficiencies, and that many of the U.S. federal environmental, product quality, and product and workplace safety regulations that have been a subject on continuing controversy did not even exist prior to the 1970s. Moreover, some of the most significant costs of these "deregulation" efforts have often been the result of too little deregulation, industry restructuring, and regulatory reform rather than too much (Peltzman and Winston 2000, Winston 1993, Joskow and Rose 1989, Joskow 2005).

The generally favorable assessments of regulatory reform over the last thirty years have been tainted by the ongoing financial market crisis and its adverse effects on the real economy. Ironically, one of the few important sectors of the U.S. economy that has not been subject to comprehensive regulatory reform during the last thirty years is the financial services sector and the associated financial products they supply and financial markets where they are traded. Yet financial institutions, financial instruments, the markets where they are trade, and the geographical expanse of trading have all changed dramatically over the last thirty years.

While it has become routine in the U.S. and other countries to place a large share of the blame for the current financial crisis on "deregulation," the list of U.S. state and federal regulatory agencies with jurisdiction over banks, insurance companies, brokerage firms, mutual funds, and other financial institutions, the products they supply, and the markets where they trade, is as long as my left arm. The one thing that we can be sure of

is that the U.S. had no shortage of state and federal regulatory agencies with overlapping responsibilities for investor protection, financial market behavior and performance, and systemic risk mitigation (prudential regulation) that collectively were supposed to work to keep this kind of financial market mess from occurring. However, these regulatory institutions have evolved over the last seventy-five years in a haphazard fashion that has not responded effectively to the evolution of financial institutions, products, and markets. The first order assessment of the regulatory framework for financial products and markets is not so much that there is too little regulation in general, but that the regulatory framework worked poorly, did not adapt effectively to changes in financial products and markets, and was too heavily influenced by political pressures from many interest groups.

Similarly, in the case of the BP Gulf of Mexico oil spill, there was no shortage of regulatory agencies with responsibilities to oversee the safety and environmental consequences of deep water drilling in the deep Gulf. The Mineral Management Service (MMS), the U.S. Environmental Protection Agency, and the U.S. Coast Guard all have regulatory responsibilities over drilling in the Gulf of Mexico. These responsibilities were reasonably well defined in theory, but did not work very well in practice. The regulators had not kept up with rapid changes in technology, had overlapping responsibilities, had potential conflicts of interest in the case of MMS, were influenced by powerful interest groups, had inadequate resources to do their jobs well, and had to rely heavily on the oil and gas exploration and production companies for expertise and technology in the case of an accident.

In the media (Surowiecki 2010) and among the public, the financial market crisis, the Gulf oil spill, and other economic, health and safety incidents are now frequently

blamed generically on “deregulation” and an excessive “free market” mentality. This in turn has created a growing distrust of markets (e.g. the opposition to cap and trade mechanisms to control greenhouse gas emissions) that is being used by interest groups who oppose market liberalization generally to launch a “reregulation” process in many other sectors of the economy that were “deregulated” over the last three decades.

I argue here that we need a much more nuanced approach to regulatory reform that balances the benefits of market allocation, the costs of market imperfections, the potential benefits of tightening, loosening or changing regulatory frameworks, and the costs of regulatory imperfections in practice rather than in theory. In particular, the financial market crisis, the Gulf oil spill, and other recent incidents should make it clear that “more regulation” per se will not improve market performance and may make it worse. If tighter regulations seem to be a good idea in theory, we must take account of how regulation will work in practice in a world where truly independent regulators do not exist, where regulatory resources are constrained, where regulated firms have superior information to those who regulate them, and where political pressures from interest groups who seek to use regulation to feather their own nests are a constant reality.

2. What is government regulation?

No markets in modern developed economies are completely “unregulated” by government-created institutions in any meaningful sense. Markets in all modern developed market economies operate within a basic set of governance institutions or what Williamson has called the basic institutions of capitalism (Williamson 1985). These include, in the U.S. and other Anglo-Saxon countries, common law institutions like property rights, liability rules, contract laws, and the institutions for enforcing them.

