WORKING
PAPER

The Impact of Regulation and Litigation on Small Business and Entrepreneurship

An Overview

LLOYD DIXON, SUSAN M. GATES, KANIKA KAPUR,
SETH A. SEABURY, ERIC TALLEY

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Robert Reville, Director
RAND Institute for Civil Justice
RAND
1776 Main Street, P.O. Box 2138
Santa Monica, CA 90407–2138
(310) 393–0411 x6786; FAX: (310) 451–6979
Email: Robert_Reville@rand.org

Susan Gates, Director
Kauffman–RAND Center for the Study of Regulation and Small Business
RAND
1776 Main Street, P.O. Box 2138
Santa Monica, CA 90407–2138
(310) 393–0411 x7452; FAX: (310) 451–6979
Email: Susan_Gates@rand

PREFACE

This working paper surveys existing research and the general state of knowledge on the impact of regulation and legislation on small business. It focuses on laws and regulations in four key regulatory areas: corporate securities, environmental protection, employment, and health insurance. In each of these areas, the review summarizes the regulatory environment, discusses the impact of the regulatory environment on small business and highlights issues in need of further research. In so doing, the review explores the ways small businesses and entrepreneurs behave differently from large businesses; the ways that policymakers, customers, employees and other organizations treat small businesses differently from larger businesses; and how these differences relate to the policy rationales that underlie regulation and the use of the tort system. A primary aim of this review is to identify additional research that would assist regulators, courts, legislatures, and others in balancing competing policy objectives. The report concludes with suggestions for future research.

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SUMMARY

As the economic power of private sector business has grown over the past century, so too has the number of laws regulating business activity. In broad terms, these laws typically serve one of two objectives: to promote market competition and control the market power of large firms over customers and smaller firms, or to mitigate the adverse effects of business activity on individuals and other organizations. Regulations on business can benefit a range of stakeholders, including corporate and financial institutions, interest groups, employees, customers, and the general public. Of course, such regulations impose costs as well as benefits. These costs—including capital and other compliance costs as well as an increased risk of litigation or of civil or criminal penalties—typically fall most heavily on the businesses being regulated.

Although some recent studies have looked at the impact of regulations on the relationship between government and private business in general, less attention has been directed toward understanding precisely how government regulations have affected *small* businesses. There is good reason to believe that size matters. Precisely because of their smaller size, small businesses are likely to be less diversified and less able to leverage economies of scale or to access capital markets. As a result, small businesses might be more risk-averse and less able to react to unexpected events compared to larger businesses. In addition, the cost of complying with a particular regulation may be roughly comparable for smaller and larger firms, thus placing a disproportionate burden on the smaller firm.

When small businesses respond differently to regulation than do their larger counterparts, these firms might be placed at a competitive disadvantage in the marketplace, undermining the effect of competition policies and antitrust laws. To reduce the incidence of such problems, policymakers and other key stakeholders have sometimes exempted small firms from state, local, or federal regulations or subjected them to differential enforcement requirements. The tort system can affect small businesses differently as well, although the precise nature of that effect is less clear.

The Kauffman-RAND Center for the Study of Small Business and Regulation was established in 2004 to evaluate and inform legal and regulatory policymaking related to small business and entrepreneurship in a wide range of settings. This paper describes a research agenda for the Center that will provide objective, independent, and rigorous analysis of the differential effects of regulations and litigation on small business. The ultimate question for Center researchers is how the differences that distinguish small firms from larger firms impact the extent to which various policies achieve their specific objectives (e.g., improved workplace safety or environmental quality) and contribute to more general social objectives (e.g., promoting

economic competition). The paper focuses attention on laws and regulations in four key regulatory areas: corporate securities, environmental protection, employment, and health insurance.

CORPORATE AND SECURITIES LAW

Corporate and securities law and regulations have real implications for the future growth potential of businesses and are thus relevant to the issue of entrepreneurship. Many small firms are formed with an eye toward becoming large firms, and the road to doing so almost always involves consideration of business form and capital structure.

Liability exposure. Perhaps one of the most salient differences between small and large firms lies in the degree to which their respective owners bear personal liability for business risks. A majority of small firms are unincorporated, thus potentially subjecting a firm's owners to personal as well as business liability risk.[1] The threat of financial liability for the firm's obligations might loom especially large for entrepreneurs and influence their ability to innovate, grow, or even begin operations in the first place. There is also broad concern over the effect of recent changes to the personal bankruptcy law, which make it much harder for individuals to obtain a "fresh start."

Organizational form. The entry, exit, and growth trajectory of entrepreneurial small businesses might also be affected by the proliferation of new business forms, such as the limited liability company (LLC) and limited liability partnership (LLP). LLC/LLPs combine the flexibility and pass-through taxation attributes of partnerships, while simultaneously according owners with a form of limited liability akin to corporate status. At the same time, LLC/LLP also comes with a few costs, including a limited lifespan (frequently in the neighborhood of 35 years), minimum insurance requirements against claims of third-party creditors, and variation in the nature and extent of liability protection that these new business forms afford.

Securities law. Securities law and recent securities law reform, such as the Sarbanes-Oxley act of 2002 ("Sarbox") and related regulations, may also affect economic activity in small firms that are not (at least yet) subject to such securities regulation prescriptions. As entrepreneurial firms grow larger and require access to additional capital, they face a choice as to whether the benefits of publicly traded status are worth the costs associated with regulatory requirements. Although, by all accounts, Sarbox has changed the landscape of securities law for firms that are publicly traded, there is as yet no consensus regarding how the new rules are affecting the interests, prospects, and growth trajectories of companies, including small firms, that are considering going public.

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[1] Source: U.S. Census Bureau, http://www.census.gov/epcd/www/smallbus.html.

Research on the impact of of corporate and securities law on small versus large businesses could assist policymakers in understanding the effects of existing policys and recent reforms in key areas. Questions of particular interest include:

- What are the implications of personal bankruptcy reform for entrepreneurs?
- What are the uses and effects of new business forms for small business?
- In what ways has the Sarbanes-Oxley Act influenced small business?

ENVIRONMENTAL LAW

Although many environmental laws regulating business were shaped with an eye toward regulating large companies, there are several reasons to expect firm size to be an important consideration in formulating and evaluating environmental policy.

Compliance. Compliance with environmental regulations can require firms to respond in several ways, such as by installing pollution control equipment, monitoring and reporting waste streams and pollutant releases, and developing emergency response plans. Small firms might be at a disadvantage due to the cost of pollution control equipment or the resources needed to complete required paperwork. High initial compliance costs may also make it more difficult for small firms to enter the industry.

Statutory variation. The requirements of environmental regulations frequently vary by firm size; this so-called "tiering" means that small firms are exempted from certain requirements or are required to meet less stringent emission or treatment technology standards. In addition, the regulations themselves are often tailored to the experiences and capabilities of large firms.

Enforcement. There is currently no consensus on whether government enforcement practices have favored or worked to the disadvantage of small firms.

Policy questions of interest regarding the differential effect of environmental law on small business include:

- **Compliance with and enforcement of current laws.** How have recent trends in environmental regulation, enforcement, and liability affected businesses along size dimensions? Which aspect of environmental regulatory and liability policy cause the greatest problems for small firms? What are the benefits of reducing environmental damage caused by small firms?
- **Need for new approaches.** Given that many environmental initiatives were originally shaped with large firms in mind, is a different approach to source control, pollution prevention, compliance assistance, and enforcement needed to deal with small firms?

- **Effect of government-industry agreements.** How have different public-industry negotiated agreements (such as the Common Sense Initiative, which aims to make environmental regulation and performance "cleaner, cheaper, and smarter") been used by small firms, and what types of modifications to these programs would make them more attractive to small firms?

EMPLOYMENT LAW

Employment laws, regulations, and policies, which can range from minimum wage laws and anti-discrimination laws to non-compete agreements and regulations on workers' compensation and unemployment insurance, can protect or benefit one party (usually employees), but typically impose some cost on the other party. In designing employment laws and regulations, policymakers strive to strike a balance between costs and benefits, which often means adjusting the application or enforcement of employment-related regulations according to firm size. The impact of employment law is likely to vary by firm size for several reasons.

Administrative enforcement of government regulations. Firms of all sizes are potentially at risk of a civil action in response to claims that the firm's actions have harmed an employee. This risk is increased due to regulations that invest government agencies with the authority to investigate firm behavior and take legal action. Very small firms falling under the employment threshold for a regulation to take effect may face a lower risk of legal action. It is therefore plausible that very small businesses might consider the implications of growth that would carry them over the employment threshold to avoid the reporting requirements and related administrative costs as well as the threat of fines or legal action.

Court enforcement policies. One of the key differences between small and large firms is the level of resources available to them to spend on litigation, either as plaintiffs or defendants. Large firms with deep pockets might be more frequent targets of employee discrimination, wrongful discharge and other suits. Large firms might also have a stronger incentive to spend substantial resources aggressively defending any one suit so as to deter future suits. On the other hand, small firms may be more vulnerable to breach of a non-compete agreement or violation of trade secrets rules as the entire business may depend on that trade secret. As a result, they may be more likely to prosecute, in spite of the costs and the risks of bankruptcy.

