

Regulation and Sarbanes-Oxley

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1. Introduction

Many of the papers in this special issue are concerned with regulation and some with the Sarbanes-Oxley Act (SOX). In this commentary, I will begin by summarizing the arguments for regulation that have been made in the literature.¹ I will then consider whether these arguments apply to SOX. I will suggest that, rather than being based on sound principles, regulation often seems to be a consequence of the public's need for action in response to a crisis, and that this was the case with SOX. I will argue that the recent financial meltdown provides another example of the same phenomenon.

2. The Theoretical Case for Regulation

It is probably useful to begin by defining regulation. According to Dictionary.com, regulation is "a law, rule, or other order prescribed by authority, especially to regulate conduct." Obviously this definition is quite broad. For example, it would seem to include the whole of criminal law, as well as tort law. From this perspective, making the case for regulation is easy. Economists agree that laissez-faire does not generally achieve an efficient outcome in the presence of externalities. A criminal who robs or murders someone is obviously creating a negative externality, as is a driver who runs down a pedestrian, or a firm that creates pollution. It makes sense for the government or the courts to discourage such behavior by imposing prison

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¹ Zingales [2009] does the same, and so there is some overlap with his paper. See also Shleifer [2005].

sentences or fines on the perpetrators or making them liable for the damage they cause.

In most discussions, however, regulation is used in a narrower sense. First, it often seems to refer to a situation where “quantities” rather than “prices” are used to control behavior. For example, a regulation might specify that a business must have a fire extinguisher on its premises, rather than that it will be liable for the damage caused by the absence of a fire extinguisher. Second, regulations are often proposed in situations where the relevant parties have a contractual relationship with each other. This is obviously not true of the criminal and his victim, or the driver and the pedestrian.²

Making the case for regulation when the key parties can contract with each other is much harder. The difficulty is that it is not clear why the parties cannot design their own penalties to control bad behavior. To put it another way, the argument for regulation comes up against the argument for freedom of contract. Regulation restricts the feasible set of contracts available to the parties, and under standard assumptions this cannot make them better off. In order to justify regulation, therefore, one has to appeal to some imperfection in the contracting process. I discuss the main imperfections on which the literature has focused, illustrating each with examples.

2.1 ASYMMETRIC INFORMATION

It is well known that asymmetric information can cause market outcomes to be inefficient, and that under some conditions the government can improve matters. Take, for example, the Rothschild–Stiglitz (Rothschild and Stiglitz [1976]) adverse selection model of insurance. For some parameter values the unique equilibrium is a separating one where high-risk individuals purchase full insurance and low-risk individuals purchase partial insurance. Requiring everyone to buy full insurance would achieve an *ex ante* (before individuals know their types) Pareto improvement. This is one of the arguments (but not the only one—see below) that can be given for mandatory health insurance in the United States.

Aghion and Hermalin [1990], among others, have employed this argument more generally to justify the use of mandatory terms in contracts. It is worth mentioning two applications of this idea beyond the insurance market. One is the choice between “at will” and “with cause” employment contracts. Suppose that workers know *ex ante* whether they are “easy” or “difficult” to get along with, but firms can’t tell this. A firm might be deterred from offering a contract that specifies that a worker can be fired only “with cause” because this would attract all the difficult workers. Thus, in equilibrium, all firms might offer “at will” contracts even though this could be socially inefficient (e.g., because workers are risk averse). Mandating “with cause” contracts, as is common in Europe might yield an *ex ante* (before workers know their types) Pareto improvement.

² Shleifer and Schwartzstein [2008] argue that regulation involves an *ex ante* action by the government rather than an *ex post* action by the courts.

A second application concerns bankruptcy law. In many countries bankruptcy law is mandatory. Why? Why can't firms opt out of the state-provided bankruptcy law *ex ante* and substitute their own? One argument is that opting out would lead firms to signal their quality through the bankruptcy laws they choose. Good firms might choose the harsher Chapter 7 to distinguish themselves from bad firms that choose Chapter 11. However, if Chapter 11 is more efficient than Chapter 7, then this outcome is socially undesirable. A mandatory regime avoids this kind of signaling.