There are also basic firm and market institutions created by statute, such as corporate law, including the framework for creating limited liability corporations, antitrust laws, bankruptcy laws, employment laws, environmental laws, etc. We can discuss the pros and cons of the details of alternative structures for these basic institutions of capitalism and how they are implemented and enforced, but there are no 21st century developed market economies without them. These basic institutions of capitalism "regulate" markets in important ways that should not be ignored. Regulatory changes of various kinds are properly viewed as adding, subtracting or reforming government regulatory actions that exceed or alter this minimal set of competitive market institutions.

3. Market Imperfections

How do we make an intellectually respectable case for implementing various types of government regulation, for removing them, or for changing the way we regulate? We should recognize first that competitive markets are powerful mechanism for allocating scarce resources reasonably efficiently, even if not exactly first best. In a sense, competitive markets combined with the basic legal institutions of modern developed market economies represent the null hypothesis against which the case for additional regulation and alternative forms of additional regulation must be tested. The case for government regulatory interventions must start, but not stop, with the identification and quantification of one or more market imperfections (Winston 2006). These market imperfections include market power, with natural monopoly being the extreme case (Joskow 2007), externalities, information costs, information asymmetries, consumer/investor decisionmaking imperfections, bounded rationality and transaction costs generally (Williamson 1975, Thaler and Sunstein 2008). It is impossible to regulate

intelligently, even under the best of circumstances, if one cannot clearly articulate what the nature of the market imperfections are whose costs we are trying to ameliorate.

Few if any markets are perfect in the sense that they satisfy the assumptions underlying textbook models of perfect competition or yield the performance associated with these textbook models. Market imperfections are the norm not the exception. But the social costs of these market imperfections vary widely from the trivial to the very large --- compared to the performance of hypothetical textbook perfectly competitive markets. However, the fact that one can identify one or more market imperfections does not necessarily make a case for imposing government regulations on the relevant market unless one believes in the existence of a benevolent, costless, and perfectly informed regulator that we all know well from economic theory. Such a regulator would be able to costlessly "fix" all market imperfections and, in turn, always improve market performance, however small the social costs of the market imperfection at issue might be. Accordingly, if the benevolent costless perfectly informed government regulator existed in reality we would regulate almost every market since almost every market is imperfect compared to the textbook ideal. Of course, while such a regulator may exist in theoretical models, she does not exist in reality.

4. Regulatory Imperfections

Having identified the nature and costs of suspected market imperfections, we must look at the other side of the equation as well so that we can properly balance the costs of market imperfections against the benefits and costs of imperfect regulatory institutions. We can easily conceptualize the potential benefits associated with fully mitigating the market imperfections identified in a world where we assume the existence

of a benevolent, costless, and perfectly informed regulator. However, the worst mistake that can be made by policymakers is to assume that government regulatory institutions pursue some well-defined public interest, are well informed, can easily and costlessly mitigate the market imperfections identified, and are not influenced by interest groups that can benefit or be harmed by their regulatory decisions. Accordingly, we must recognize that regulation necessarily carries with it its own costs --- direct implementation costs, but more importantly, indirect costs that can make market performance even worse than it was if we simply lived with the market imperfections at issue. These costs must be viewed dynamically, recognizing that technological change will affect consumer, firm, product, process and industry attributes and, in turn, that regulation can affect the rate and direction of the changes in these attributes. Indeed these dynamic effects often represent the largest costs of imperfect regulation. These costs also have implications for the design of regulatory mechanisms and institutions. Some institutions may look "second best" in theory, but work better than others in a world where information costs, enforcement costs, human and physical resource availability and potential political interference are taken into account.

The decision to regulate and the decision to change regulatory policies, whether it is to eliminate a set of regulatory constraints or to change the form of those constraints, must turn on a careful balancing of the likely costs of market imperfections and the likely benefits and costs of alternative forms of regulation designed to mitigate. These choices involve tradeoffs and will never lead to a "first best" outcome. The right approach to thinking about regulation and deregulation was articulated very clearly by my

undergraduate advisor Alfred Kahn: "What is the best that we can do in an imperfect world (Kahn 1979)? "