Costs of providing worker's compensation and unemployment insurance. Employers are required either to purchase workers' compensation insurance to cover potential workers' compensation losses or to demonstrate sufficient financial resources to self-insure. Large firms typically have a greater ability to self-insure and thus opt-out of the system.. In addition small firms often face higher insurance premiums due to the imperfect application of experience rating. Unemployment taxes are typically determined by a firm's experience with unemployment, although new firms are assigned a flat rate, which will change over time based on the stability of their labor force and the number of layoffs they experience. As a result, small firms may have less potential relative to large firms in reducing their rate because of less flexibility in response to changing economic conditions and or the potential of layoffs.

These issues lead to a number of questions of potential interest to policy makers involving small business.

- **Effect of thresholds.** Do small firms avoid adding employees when they are close to an employment threshold for particular regulations?
- **Court enforcement of regulations.** Does court enforcement of employment regulation vary b firm size?
- **Workers' compensation and unemployment insurance.** Do these insurance systems have a differential impact on small business?
- **Regulation of employment contracts.** What are the cost-benefit tradeoffs involved in the regulation of employment contracts for different-sized firms?

HEALTH INSURANCE REGULATIONS

Health insurance regulations are generally targeted to insurance companies that sell group health insurance products to firms, rather than toward the firms that offer health insurance to their employees. Nonetheless, these regulations might have differential effects for small versus large firms.

Health insurance coverage and premiums. Health insurance regulations that affect small firms differently from large firms might be expected to impact the likelihood that small firms will offer health insurance coverage or lead to changes in health insurance premiums. Studies to date, however, have not found evidence of either of these effects.

Business size. The explicit size thresholds in many health insurance regulations suggest that firms considering changing their workforce size might be influenced by health insurance regulations. In the case of small group health insurance regulations, small firms that can obtain health insurance that is protected by these regulations might choose not to expand beyond the upper size threshold. On the other hand, if the regulations result in higher premiums and lower availability, small firms might prefer to expand to a size that is beyond the reach of small firm regulations. Other regulations such as state-mandated benefits may also affect business size, since larger firms can self-insure and avoid state regulation.

Policy questions concerning health insurance regulations include the following:

- **Access and pricing**. Should policymakers consider pricing regulation to accompany health insurance access regulations?

- **Insurance reforms.** What is the impact of recent insurance reforms on small firms? Have health insurance mandates influenced firm behavior (including the choice of firm size and the decision to offer health insurance)? Have small businesses made use of some of the new health insurance innovations such as Health Savings Accounts?

CONCLUSION

This review has highlighted some fruitful areas for research on the impact of regulation on small business. Regulations or programs designed to benefit small business are rarely criticized or questioned. However, it is important to consider whether such are meeting their objectives, whether they are well targeted and whether they have unintended consequences that interfere with intended aims.

A systematic comparison of the costs and benefits of regulations, as well as regulatory implementation and enforcement, is a promising avenue for research. Information on the cost-benefit tradeoffs could help policymakers design more effective policy.

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1. INTRODUCTION

As the economic power of private sector business has grown over the past century, so too has the number of laws regulating business activity. Indeed, some have argued that the amount of government regulation of private sector business directly reflects the level of economic power within the private sector (e.g., Glaeser and Shleifer, 2003).

In broad terms, government can be said to regulate private sector business for the good of "society." The basic premise behind regulation is to limit the ability of private sector businesses to do harm to other organizations, groups, or individuals (whether intentionally or unintentionally) during the course of conducting business. In general, government regulation of private business tends to serve two overriding public objectives: (1) to promote market competition and control the market power of large firms over customers and smaller firms, and (2) to mitigate any adverse effects of business activity on individuals, other organizations and the environment. The first objective is addressed primarily through federal and state antitrust laws (and, outside the regulatory environment, through policies designed to support small business). The second objective is tackled through an expansive array of environmental laws, securities laws, employment laws and health and safety regulations.

Among those who benefit from regulations on business are corporate and financial institutions, interest groups, employees, customers, and the general public. Of course, it is widely acknowledged that business regulations impose costs as well as benefits, and any regulatory costs typically fall most heavily on the businesses being regulated. The direct costs include capital costs associated with compliance, the costs associated with gathering information about what compliance entails, and the costs associated with reporting and recordkeeping (Bradford, 2004). Many regulations expose businesses or their representatives to the risk of litigation and associated civil or criminal penalties. In the course of devising regulations, policymakers strive to weigh the costs of regulations against their benefits.

Much recent social science research has focused on the relationship between government and private business in general. However, less attention has been directed toward understanding precisely how government regulations have affected *small* businesses differently than large ones. There is good reason to believe that size matters. Precisely because of their smaller size, small businesses are likely to be less diversified, are less able leverage economies of scale, and have more limited access to capital markets. These factors may make these businesses behave in ways that are different from those seen in large businesses. For example, small businesses might be more risk-averse because they are more resource-constrained and less able to react to unexpected events compared with larger businesses. In addition, the cost of complying with a particular regulation may be roughly comparable for smaller and larger firms, thus placing a disproportionate burden on the smaller firm. As a result of these differences, small entrepreneurial firms are likely to respond differently to regulation than do their larger counterparts. That differential response, in turn, can place small firms at a competitive disadvantage in the marketplace, undermining the effect of competition policies and antitrust laws.

There is growing awareness among policymakers that regulatory activity designed to mitigate the adverse effects of business activity can unintentionally stymie market competition. To ameliorate this problem, small firms often receive differential treatment from policymakers and other key stakeholders. For example, federal, state and local governments often exempt small businesses from certain policies and regulations or apply different regulatory enforcement approaches to small businesses. The tort system can affect small businesses differently as well, though the precise nature of that effect is less clear: in some cases, customers, employees, and government agencies might be *less* likely to punish or sue small businesses because the perceived payoff is low; on the other hand, customers or employees might be *more* likely to sue a small business if they perceive it cannot afford to mount an effective legal defense.

The ultimate question is how the differences that distinguish small firms from larger firms impact the extent to which various policies achieve their stated objectives, (such as improved workplace safety, or improved environmental quality) and contribute to more general social objectives (such as promoting economic competition).

The Kauffman-RAND Center for the Study of Small Business and Regulation was established in 2004 to evaluate and inform legal and regulatory policymaking related to small businesses and entrepreneurship in a wide range of settings. The purpose of this paper is to outline a research agenda for the Center that will provide objective, independent, and rigorous analysis of the differential effects of regulations and litigation on small business.

In the remainder of this introduction, we will sketch out in more detail the context for the discussion to follow and describe the approach used in this paper.

THE POLICY CONTEXT

Over the past century, government regulation of business has produced some significant achievements. The Environmental Protection Agency (EPA) estimates that the Acid Rain Program and other EPA regulations have led to a 30–percent decline in particle pollution, a leading cause of respiratory illness, since 1978 and 2003 (Environmental Protection Agency, 2004). Labor and employment laws have promoted opportunity for all workers by prohibiting discrimination on the basis of race, gender, ethnicity, age, and disability status. The Fair Labor

Standards Act established the federal minimum wage and overtime requirements. Corporate and securities laws such as the Securities Act and the Securities and Exchange Act imposed registration and reporting requirements on companies in order to promote the transparency and stability of our economic infrastructure by protecting shareholder interests and instilling confidence in the system. Such confidence has enabled the markets to withstand cyclical fluctuations and global crises, including the terrorist attacks of September 11, 2001.

Despite these successes, there has been longstanding concern that regulation places a disproportionate burden on small businesses. Although much of this concern is based on anecdotal evidence, there is empirical evidence that at least some regulations pose a disproportionate cost burden on small businesses. Research also suggests that this disproportionate burden is due primarily to costs of compliance that don't vary by firm size and that are incurred on an on-going (rather than one-time) basis (Bradford, 2004).

When establishing environmental, employment and other regulations, policymakers often place special consideration on the impact that such policies will have on smaller firms. At the federal level, the Regulatory Flexibility Act (RFA), enacted in 1980, requires federal agencies to carefully consider whether proposed rules will have a "significant economic impact on a substantial number of small entities."[1] In many cases, government agencies have invoked size thresholds to exempt small businesses from certain regulations.

Unfortunately, there is little evidence that such exemptions are crafted in way that appropriately balances the costs and benefits of regulation. We currently know surprisingly little about exactly when and under what circumstances it makes sense for policymakers to institute differential legal treatment—or wholesale retrenchment from regulatory intervention—based on firm size. Indeed, much of what we know about the interaction between regulation, litigation and business stems from research that looks at the implications of regulations for large firms.

The greater emphasis given in research to the impact of regulations on larger firms is understandable. Larger firms tend to experience the most public exposure, both in the popular press and by word of mouth. Moreover, the policy goal of mitigating the adverse effects of business activity on other individuals or organizations is geared specifically toward perceived problems generated by large economic scale, since the capability of inflicting economic and social harms typically increases with firm size. And finally, because larger businesses are more

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[1] The Small Business Regulatory Enforcement Fairness Act of 1996 amends the RFA to impose specific requirements on federal agencies in the interest of improving compliance with the act. Executive Order 13272 (signed August, 2002) requires federal regulatory agencies to develop written procedures for implementing the RFA. In many cases, government agencies have invoked size thresholds to exempt small businesses from certain regulations.

frequently subject to reporting and disclosure requirements, they are a much more fertile harvesting ground for empirical data.

However, the importance of large businesses does not negate the need to understand the impact of regulation on smaller businesses. Excluding such a significant component of economic activity from the landscape of informed policy debate is both risky and imprudent.