Of course, while mandating behavior can sometimes improve matters, in many cases it will have the opposite effect. For some firms, being able to get rid of workers that do not fit in may be very important, and a mandatory "with cause" employment contract might cause these firms to be excessively cautious about hiring. Similarly, for some firms, the bankruptcy law provided by the state might be cumbersome, and it might be better if these firms could design their own procedure. Finally, the implementation cost of mandatory rules must be taken into account: Someone, for example, a regulator, has to make sure that they are known, understood, and followed.

Sometimes parties can credibly disclose their private information. For example, car manufacturers can reveal information about product safety tests or pharmaceutical companies about drug trials. A large literature has considered whether firms will disclose the socially optimal amount of information, or whether regulation is required (for a recent survey, see Leuz and Wysocki [2008]). In the simplest situation, where disclosure is costless, firms cannot lie, and consumers are fully rational, full disclosure of information will occur voluntarily (see Grossman and Hart [1980], Grossman [1981], Milgrom [1981]). The basic argument is that, within any pool of firms whose products look indistinguishable to consumers, the firm with the safest product will disclose this in order to separate itself from the other firms in the pool. Since the remaining firms in the pool do the same thing, the pooling unravels and each firm's type is revealed in equilibrium. However, once the above strong assumptions are relaxed, this unraveling result breaks down, and regulation may improve matters. For example, suppose that disclosure is costly. Assume that there are two types of firms: good and bad. Then in the market equilibrium the good firms will disclose that they are good (as long as disclosure costs are not too high) and the bad firms will say nothing, but will be perceived to be bad by rational consumers, precisely because they have not said that they are good. If most firms are good, total disclosure costs are high. It might be more efficient for the government to mandate that anyone with a bad product must disclose this. Then the bad firms will be forced to disclose while the good firms will say nothing; total disclosure costs are lower (see Grossman and Hart [1980]).

2.2 BOUNDED RATIONALITY

The degree of consumer rationality underlying the unraveling result seems implausibly high. Casual introspection suggests that when you go

to the doctor and he says nothing about having being sued, you do not assume that he must have been sued by many patients, since otherwise he would have told you that he hasn't been. Similarly, I do not recall going into a doctor's office and seeing a sign saying, "I have never been sued," and yet one might expect the best (or luckiest) doctors to display such a sign. Explaining why we do not see these things is not easy, but it is clear that, if we do not, then a law that mandates disclosure, for example, about malpractice suits, will have an impact, and might (or might not) be efficiency enhancing.

In the case of doctors it is at least plausible that consumers realize that some are more competent than others. In some cases, consumers may not even know that a product is dangerous. For example, consider a time when many consumers did not know that cigarettes caused cancer, but cigarette producers did. Then the incentive of a firm producing relatively safe cigarettes to disclose this fact was weak, and an equilibrium could have arisen without disclosure of information. One way to break this equilibrium is for a firm producing relatively safe cigarettes to launch an advertising campaign that proclaims not only the virtues of its own product but also the dangers of its competitors' products. Apart from being expensive, such a campaign runs the risk of alerting consumers to the general dangers of smoking. Mandatory disclosure might be desirable in this case to educate the public. See Gabaix and Laibson [2006] for an interesting discussion of this and related issues.

In some cases, even when presented with the facts about cigarettes, some consumers will underestimate the risk of illness affecting them. Under these conditions, putting a warning from the Surgeon General or a skull and crossbones on cigarette packets may not be enough to deter smoking and one can make the case for an outright ban. Of course, such a ban is paternalistic and would interfere with the rights of those who have thought through the risks and get great pleasure from smoking.³

Recently, behavioral economists have identified other situations where regulation may be desirable. If consumer irrationality arises in the form of procrastination, then consumers may inefficiently delay certain choices, such as signing up for employer-based pension plans. It might be efficient to sign them up automatically and let them opt out, rather than the other way round (see, e.g., Thaler and Sunstein [2008]). Also, if consumers have self-control problems, then a ban on cigarette sales can be justified on the grounds that it helps those who want to give up smoking, but can't (for an early discussion, see Schelling [1984]). Note that the first proposal does not interfere seriously with freedom of contract since it is easy to opt out. However, the second one does: Those who really want to smoke will be unable to.