To answer this question in practice we must recognize:

a. Even if they have the right goals, regulators are necessarily imperfectly informed about the firm and consumer attributes, including attitudes toward risk. However, this information is necessary, even in theory, to regulate well (Laffont and Tirole 1993, Joskow 2007). Indeed, regulators are typically less well informed than are the firms that they regulate, and often less well informed about the attributes of the consumers they may be seeking to protect, leading to the potential for costly distortions in production costs, product attributes, and the rate and direction of innovation (regulator induced moral hazard)

b. The regulatory process is characterized by bureaucratic costs, can take long periods of time to make decisions, and is inherently conservative in its treatment of new product and process technologies, risk, and new and better ways of regulating. Regulators also easily become self-protective of the traditional regulatory mechanisms that characterize the status quo of the importance of their places in the world. This becomes more and more of a problem as regulatory agencies age. The public competition among existing U.S. financial product and market regulatory agencies for a slice of the pie created by a new financial product and market regulatory framework is a case in point.

c. The regulatory process is subject to interest group capture, political influence, and tremendous pressure to engage in (hidden) taxation by regulation (Stigler 1971, Posner 1971, Noll 1989). The modern field of political economy based on rational actor

models of political behavior did not start with studies of regulation by accident. This phenomenon goes well beyond simplistic models of capture by regulated firms and reflects the fact that regulatory agencies have things that they can do to help one interest group and harm others, naturally leading them to become targets of political competition. This phenomenon is exacerbated over time as young "expert" regulatory agencies become dominated by commissioners and senior staff who have come up through the political process and are sensitive to the same political considerations as are their sponsors in the executive and legislative branches and those they regulate. In my view, this has become a more serious problem over time as "independent" regulatory agencies once heavily populated by reasonably independent technocratic experts with clear public interest goals have increasingly come to be populated by commissioners and senior staff with narrower political goals ---- whether it is on the less regulation and more regulation extremes of the political spectrum depending on which political faction is in power.

d. When firms are subject to overlapping or substitute regulatory jurisdictions, firms will seek to exploit gaps between the jurisdictions of regulatory agencies and to seek to be subject to regulation by the agency under whose supervision they will do best. This kind of regulatory arbitrage exists between federal and state regulatory agencies, between federal regulatory agencies with overlapping jurisdictions, and, when there are opportunities to exploit differences in regulatory frameworks in different countries. For example, the existing framework for regulating financial products and markets was ripe for regulatory arbitrage of all three kinds.

e. Regulation is not free. Regulators need adequate human, information and financial resources to do their jobs well. Absent adequate resources, regulators will be

unable to hire the appropriate personnel, obtain the necessary information, and enforce their regulatory responsibilities effectively. As a result, they will often turn to "outsourcing" some of their regulatory responsibilities to the firms that they are supposed to regulate or to independent organizations created by the firms they regulate (or so-called self-regulation).

5. A Framework for Evaluating Regulatory Reform Proposals

A useful framework for evaluating proposals to regulate, to deregulate and to change the way be regulate can be captured by asking and answering a set of simple questions, though providing precise answers to these questions may often be quite difficult. I will articulate the questions from the perspective of proposed new regulations but a similar set of questions can be applied to deregulation and to the consideration of the adoption of new regulatory mechanisms.

- Precisely what are the market imperfections that the proposed regulations are trying to fix and what are the causes of these market imperfections?
- What are the social costs of these market imperfections and who bears them?
- What alternative regulatory arrangements may be available to mitigate the market imperfections and why is one likely to be better than the other?
- How much will the costs of market imperfections be reduced if the proposed regulations are implemented successfully?
- What information and authority would a regulator need to implement the proposed regulations effectively?
- What resources must be made available to the regulator for her to perform her job well? What are the likely <u>direct</u> costs of implementing the regulatory framework?

- What potential indirect costs may be incurred by implementing the proposed regulations given the potential regulatory imperfections discussed earlier, especially indirect dynamic costs?
- What kinds of transparency policies and administrative procedures will be adopted to minimize covert political interference with the actions of the regulator?
- On balance what will be the likely net benefits or the likely net costs of the proposed regulations be in practice?
- How will the performance of the regulatory framework be evaluated over time and who will do this evaluation?

6. Conclusions

Balancing the costs of market imperfections against the (net) costs of regulatory imperfections provides a robust framework for evaluating regulatory reforms. On the other hand, simply characterizing the issues as "regulation" vs. "markets" is not constructive. As we balance the costs of imperfect markets against the benefits and costs of imperfect regulation we must always come back to the question "what is the best that we can do in an imperfect world?"

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