An understanding of the impact of regulations on small business is particularly called for due to the prominence of small business interests in the political and economic spheres. As Figures 1.1, 1.2, and 1.3 illustrate, small businesses (here, defined as firms with 500 or fewer employees)[2] represent almost half of all gross revenues generated by U.S. businesses, employ 51 percent of private-sector workers, and represent more than 99 percent of all employers. In addition, small businesses produce over 70 percent of all the net new jobs, over half of all private sector output, and represent 97 percent of all exporters. As a result, laws with a disproportionately negative effect on small business threaten a large sector of the U.S. economy.

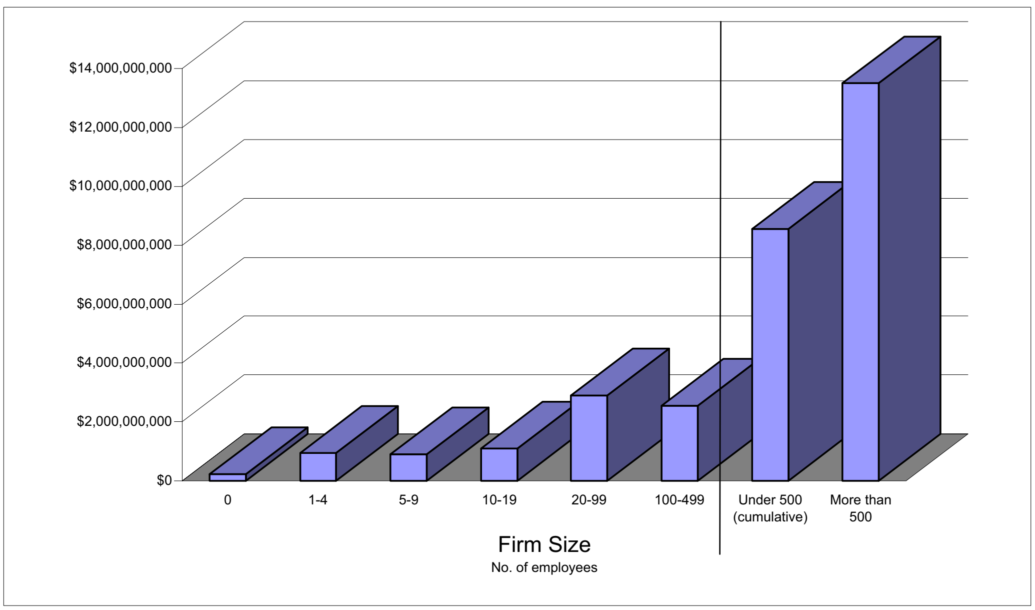

Figure 1.1—Small Businesses' Economic Significance: Gross Receipts (1990–1998)

Thus, while individual small businesses have, by definition, fewer employees than large businesses, their cumulative impact is large and worthy of greater understanding.

[2] This particular definition is not sacrosanct, as we explain later in this chapter.

METHOD

As noted above, the purpose of this paper is to outline a research agenda on the differential effects of regulations and legislation on small business. The findings generated through this research can be used to inform sound public policymaking.

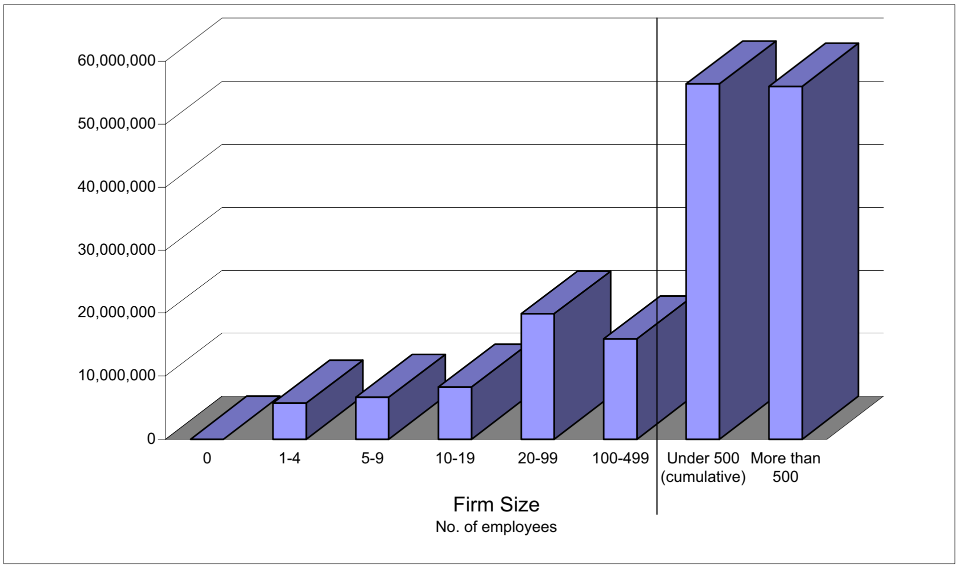

Figure 1.2—Employment (1990–1998)

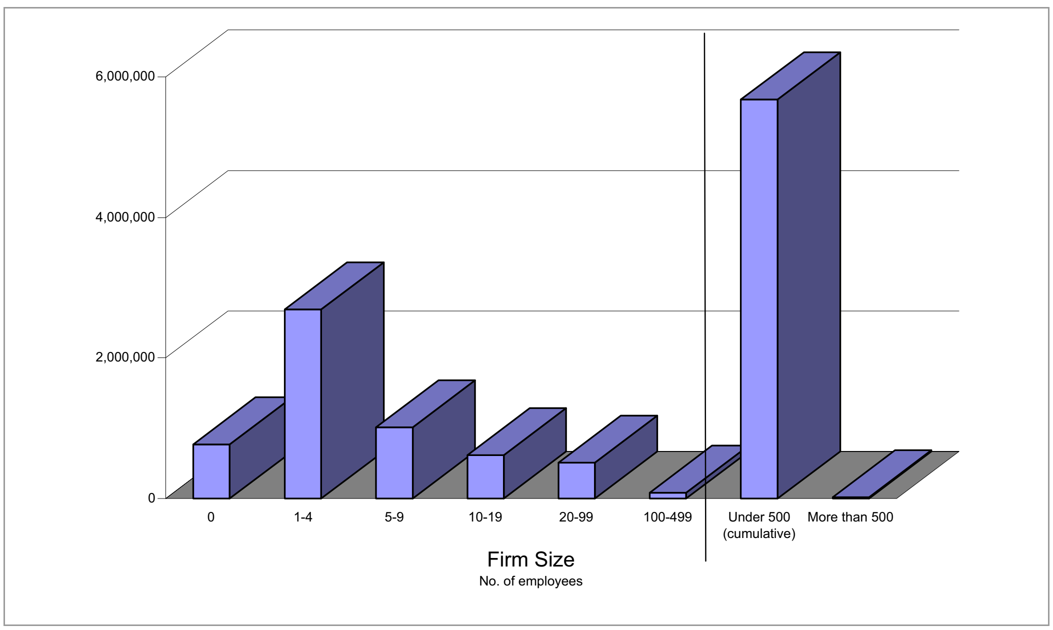

Figure 1.3—Number of Employer Firms (1990–1998)

Our inquiry seeks to answer three specific questions:

- In what ways are small businesses and entrepreneurs likely to behave differently from large businesses?

- In what ways do policymakers, customers, employees and other organizations treat small businesses differently from larger businesses?
- How do the behavioral differences among small and large firms square with the plausible policy rationales behind regulation and the use of the tort system? How might regulators, courts, legislatures, and others formulate alternative practices to balance competing policy objectives?

We recognize that the questions posed above might be answered in different ways for different kinds of regulations. In this paper, we focus attention on laws and regulations in four key regulatory areas:

- corporate securities
- environmental protection
- employment
- health insurance

Underlying our method is the view of the regulatory reform process shown in Figure 1.4. Regulation originates with some public concern regarding the impact of one or more businesses' actions on employees, customers, other individuals or organizations, the physical environment or ecological resources. A regulatory environment is created to address these concerns. That regulatory environment may exempt certain types of businesses from the resulting regulation or apply different enforcement mechanisms to different types of firms. In the new regulatory environment, businesses pursue their business objectives while responding to regulations, all of which produces economic and other outcomes (e.g., social, environmental). Once this chain of events has played out, the outcomes may feed into new public concerns and lead to changes in the regulatory environment.