³ I have ignored the secondhand effects of smoking. These secondhand effects are equivalent to a negative externality, and standard arguments suggest that cigarette smokers should be forced to internalize them, for example, by not being allowed to smoke in public places.

2.3 THE JUDGMENT PROOF PROBLEM

I have argued that parties to a contract can design their own penalties to control behavior. However, this statement must be qualified to the extent that some parties face wealth constraints. Under these conditions, the penalty necessary to deter bad behavior may be so large that an offending party will not be able to pay it, and anticipating this, will engage in the bad behavior. The government has an extra sanction available that private parties do not: jail. If a party who engages in the behavior and who cannot pay a penalty knows that he will be jailed, then deterrence can be restored. For an analysis of the judgment proof problem, see Shavell [1986].

To take a specific example, a CEO who knows that he can only be sued for the damages he causes shareholders if his company's accounts are inaccurate may inspect the accounts less carefully than one who knows that he may go to jail. Thus government regulations aimed at CEOs can achieve outcomes that shareholders cannot achieve by themselves.

2.4 COMMITMENT PROBLEMS

There are some situations where the pressure on government to intervene *ex post* is so great that it cannot credibly commit not to do so. This creates a potentially large moral hazard problem: Private parties will take insufficient precautions to avoid getting into these situations because they know that they will be saved. Given this, it is desirable to place *ex ante* restrictions on the behavior of the involved parties.

Three examples come to mind. First, consider a beachfront area that is steadily eroding. Normally, we might feel that it is up to each individual to decide whether to live there: The individual would either bear the risk of losing her home in the event of a storm or pay a high premium to insure against this risk. However, if many people were to lose their homes in a storm, then there would be pressure from the community, the media, etc., to help those who have suffered. Anticipating this, people may move to the area without taking out insurance, knowing that they are effectively insured anyway: They will be bailed out by taxpayers. One way to deal with this problem is to forbid people from living in the beachfront area or require them to take out insurance.

A second highly topical example concerns financial distress. As recent events have made clear, many politicians and economists believe that if large banks, insurance companies, or investment banks are in financial distress, particularly many of them at the same time, then the government should intervene to prevent these institutions from going bankrupt. Not everyone accepts this argument,⁴ but, given that those with power seem to, a large financial institution that is engaged in the same business practices as other large financial institutions knows that, if something goes wrong, it will be safe. Anticipating this, financial institutions have an incentive to engage in

⁴ See, for example, Hart and Zingales [2008].

overly risky behavior, as long as others are doing the same. An appropriate solution to this moral hazard problem is for the government to regulate the amount of risk large financial institutions can take on *ex ante*.

A third, also highly topical, example involves health insurance. Suppose that society cannot commit not to help those who become ill and who have neither health insurance nor financial resources. Then, in a private insurance system like that of the United States, it may be optimal to require everyone to purchase health insurance in advance.

For a more detailed discussion of commitment issues, see Kydland and Prescott [1977].

2.5 INFLUENCING TASTES

In some cases, a regulation or law may be implemented at least partly to legitimize or de-legitimize an activity in the public's mind. For example, not so long ago, it was legal in parts of the United States for restaurants or hotels to exclude African Americans, Jews, and other minority groups. From a strict freedom of contract perspective, it is, unfortunately, hard to object to this: If the restaurant's owner is willing to lose profits from not serving certain groups, or his customers are willing to pay a premium to dine separately from these groups, that is their business. At some point exclusion was made illegal, presumably because more and more Americans thought that it was abhorrent. However, a further justification for making such an act illegal is that the law changes people's attitudes: If exclusion is banned, then after a while almost everyone will think that it is abhorrent. It seems clear that this has happened.

3. SOX

In response to financial scandals at Enron, WorldCom, Tyco, Global Crossing, and others, Congress passed SOX on July 25, 2002. In addition, the New York Stock Exchange and National Association of Securities Dealers Automated Quotations (NASDAQ) imposed governance changes on listed firms at around the same time. Some of the stock exchange actions might have happened independently of SOX, but it is plausible that others were enacted in anticipation of and in response to SOX. In what follows I do not distinguish between changes due to SOX and those due to stock exchanges. For a more nuanced discussion, see Coates [2007].