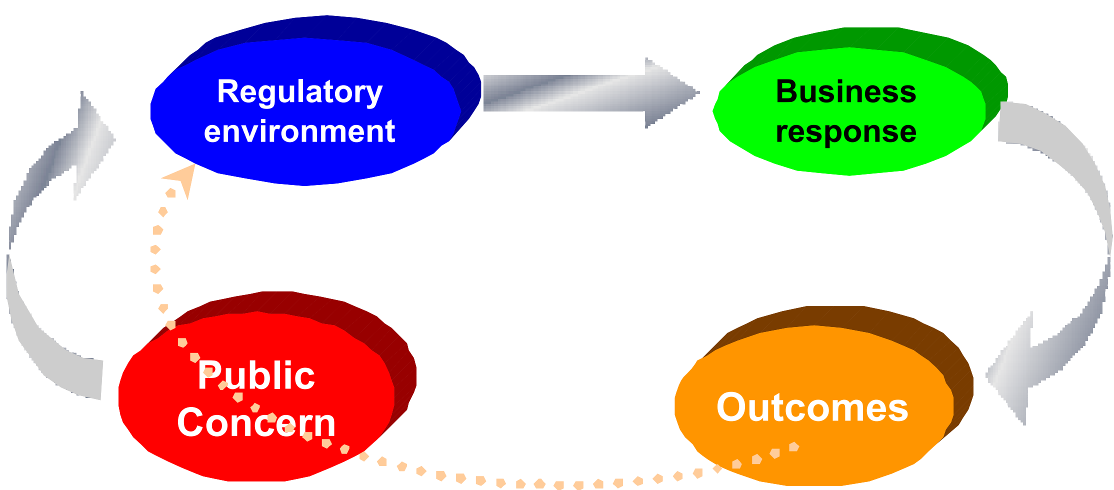

Figure 1.4—Conceptual Model of the Regulatory Reform Process

The key objective of the Kauffman-RAND Center for the Study of Small Business and Regulation is to understand how the business response differs for small businesses compared to large firms and to identify the implications these differential business responses have for economic outcomes.

THE DEFINITION OF SMALL BUSINESS USED IN THIS PAPER

Throughout this introduction, we have used the terms "large" and "small" business without precisely distinguishing between them. This lack of precision reflects the lack of a generally accepted definition of "small business" in both the regulatory and research spheres. Perhaps the most oft-cited definition is that provided by the Small Business Act (SBA): "One that is independently owned and operated and which is not dominant in its field of operation." Note that this definition does not require one to view the size of a business through a unique lens, such as employee ranks, gross receipts, ownership structure, or market presence. Rather, under the SBA definition, the category of "small business" aggregates these factors.

Following the logic of Figure 1.4, the meaningful distinction between "large" and "small" businesses is reflected in different responses to the regulatory environment. Differences resulting from firm size may or may not be evident depending on the regulatory issue in question. For example, the cost of implementing a complicated pollution abatement technology may be so large as to invoke the same response from a firm with 10 employees and 100 employees (i.e., to close down). Meanwhile, the cost associated with a labor reporting requirement may be a great burden on the firm with 10 employees, but not on the firm with 100 employees. Rather than attempting to resolve this ambiguity in what follows, we opt instead to work with it, remaining flexible about the definition of "small business" depending on the contextual application, the form of legal regulation, and the underlying social policy rationale. In our view, the various definitions of this term are due, in large part, to the multiple distinct objectives at the core of different regulatory policies, which would naturally distinguish between large and small organizations along a range of substantive axes.

THE REMAINDER OF THIS PAPER

The aim of our immediate inquiry is not to resolve these questions, but rather to frame them in a way that lends itself to objective, empirical policy analysis. As such, our primary emphasis in this paper will be to highlight promising areas of inquiry, rather than to produce an exhaustive catalog of all forms of regulatory and litigation activity faced by small businesses and entrepreneurs. For each of the four topical areas, the paper will describe the policy context and the regulatory regime, discuss how the regulatory regime, including regulatory enforcement and liability, impacts small firms differently from larger firms, and discuss what we need to know more about in order to improve regulatory policymaking.

Our analysis proceeds as follows. Section 2 of this paper explores corporate and securities law. Section 3 considers environmental protection. Section 4 discusses employment law and regulation. Section 5 analyzes health insurance regulation and law, and Section 6 concludes.

2. CORPORATE AND SECURITIES LAW

The inclusion of corporate and securities law in a summary of regulatory issues relevant to small business might perhaps appear curious at first. While the importance of these areas of law is self-evident for large, well-established firms, most smaller firms are not organized under statutory business forms (such as corporate status). Even among those small firms that have adopted a corporate form, few have sought access to public capital markets.

However, corporate and securities law and regulations have real implications for the future growth potential of businesses and are thus relevant to the issue of entrepreneurship. Many small firms are formed with at least a partial eye toward becoming large firms, and the road to doing so almost always involves consideration of business form and capital structure. At critical junctures, the role of corporate and securities law is paramount. Consequently, these areas of law are likely to loom large to entrepreneurs even at the very inception of a business plan.

In this chapter, we consider the role that business organization law and securities regulation can play in the formation, growth, and transition of small, entrepreneurial businesses. One area of interest is the impact of liability exposure on organizational decisions; almost all statutory business forms (outside the sole proprietorship and general partnership) have limited liability. A second area of interest is how the proliferation of new business forms, such as the limited liability company and limited liability partnership, have altered the entry, exit, and growth trajectory of entrepreneurial small businesses. A third area of inquiry concerns the ways in which aspects of securities law and recent securities law reform, such as the Sarbanes-Oxley act of 2002 and related regulations, have affected economic activity in small firms that are not (at least yet) subject to such securities regulation prescriptions. We address each of these issues below.

Before proceeding, it is worth pointing out that the definition of small business used in corporate and securities law is not generally based on conventional measures of operational size (such as employees, revenues, or market power) as is the case in other regulatory spheres. Rather, corporate and securities law frequently conceives of size as a function of either the distribution or the value of ownership in the firm. Privately held firms are generally considered to be small for the purposes of securities regulation; they are largely exempt from the mandates of federal securities law as long as they maintain their existing ownership form. While privately held firms are often small according to more typical measures of firm size (e.g., employees, gross receipts, etc.), there are exceptions. For example, Cargill International Inc. does business in agricultural, food distribution/export, and industrial sectors, employs over 100,000 people in 59 countries, and generates annual sales of approximately $60 billion, making it among the world's largest companies. At the same time, Cargill is a "small" company under conventional corporate measures, because its shares are privately held (by a single family). In considering the differential effects of regulation and litigation within corporate and securities law, we use definitions of firm size that are distinct from measures natural to other substantive areas.

In the remainder of this chapter, we discuss the regulatory environment for corporate and securities law, the potential impact of this environment for small firms, and issues for future research in this area.

REGULATORY ENVIRONMENT

The regulatory environment for corporate and securities law is influenced by the key choices that a firm makes. Three choices are of particular relevance: the decision to incorporate, the choice of organizational form, and the decision to be publicly as opposed to privately held. In many cases, one choice has implications for the others (e.g., some organizational forms imply a non-corporate status). Although it is beyond the scope of this section to provide a complete summary of options available to businesses, we discuss key characteristics of these three choices and the implications of these choices for small firms.

Incorporation and the Regulatory Environment

The first choice relates to incorporation status. Incorporation creates a legal distinction between a firm and its owners. Unincorporated firms (or those that have not sought refuge in other statutory forms) can incur business liability risks that, if sufficiently large to bankrupt the firm, will also imperil the assets of the firm's owners. This is true even if the firm is owned by a sole proprietor.

Incorporation limits the liability of the firm's owners for the debts and obligations of the firm. This limitation of liability is viewed as a primary benefit of incorporation. Other advantages include an unlimited life span (the corporation can continue even after the owner dies), transferability of shares, and the ability to raise capital. The major disadvantages associated with incorporation stem from the administrative paperwork burden and taxation. There are a variety of organizational options that allow organizations to balance the costs and benefits of incorporation, as discussed in the next section.

In unincorporated businesses, the debts and obligations of the firm are frequently indistinguishable from those of the owners. For this reason, the owners of unincorporated businesses may be affected by personal bankruptcy law in the event of a business failure. Therefore, changes to the personal bankruptcy law following from the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 Pub. L. No. 109–8, 119 Stat 23 may have a significant impact on small businesses and entrepreneurs.[1] This legislation was designed to reform some aspects of U.S. personal bankruptcy law, and (in part) to stem a perceived crisis in consumer credit that had culminated in record numbers of personal bankruptcy filings.[2]

One of the key reforms implemented by the law involves a personal income threshold for access to Chapter 7 (liquidation) bankruptcy proceedings, the effect of which will be to force many would-be bankruptcy petitioners to file under Chapter 13 (reorganization) instead. As a practical matter, traditional Chapter 7 proceedings involved partial liquidation of a debtor's assets, and legal termination of most debts without lien against a debtor's future income. By contrast, proceedings under (the revised) Chapter 13 are more burdensome, and primarily involve scheduled repayment of debts out of future income, rather than a dismissal of debts in return for a liquidation of assets. The result is a new bankruptcy regime that is far less friendly to personal debtors, and one that will focus more on restructuring and enforcing debt payments than on dismissing them. Several other changes implemented by the recent legislation likewise serve to make personal bankruptcy laws more favorable to creditors, and less protective of debtors. These changes include a longer schedule of mandatory repayments for some debtors under Chapter 13, more limitations on the categories of debt subject to Chapter 13 proceedings, and new statutory provisions designed to prevent debtor "forum shopping" for favorable state property exemptions.[3]

Organizational Structure and the Regulatory Environment

Organizational choices are broader than the decision of whether to incorporate, and the options available to firm owners have grown substantially over the last 20 years. For much of the last century, business organizations were forced to choose between two distinct models for business organization: the traditional general partnership[4] or a state-chartered corporation. Partnerships allow for co-management, profit-sharing, and loss-sharing, and allow the firm's governance to be tailored to the firm's individual needs. Partnerships also receive pass-through treatment for tax purposes, allowing the owners to avoid entity-level taxation of their partnership income. A key disadvantage of partnerships is that all general partners are jointly and severally

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[1] Pub. L. No. 109–8, 119 Stat. 23.

[2] See H. Rep. 109–131, "Bankruptcy Abuse and Consumer Protection Act of 2005: Report of the Committee on the Judiciary of the House of Representatives," April 8, 2005, at 3.

[3] See, e.g., Thomas Walker, "Bankruptcy Law a Gift to Credit Card Companies," Providence Journal, July 25, 2006; see also "Bankruptcy Reform Act: A Comprehensive Summary of the Bankruptcy Reform Act of 2005" at <http://ws5.com/bankruptcy>, May 17, 2005 (visited August 25, 2005).

[4] This continues to be the default legal relationship for multi-person firms; however, "default" does not mean "dominant." Rather, if a business organization comes into being without complying with statutory formalities for forming, say, a corporation, it will be considered a general partnership by default.

liable for torts of other partners, and are jointly liable to contract liabilities incurred by any partner acting on behalf of the partnership.

The state-chartered corporation is a more formalized structure than a partnership. Corporate status confers limited liability on its owners, so that they risk only the value of the shares they own. On the downside, corporate status is generally perceived as more cumbersome and inflexible, as governance procedures are largely regulated by statutes that, while allowing participants to opt out, are nonetheless perceived as difficult to overturn. Moreover, corporate status generally implies double taxation, in which the firm is taxed at the entity level and distributions to shareholders are once again taxed at the individual level.

Beginning around 25 years ago, both individual states and taxation authorities began to implement significant reforms to their company law statutes in a way that eroded the distinction between corporate and partnership status. First, federal taxation authorities began to blur some distinctions between corporations and partnerships. In particular, during the early 1980s federal taxation authorities began to allow professional corporations to take advantage of pass-through taxation by electing tax treatment under subchapter "S" of the Internal Revenue Code. For some firms, this option has proven extraordinarily beneficial. Nevertheless, S corporation status still imposes a few important constraints on firms that choose this form. First, the benefit is simply unavailable to large firms or firms with foreign participants, as subchapter S is limited in applicability to companies with fewer than 75 shareholders, all of whom must be U.S. citizens. Second, while enjoying pass-through taxation, S corporations are often unable to deduct the full expenses of many employee benefit plans (as can C corporations), and are generally unable to use basic strategies to reduce or avoid tax liabilities upon a sale of assets or share redemption, such as a step-up in the tax basis of an asset. In addition, S corporations are allowed to have only one class of stock, which limits

During the same time period in which professional S corporations were becoming a reality at the state level, a number of legislatures were beginning to pass statutes authorizing the "limited liability company" (LLC) and "limited liability partnership" (LLP). In fact, these novel business forms were adopted either jointly or individually within every state and the District of Columbia between 1977 and 1996.

Publicly Held Status and the Regulatory Environment

Firms that choose a corporate organizational status may also choose to be publicly held. Generally speaking, a publicly held corporation is one with shares held by a large number of people. The value of the assets and the number of shareholders determine whether the corporation is considered private in the sense that its activities are governed by the Securities and Exchange Commission. Although few entrepreneurs choose public status at the inception of a small business, the issue becomes increasing germane as a firm grows and requires access to additional capital. Securities regulations are a central consideration for smaller firms seeking to make the transition to publicly traded status, or to sustain and expand that status.

Federal securities regulations require firms to file an Exchange Act registration statement if they a) have more than ten million dollars in assets and a class of equity securities with more than 500 shareholders of record or b) list securities on an exchange. Firms that do not meet these criteria may, but are not required, to register. Registered firms face a variety of reporting requirements and restrictions outlined in the Securities Act of 1933 and the Securities Exchange Act of 1934. These regulations are designed to protect the interests of investors by requiring the disclosure of pertinent information.[5]

Federal securities regulations have simplified registration procedures for small businesses, allowing them to use streamlined processes either to begin offering securities for sale to the public, or to expand their current offerings. In particular, the SEC allows an enterprise to use a special "SB–1" or "SB–2" form to register as a small business issuer if a) the business is a U.S. or Canadian issuer that had less than $25 million in revenues in its last fiscal year, and b) the business's outstanding, publicly-held stock is worth no more than $25 million. Registration with the SEC using the SB–1 or SB–2 forms still requires the submission of audited financial statements. The SEC also allows small businesses (there are some exceptions) to do "Regulation A" offerings, which allows for public offerings of stock not to exceed $5 million in any 12–month period. The Regulation A option was created to allow a small business to "test the waters" for interest in its securities before going through the expense of filing with the SEC. Even Regulation A offerings still require the submission of financial statements, but the statements are simpler and they do not need to be audited.

The Sarbanes-Oxley Act of 2002[6] ("Sarbox") imposes additional requirements on publicly traded firms. These requirements have major implications for the governance, accounting, auditing, and executive compensation environment for publicly-traded firms. In conjunction with other regulatory/listing requirements passed pursuant to the legislation, Sarbox requires the following (inter alia) for listed companies:

Senior executives must now personally certify that financial statements "fairly present, in all material respects " the financial condition of their business.

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[5] For details on these federal requirements, see http://www.sec.gov/info/smallbus/qasbsec.htm#eod1 (accessed 9/1/05).

[6] H.R. 3763, enacted in 2002 by the Senate and House of Representatives in the Second Session of the 107th Congress: "To protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws and for other purposes." Web reference: http://news.findlaw.com/hdocs/docs/gwbush/sarbanesoxley072302.pdf.

Annual reports must now include – in addition to the audited financial statements and other information firms must submit to the SEC under the Securities Exchange Act of 1934 – "an internal control report (prepared by the same public accounting firm that prepares the audit report), which states the responsibility of management for establishing and maintaining an adequate internal control structure and procedures . . . and an assessment (by the external auditor) . . . of the effectiveness of the internal-control structure and procedures of the issuer for financial reporting."

Auditing committees, nomination committees, and compensation committees must now be completely "independent," and must (with some exceptions) institute a board of directors that is majority independent.[7]

Executive compensation is now more tightly controlled, prohibiting many sorts of loans to executives, and giving shareholders greater say in the approval of executive stock option plans.

The Sarbox legislative language does not single out "small businesses" for special or different treatment under the Act; SEC leaders have recently announced, however, that further guidance on this topic will be issued, so matters may change further regarding small business compliance with Sarbox.

EFFECTS OF CORPORATE AND SECURITIES LAW ON SMALL FIRMS

Incorporation

Perhaps one of the most salient differences between small and large firms in business organizations law lies in the degree to which their respective owners bear personal liability for business risks. This difference in liability can have important implications for firm behavior. Over 75 percent of all small businesses in the United States (measured in terms of annual sales receipts) have no payroll employees at all, and a majority of those are unincorporated.[8] Thus, many businesses that would be considered small in the context of other regulatory areas are also considered small under business organization law. The relative infrequency with which smaller firms incorporate can have significant differences on many aspects of their operational behavior. Unincorporated firms (or those that have not sought refuge in other statutory forms) can incur business liability risks that could imperil the assets of the firm's owners. This is true even if the firm is owned by a sole proprietor. Existing research indicates that (see, e.g., Ribstein, 2004)

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[7] Companies that are majority owned by a single shareholder or unified group, however, are exempt from the some of these requirements.

[8] Source: U.S. Census Bureau, http://www.census.gov/epcd/www/smallbus.html.

unincorporated business owners[9] are less likely to take risks, are often less innovative, and have distinct (often slower) growth trajectories than their corporate counterparts.

The different legal and regulatory environment facing unincorporated versus incorporated firms may have significant implications for firm behavior, and ultimately for the initiation and growth of small businesses. The threat of financial liability for the firm's obligations might loom large for entrepreneurs, and influence their ability to innovate, grow, or even begin operations in the first place. Previous research (Fan and White, 2003) finds evidence of a "chilling effect" of strict personal bankruptcy laws on entrepreneurship. There is broad concern that changes to the personal bankruptcy law, which make it much harder for individuals to obtain a "fresh start," will exacerbate the distinction between incorporated and unincorporated firms in terms of the level of financial risk born by the owners and further 'chill' entrepreneurship.

One might plausibly respond to the observations above by pointing out that entrepreneurs can choose an organizational status for their firm, and that if smaller firms wished to avoid liability risks, they could easily incorporate themselves. There are, however, at least two countervailing factors worth considering. First, the formalities required to incorporate (involving not only the initial paperwork, but creation and management of governance bodies) involve fixed costs that smaller firms may be less likely to be in a position to bear.

Second, even if a smaller firm were to bear the costs of incorporating (or adopting some other limited liability business form) doing so does not necessarily eliminate the risk of personal liability for shareholders, particularly for closely held companies. In many circumstances, courts can (and do) disregard the veil of limited liability that ostensibly protects shareholders of a corporation, using a doctrine known as "piercing the corporate veil" (or PCV). When PCV doctrine is invoked, shareholders of an incorporated entity are held liable for the firm's debts and liabilities as if the firm were an unincorporated business entity. Although PCV doctrine differs slightly across jurisdictions, a factor that is common to all is whether there is "unity of ownership and interest" between the corporation and its shareholder(s), an inquiry that generally turns on determining whether there is sufficient separation between the firm and its owners. The only successful PCV cases that have *ever,* to our knowledge, been asserted have been against closely held corporations, and not against publicly traded firms (although wholly owned subsidiaries of publicly traded firms, which are technically closely held firms, are also common targets). Thus, incorporation is unlikely to be a complete liability risk panacea for firms whose ownership is closely held.