Among other things, SOX (plus the new stock exchange rules) imposed the following requirements on listed companies:

- 1) The CEO and CFO must certify quarterly results, with criminal penalties if they knowingly sign off on misleading financial statements.
- 2) A majority of the members of the board must be independent (and the definition of independence is quite stringent).
- 3) The audit and compensation committees must consist entirely of independent directors. Moreover, the audit committee must contain at least one director who is a financial expert.

- 4) The company's auditors cannot also provide consulting services for the company.

In addition, SOX creates a unique, quasipublic institution to oversee and regulate auditing, the Public Company Accounting Oversight Board (PCAOB).

I want to consider how SOX fits in with our theoretical arguments for regulation in section 2. For this purpose, it is useful to think of a company's corporate charter, or articles of incorporation, as a contract, written when the company is set up, that specifies the company's governance structure and the rights of shareholders. Thus, the issue is whether regulation can improve the functioning of this contract. In what follows I focus on regulation (2) to regulation (4) since they are directly concerned with governance, whereas regulation (1) and the creation of the PCAOB involve accounting issues that are not covered by the corporate charter.

Let's start with our first theoretical argument for regulation: asymmetric information. It is hard to argue that companies chose excessively pro-management corporate charters *ex ante* to signal their type: If anything, good firms would choose excessively pro-shareholder charters. Regulation (2) to regulation (4) also do not involve issues of disclosure. Thus section 2.1 does not seem to support regulation (2) to regulation (4). Consider next bounded rationality. Probably the most relevant aspect of bounded rationality is one that we did not consider in section 2. A corporate charter, like any other contract, is incomplete. Companies last for decades or even centuries. When the founders write the initial charter, they cannot anticipate what the world will look like 30, 50, or 100 years hence. Suppose that a situation arises where, from the point of view of shareholders, the charter is no longer appropriate: say, it is more important now that the board be independent than when the company was founded. However, such a change is opposed by management, and since shareholders are dispersed it is hard for them to replace the board via a proxy fight or takeover bid. Under these conditions might it make sense for the government to impose a change in governance structure?

The answer is "probably not," for two reasons. First, it is not clear that one size fits all: The change may be appropriate for some companies but not others. For example, some companies may separate the positions of board chairman and CEO (this is common in the United Kingdom). For such companies, having many independent directors may be less important. Second, and related, why not let the shareholders of each company decide whether they want regulation (2) to regulation(4) rather than making these changes mandatory? In other words, it seems that the most the government should do is to require each listed company to put the change in governance structure to a shareholder vote. This is closer to the approach taken in the United Kingdom.

It does not seem plausible that the judgment-proof problem of section 2.3 is relevant for regulation (2) to regulation (4). (It may be relevant for regulation (1) to the extent that criminal penalties may change CEO and

CFO incentives.) Also, moral hazard with respect to anticipated government bailouts, as in section 2.4, was surely not an issue for Enron et al. The changing tastes problem of section 2.5 does not seem to apply. The conclusion is that none of the theoretical arguments for regulation that I presented in section 2 appear to be relevant for SOX.

What does explain SOX then? Probably the best explanation is that the pressure on politicians to act—from the public, interest groups, and the politicians themselves—was so great that nonintervention was not an option. To quote Coates [2007, p. 91]: “In a democracy in which most voters own stock either directly or indirectly through their pension and retirement funds, government was certain to react. The only question was the shape the reaction would take.” The good news is that the intervention does not seem to have been a disaster; in fact, it may even have been a mild success (see, e.g., Coates [2007], Leuz [2007], Hochberg, Sapienza, and Vissing-Jørgensen [2009]). At the same time, as Ball [2009] points out, we still do not know definitively whether the 1933 to 1934 Securities Acts were a good thing 75 years after the event! Thus, we will not have the final word on SOX for a while.

Let me conclude by drawing an analogy to the recent financial crisis. The crisis has triggered government intervention at a scale that is unprecedented in recent times. Moreover, it is hard to discern many principles behind this intervention.⁵ The best explanation for the government’s actions seems to be the same as with SOX. The extent of the crisis was so great that nonintervention simply was not an option.

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⁵ See Hart and Zingales [2008] for a short discussion.

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