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[9] These findings apply to business owners who engage in the business on a full-time basis.

Organizational Form

One of the most widely advertised benefits touted at the introduction of new business forms was that they would open up new possibilities for more specialized, entrepreneurial, and smaller business organizations for whom the corporate form was either a poor fit or too cumbersome. Specifically, the LLC/LLP organizational form was intended to allow owners of firms to share the best attributes of both partnerships and corporations. LLC/LLPs combine the flexibility and pass-through taxation attributes of partnerships, while simultaneously according its owners with a form of limited liability akin to corporate status. Within most states, professionals have been permitted to organize as either LLCs or LLPs (sometimes both) without the cumbersome constraints that frequently attend corporate status. At the same time, LLC/LLP also comes with a few costs. First, unlike corporations (and even partnerships), LLC/LLP companies are required to have a limited lifespan (frequently in the neighborhood of 35 years). Although firms are allowed to re-form at the end of this period, the terminal period itself can create both tax and strategic problems for a firm. In addition, enabling statutes typically require that LLCs and LLPs carry a minimum amount of insurance against claims of third party creditors. Moreover, even within a state there is frequently some variation in the nature and extent of liability protection that these new business forms afford. For example, the LLP form frequently provides only a partial shield against liability relative to the LLC,[10] and imposes larger fiduciary duties on its members, but is also significantly more flexible. Despite these differences, the LLC and LLP both constitute important options that might be of particular interest to small entrepreneurial firms.

The Public–Private Divide

The Securities and Exchange Acts have long imposed reporting and other requirements on firms that register with the SEC. As entrepreneurial firms grow larger and require access to additional capital, they face a choice as to whether the benefits of publicly traded status are worth the costs associated with regulatory requirements. By all accounts, the Sarbanes-Oxley legislation (and related regulations) has changed the landscape of securities law for firms that are publicly traded. However, there is no consensus regarding how the new Sarbox rules are likely to affect the interests, prospects, and growth trajectories of companies that are not listed on a national exchange (and thus not subject to federal securities regulations).

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[10] Most notably, a number of states provide partners in an LLP only partial liability shields against third party creditors (most notably, tort claimants alleging malpractice by other partners). These “partial shield” states still allow for liability as to the LLP’s general debts, and include Alaska, Louisiana, Ohio, Arkansas, Maine, Pennsylvania, District of Columbia, Michigan, South Carolina, Hawaii, Nevada, Tennessee, Illinois, New Hampshire, Texas, Kansas, New Jersey, Utah, Kentucky, North Carolina, and West Virginia.

The Chief Auditor for the Sarbox-created Public Company Accounting Oversight Board (PCAOB), for example, has expressed the view that the Sarbox changes will make it *easier* for closely held businesses to make the transition to publicly traded status – because the additional reports and assessments they have to produce will help convince prospective investors that good internal controls are already in place, thereby making small business investments safer than they have tended to be in the past.[11] Many critics, however, have pointed out that the new requirements will simply impose a compliance cost for doing business as a public company. If such costs are high enough, privately held firms will eschew registration or, if they are already registered, de-list because of the increase in recurring expenses and other effects that the new Sarbox rules will impose. If the Sarbox regulatory innovations create a situation in which only "large businesses" can afford to go or remain public, small businesses may face differential difficulties in accessing capital, with potentially far-reaching effects for the markets and economic growth in general.[12]

Others have suggested that documentation costs and external auditor fees associated with Sarbox reporting could be substantial – with estimates that the internal-control-report attestation fees could range from 25% to more than 100% of current audit fees.[13] If true, and in the absence of commensurate countervailing benefits, compliance costs could prohibitively increase the cost of capital for publicly traded firms, leading to a prediction that (all else constant) a larger rate of going private mergers and a smaller rate of public offerings will ensue post-Sarbox. In addition, some have projected "cascade effects" from Sarbox, as state legislatures and regulators decide to apply all or some portions of Sarbox-type reporting rules to a wider population of firms, perhaps even to non-publicly traded businesses simply for stricter tax-accounting and enforcement purposes. This also creates possibilities for the proliferation of different rules and regulations from state to state, which could increase the challenges for all small businesses that engage in interstate trade.[14]

Key questions that have not been addressed include: How have the new regulatory requirements affected the willingness of companies to go into (or stay within) the public capital

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[11] The PCAOB Chief Auditor has expressed the view that "small companies may actually benefit from the new (Sarbox reporting) requirements, because fraud tends to be more prevalent among small companies, making access to capital markets harder. The new requirements should reduce uncertainty and therefore improve access" (the view of Mr. Douglas Carmichael, PCAOB Chief Auditor, as reported by the WSJ, 2/10/2004).

[12] Quantitative estimates have already begun to appear on the costs associated with Sarbox compliance. The preceding WSJ article, for example, cites a study released by Financial Executives International estimating that firms with annual revenues of less than $25 million will incur first-year Sarbanes-Oxley compliance costs of $0.28M and 1,996 hours.

[13] See, e.g., http://www.aicpa.org/pubs/jofa/feb2004/coustan.htm for a discussion.

[14] The AICPA website quotes the President of the National Association of State Boards of Accountancy as saying that "California and New York have (already) added to the Sarbox documentation requirements. There is a proliferation of rules. People are making more rules on top of rules that have not yet been implemented."

markets? Has this reaction been differentiated across different firms according to size, or has it been homogeneous? How well do alternative sources of capital (e.g., private equity markets) substitute for the benefits of pubic capital, and does the viability of these alternative sources differ according to firm size? These questions are ripe for inquiry.

ISSUES FOR FUTURE RESEARCH

Although corporate and securities law does not typically receive attention in the study of small firms, it is clearly deserving of such attention. There are a number of researchable policy-relevant questions related to the differential impact of corporate and securities law on small v. large businesses.

First, there is a need to develop an empirical understanding of the differences in the risk profiles of closely held firms and publicly traded firms. In addition, our understanding of the effects that the PCV doctrine is likely to have on small compared to larger companies is limited. The most definitive empirical study (Thompson, 1991) is now over a decade old, and even when published included some surprising findings that were probably an artifact of the author's failure to control for selection biases in his data set.[15] Such research would help entrepreneurs by illuminating the relative costs and benefits of incorporation and publicly traded status. It would also inform policymakers of any unintended consequences of policies on small businesses.

To the extent that smaller firms tend to remain unincorporated, another possible business legal distinction between large and small companies concerns the jurisdictional landscape they face. A disproportionate number of large companies incorporate in the state of Delaware and are subject to its laws. In contrast, unincorporated firms (and perhaps some smaller incorporated ones) are more likely to be subject to the business organization laws of the state in which they do business. The more developed (and well known) doctrines that have emerged in Delaware may create a form of stability and predictability that smaller companies do not, as a practical matter, enjoy. Another fruitful area for research, then, might be to consider whether a "Delaware effect" (such as that identified for firm value by Daines [2001]) carries over to other operational and business risk components of firms' profiles. Evidence of such an effect might argue for changes in state business laws in other states.

Research on the implications of personal bankruptcy reform for entrepreneurs is also a promising area for future research. There are differing views regarding whether the reforms are a good or bad thing for small business. In this paper, we have discussed the possible "chilling" effect on entrepreneurship due to the increased difficulty for businesses to make a 'fresh start."

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[15] Moreover, in Thompson (1991), essentially no attempt was made to examine state-by-state variation in veil-piercing activity. Nevertheless, piercing doctrine continues to be one of the most often litigated areas of corporate law in the country.

However, if the law makes business opportunities more risky, it might therefore drive some "bad" risks out of the market, resulting in a more robust set of small business entries that will be less vulnerable to failure. In addition, a more "pro-creditor" bankruptcy regime might benefit small businesses that are creditors to individuals and other small businesses. The net implications are unclear and worthy of future research. If unintended consequences of this legislation for small businesses can be identified, then reforms to the legislation could be considered.

Although the regulatory roll-out of new business forms has now substantially run its course, researchers and policymakers are only now beginning to assess their effects. In particular, little is known about what sorts of firms have benefited from the new options.[16] It would be useful to evaluate whether one of the major intended benefits of these innovations, namely to open up new possibilities for more specialized, entrepreneurial, and smaller business organizations, was in fact realized. The incremental introduction of limited liability forms across states provides an important form of statistical variation that would allow researchers to measure the importance of regulatory structure on organizational choice. What sorts of firms are most likely to take up the new business forms? Of those who take up the forms, are they likely to grow or shrink as a result of their decision? Do they take on riskier projects after reorganization? Policymakers should be interested in determining whether these reforms had a real effect on entrpreneurship.

Another important area for research would explore the various ways in which the Sarbanes-Oxley Act has influenced small business. For example, research might explore the question of how the new Sarbox rules are likely to affect the interests, prospects, and growth trajectories of companies that are not listed on a national exchange, particularly in light of the differing predictions have been made on what the net effects will be.[17] Similarly, empirical work on the decisions of small firms that are currently listed (and related regulations) would shed light on how they have responded to the introduction of Sarbox. Research on these issues would contribute greatly to the ongoing policy debate surrounding the implementation of Sarbox.

There are many other related subjects that are also potentially relevant to small business. For example, California recently considered a major reform to its unfair competition law,[18]

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[16] Hillman (2003) is perhaps the most comprehensive description of how firms in a certain industry (law) have embraced these new forms. Recently, Baker and Krawiec (2004) use a smaller study of New York firms, but find little evidence of size effects among adopters.

[17] Leuz et al. (2004) consider the act of "going dark" among firms before and after Sarbox—i.e., the process by which relatively closely held firms can de-register and trade solely on the over-the-counter market. They document a considerable negative abnormal return for such firms, leading them to conclude that compliance costs are not the sole cause of concern for firms that de-register. This result contrasts with Block (2002), who uses a survey instrument to measure the rationale for firms who deregister, and notes that 60 percent of them list Sarbox compliance costs as the primary rationale. Hence, this question remains a lively one within the academic community.

[18] Cal. Bus. & Prof. Code § 17200 (2004).

which allows private rights of action by citizens (as private attorneys general) to seek enforcement. While monetary relief for such plaintiffs is often limited to restitution of their own losses, their ability to seek injunction can represent a significant threat to potential defendants. To date, there is virtually no research on how this statute tends to be utilized in practice. Anecdotal accounts, however, suggest that small businesses and large businesses appear to be subject to very different kinds of suit, in which plaintiffs seek equitable relief in the former and significant damages in the latter. The divergent conditions under which plaintiffs seek redress in these cases may also be pertinent to whether the statute achieves its overall policy goals. For example, small firms may be more frequently subject to non-meritorious suits if the cost of defending such suits constitutes a considerable fraction of their operating revenues, and a favorable judgment is unlikely to produce long-term benefits in future litigation. On the other hand, larger firms have a more significant ability to pay damages, and are more decentralized, which creates a countervailing possibility of non-meritorious suits. The existence of non-meritorious litigation in either case is significant, because not only does it increase the underlying costs of doing business, but it also weakens the deterrent effects that the unfair competition law can have – as companies become resigned to the prospect of dealing with such litigation.

3. ENVIRONMENTAL PROTECTION

There are several reasons to expect firm size to be an important consideration in formulating and evaluating environmental policy. First, from the regulator's perspective, it may be more cost effective to focus regulation and enforcement on large sources, which are usually large firms. Liability-based approaches also may be more effective on firms that have deep pockets. In addition, regulatory approaches that require firms to provide information may be more successful with firms concerned about their public image, which again may tend to be larger. For all these reasons, small firms may have been overlooked in previous analyses of the impact of environmental regulations on business. At the same time, it may be easier for larger firms to comply with environmental regulations; as a result, regulations might increase the minimum efficient scale of production, putting small firms at a competitive disadvantage.

REGULATORY ENVIRONMENT

Environmental regulations attempt to reduce the negative effects of industrial, manufacturing, and other business operations on the environment and people's health. Firms frequently do not bear the cost of their operations on the environment or public health. Thus they do not have appropriate incentives to control emissions. The purpose of environmental regulations is, at least in part, to correct these so-called negative externalities.

In the United States, federal environmental laws initially focused on large sources of pollution and large firms. These laws were implicitly designed with large firms in mind—firms that could afford in-house environmental compliance offices and that had engineering expertise. Over time, as large sources increasingly came under control, the Environmental Protection Agency (EPA), state environmental agencies, and environmentalists gradually turned their attention to mid-size sources of pollution, and to smaller firms. While the emissions of any one small firm might not be large, the large number of small firms in many industries made the cumulative emissions across all small firms a source of concern. As attention has shifted toward smaller sources, the question arises whether the regulatory approaches that were initially developed with large firms in mind are appropriate for small firms.

Federal Environmental Regulations

A list of major federal environmental laws is shown in Table 3.1.

A number of states have also have enacted their own environmental laws and regulations that are stricter than the federal laws.

Table 3.1

Major Federal Environmental Laws

Law	Year Enacted or Amended	Focus
Clean Air Act	Enacted in 1967 as the Air Quality Act and amended in 1970, 1977, and 1990	Regulates air emissions
Clean Water Act	Enacted in 1972 and amended in 1977 and 1987	Regulates discharges into bodies of water
Safe Drinking Water Act	1974	Sets standards for drinking water and discharges into sources of drinking water
Resource Recovery and Conservation Act	Enacted in 1976 and significantly amended in 1984	Focuses on waste disposal into landfills
Federal Insecticide, Fungicide, and Rodenticide Act	Enacted in 1947, but amended with major changes in 1972	Regulates pesticides and particular set of chemicals
Toxic Substance Control Act	1976	Regulates chemical use and disposal in general
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	1980	Addresses clean-up of abandoned or inactive hazardous waste size
Superfund Amendments and Reauthorization Act	1986	Amended CERCLA and established the Toxic Release Inventory
National Environmental Policy Act	1969	Addresses general environmental policy and practice
Pollution Prevention Act	1990	Addresses general environmental policy and practice

Regulatory Enforcement

The implementation and enforcement of these regulations occurs through a variety of mechanisms that differ according to the regulation, industry, and firm in question. States agencies play the lead role in enforcing these regulations. They accomplish this primarily by monitoring the processes that firms employ to comply with regulation. Such monitoring often requires substantial data collection on the part of firms, which must track emissions and the use of hazardous substances and then report to EPA. When firms are found to be out of compliance, they may be subject to fines and required to take action to remedy the problem.

The federal statutes listed above were adopted or substantially amended between the late 1960s and 1990. During the 1990s, there were efforts to integrate and streamline the fragmented air, water, and waste laws and programs. This section reviews some of the main initiatives undertaken.

Voluntary Agreements. Many efforts took the form of voluntary agreements. Voluntary agreements can be classified into three types: public voluntary, unilateral, and negotiated agreements (Mazurek, 1998). Public voluntary agreements are non-mandatory rules developed by EPA or other government regulators. An example of such agreements is EPA's 33/50 program. The program, concluded in 1995, encouraged manufacturers to voluntarily reduce emissions of 17 target chemicals by 50 percent. Unilateral agreements are agreements made by industry for industry. An example is the Chemical Manufacturers Association's Responsible Care Program, which encouraged member companies to adopt environmental management principles. Negotiated agreements are contracts between public authorities and industry. The two most visible examples have been EPA's Project XL and the Common Sense Initiative (CSI). Both were designed in response to the complaints from the regulated community regarding the growing detail and complexity of federal environmental laws (Mazurek, 1998).[1] CSI's goal is to make environmental regulation and performance "cleaner, cheaper, and smarter", and it was tried in six industrial sectors. Most of these initiatives in environmental regulation were largely abandoned when the Bush Administration came into office in 2001. The main exception is EPA's National Environmental Performance Track program. Performance Track is a voluntary partnership program that recognizes and rewards private and public facilities that demonstrate strong environmental performance beyond current requirements.

Government Enforcement Strategy. A number of programs were adopted over the last 10 years in an attempt improve the regulatory system for small businesses. The Small Business Regulatory Enforcement Fairness Act of 1996 directs the Small Business Administration to establish a regulatory enforcement ombudsman and 10 regulatory fairness boards in 10 regional cities. The act allows a small business to file a grievance in court if it believes the business has been "adversely affected or aggrieved" by a regulatory ruling. The courts can rule that the regulations should not be enforced against a small firm. The boards are required to report to Congress on their activities (OMB Watch, 2002).

To monitor agency efforts to reduce regulatory burden, the Small Business Paperwork Relief Act of 2002 requires agencies to report to Congress and the Small Business and Agricultural Regulatory Ombudsman on their enforcement actions against small businesses and the penalty reductions in such actions. The Paperwork Reduction Act also required federal agencies to review the impact of their regulations on small businesses and to consider less costly alternatives for accomplishing public policy goals (OMB Watch, 2002).

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[1] See Coglianese and Allen (2003) for a review of EPA's Common Sensei Initiative.

EPA's Small Business Compliance Policy promotes environmental compliance among small businesses (those with 100 or fewer employees) by providing incentives to discover and correct environmental problems. EPA eliminates or significantly reduces penalties for small businesses that voluntarily discover violations of environmental law and promptly disclose and correct them (EPA, 2005).

Small Business Participation in the Regulatory Process. The Small Business Regulatory Enforcement Fairness Act (PL 104–121, 1996) provides new avenues for small businesses to participate in the federal regulatory process. EPA has set up panels to facilitate greater participation by small business in the regulatory process (SBA, 2004). This program responded to concerns that greater participation by larger firms in the regulatory and political process has resulted in regulations that are tailored to the experiences and capabilities of larger firms. There do not appear to be studies on the use and effectiveness of this or similar programs.

Environmental Management Systems. In recent years, government and industry have been exploring standards and guidelines for the management of firm activities or processes related to environmental performance. Environmental management systems do not specify particular emissions standards, but they provide guidelines for management structures. For example, EPA has adopted management-based regulations aimed to prevent accidents involving hazardous chemicals. These regulations require facilities to conduct risk assessments of their operations, develop procedures to prevent accidents, and seek to make continuous improvement in the management of their operations (Coglianese and Nash, 2004, p. 6).

LIABILITY AND CITIZEN ENFORCEMENT

Liability. Firms often face liability for the release of pollutants into the environment. The highest profile example is probably the federal Superfund program, which imposes strict, joint and several, and retroactive liability for the clean-up up of hazardous waste sites. Small firms accounted for the majority of those responsible for site cleanup, although a more moderate share of the total waste sent to the site (Dixon, 2000).

Environmental and toxic tort claims can also cause firms to incur costs and requirements to change their business practices. The use of class action law suits for environmental and toxic tort claims has been a topic of ongoing debate. From 1980 to the mid-1990s, the trend was toward more widespread usage of class action suits for environmental and toxic tort claims. In the mid-1990s, however, a series of federal appellate court decisions reversed class certifications in pending class action tort cases (Schwartz and Sutherland, 1997). Further examination is needed of the impact of these reversals over time and of the differential impacts of liability related to environmental harms across small and large firms.

A third dimension of environmental liability worth investigation is the impact of recent court decisions on the relative exposure that large firms have to liability claims. Approximately six years ago the U.S. Supreme Court first considered the question of whether large multi-national firms could shield themselves from CERCLA liability through a parent-subsidiary relationship. In *U.S. v. Best Foods* (1998), the court held that a corporate parent could be held vicariously liable for its subsidiary's environmental damage if the parent's right of control over the subsidiary's business was sufficiently large to convert the parent into an "operator" under CERCLA. If these events enhanced large firms' exposure to vicarious liability, the predicted effect would be to induce them to contract out much of their high-risk work to smaller, less liquid firms, working substantially independently.

Citizen Enforcement. The federal Clean Water Act and several other federal environmental laws allow private citizens to bring enforcement actions. Private enforcement of environment-related regulations is also allowed under two California laws. California's Safe Drinking Water and Toxic Enforcement Act of 1986 (more commonly known as Prop. 65) prohibits businesses from knowingly discharging listed chemicals into sources of drinking water, and requires warnings before otherwise exposing someone to a listed chemical.

There is a great deal of controversy about the social value of citizen suit provisions. Supporters contend that empowering "private attorneys general" is an appropriate and effective way to augment the limited resources of public enforcement agencies. Critics contend that citizen suits are often used to pursue narrow private interests, generate legal fees while focusing on permit violations that cause little environmental harm, and restrict the socially useful discretion of public enforcement agencies. Citizen suit provisions have now been in place for over 25 years, but there is little systematic empirical information about them. There has been a good deal of legal analysis of the various statutes and court cases (see Leonard, 1995; Austin, 1987; Thompson, 1987), but little data have been collected on the frequency, costs, and outcomes of these cases.

EFFECTS OF ENVIRONMENTAL REGULATIONS ON SMALL FIRMS

There has been ongoing debate over whether environmental regulations put small firms at a disadvantage relative to larger ones. Environmental regulations may more heavily impact small firms because of compliance asymmetries, statutory asymmetries, and enforcement asymmetries (Dean, 2000, p. 58). We discuss each in turn.

Compliance Asymmetries

Compliance with environmental regulations requires responses by the firm on several different dimensions. It can involve installation of pollution control equipment that removes pollution produced in the production process (so-called end-of-the-pipe treatment) or installation of production equipment that generates less pollution. Compliance can require firms to monitor waste streams or releases of pollutants into the environment and report results to government agencies. Finally, compliance can have internal organizational implications for firms; for example, requiring them to designate points of contact for government agencies or to develop a emergency response plan for the release of hazardous substances.

Pollution equipment can increase the minimum efficient scale of production, possibly putting small firms at a disadvantage. There can also be economies of scale in discovering and understanding environmental regulations and in completing required paperwork. The result is that environmental regulations may cause costs per unit of output to increase more for small firms than larger ones.

Studies have found evidence of compliance asymmetries. Pettman (1981) found that required control technologies in the pulp and paper industry increased the minimum efficient size of a plant. Not all studies agree, however. Using data on manufacturing firms between 1978 and 1981, Evans (1985) asked whether there were substantial economies of scale in complying with U.S. EPA and OSHA regulations. Recent thinking on the impact of environmental regulations also raises questions about economies of scale argument. Some analysts believe that a small but growing body of evidence indicates that firms have found ways to convert environmental regulations into a competitive advantage (Dean, 2000). When reengineering production processes to produce less pollution, some firms have found ways to save enough inputs so that unit production cost has declined.

Environmental regulations may make it more difficult for new firms to enter the industry. Existing firms may have gradually learned the cheapest and most effective way to comply with environmental regulations over time. Compliance costs may be initially higher for potential entrants, discouraging entry. If costs are skewed in this way, environmental regulations may pose a barrier to entry that disadvantages small firms.

Statutory Asymmetries

Varying the requirements of environmental regulations by firm size became common starting in 1985 (Hopkins, 1995, p. 8). This so-called “tiering” means that small firms are exempted from certain requirements or are required to meet less stringent emission or treatment technology standards. According to the U.S. Small Business Administration Office of

Advocacy, U.S. EPA has tiered over 50 different regulations based on either firm size or the amount of pollution released (SBA, 1995, p. 5).

While such tiering of environmental regulations obviously works to the advantage of small businesses, two factors work to reduce this advantage. First, environmental regulations often contain grandfathering provisions that allow older, and perhaps larger, firms to postpone compliance with new regulations or provide for less stringent standards. For example, under federal new source review guidelines, existing firms are not required to upgrade pollution control equipment until they modify their existing plants by making "non-routine" physical or operational changes that result in a significant increase in emissions of a regulated pollutant. Second, Shaller (1998) observes that large firms are usually much more active in the regulatory process than smaller firms, with the result that regulations are tailored to the experiences and capabilities of large firms. The result may be that the advantages given to small firms under the regulations may not be as large as they might first appear.

Enforcement Asymmetries

Asymmetries in enforcement result when government or private parties enforce regulations more vigorously against firms in one size range than another. Brown et al. (1990, p. 84) found that government enforcement practices serve to cushion the regulatory burden placed on smaller firms, and that the preferential treatment more than offsets any disadvantages for small firms created due to economies of scale in complying with environmental regulations. Finto (1990) concluded that limited enforcement budgets cause U.S. EPA to focus enforcement efforts on larger firms. There are contrary views, however. Several studies have concluded that enforcement is less stringent against larger firms. For example, findings by Bartel and Thomas (1985) suggest that large producers face less stringent enforcement by U.S. EPA and OSHA. Some agree that larger firms often escape stringent enforcement because they are more politically influential than smaller firms and can directly or indirectly influence enforcement priorities.

Even if regulations are enforced equally for large and smaller firms, the ultimate impact of regulations on large firms may be less if they are more successful in defending themselves. Yeager (1987) found that because larger firms have more resources, they are more successful in defending themselves against enforcement actions. Larger firms must bear the costs of such defenses, but the cost is presumably less than the expected cost of compliance, thus reducing the difference in the cost of environmental regulations between large and small firms from what it would otherwise be.

Research has shown that enforcement actions by private parties tend to focus on larger firms.[2] Greve (1989) found that environmental groups were more like to pursue enforcement actions against larger firms under the Clean Water Act even when these firms were not the largest polluters. Dean et al. (2000, p. 59) argued that large firms are more likely to be targeted by private groups than small firms because large firms are more concerned about their reputations and thus more prone to settle.

Combined Effects

The net advantage or disadvantage for small firms created by each of the three asymmetries is difficult to determine and undoubtedly varies by industry as well as environmental regulation. The combined effect of the three uncertainties is also not obvious. For example, compliance asymmetries that disadvantage small firms may be offset by statutory and enforcement asymmetries that favor them. Empirical studies that attempt to evaluate the combined effects of environmental regulations have come to mixed conclusions.

Before environmental tiering became widespread, Pashigian (1984) found that environmental laws placed greater burdens on smaller manufacturing plants, resulting in increased market share for larger firms. Both Pashigian (1984) and Bartel and Thomas (1987) concluded that while regulations can impose significant burdens on larger manufacturing firms, decreased competition from smaller firms might mean that, on the whole, large firms are better off with environmental regulations than without.

Dean et al. (2000) found that higher pollution abatement costs resulted in lower entry of small firms into the industries examined, but not large firms. They concluded that, on the whole, environmental regulations put small firms at a unit cost disadvantage relative to large firms. Dean et al. also concluded that the disadvantages faced by small firms were not a temporary phenomenon that disappeared as firms learned to cope with regulations and organizations evolved to aid small firms in abatement efforts (2000, p. 61). It should be noted, however, that their conclusions are based on data only through 1987 and may not reflect conditions today.

Other studies suggest that environmental regulations do not put small firms at a significant disadvantage. Hopkins (1995, p. 61) found that environmental regulations accounted for a smaller share of overall regulatory burden for small firms than for large firms and that tax and payroll-related burdens were the main concerns for smaller firms. A 1994 survey by Arthur Anderson and National Small Business United came to similar conclusions. In addition, the study found that firms with fewer than 20 employees were more than twice as likely to report

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[2] Enforcement of environmental regulations is primarily the responsibility of public agencies, however, as will be discussed below, several environmental statutes (such as the federal Clean Water Act) allow private parities to bring suits to force firms to comply.

that they faced no major regulatory burden of any kind (including environmental regulations) than larger firms (Anderson, 1994, p. 25, as quoted in Hopkins, 1995, p. 9).

Researchers have found that environmental regulations can increase the number of small firms in some circumstances. For example, Ringleb and Wiggens (1990) argued that concerns about liability have induced larger firms to shed operations involving hazardous substances. Becker and Henderson (1997) found an increase in the number of small firms in four-high polluting industries.

It is difficult to judge the success of efforts over the last 10 or 15 years to make it easier for small firms to comply with environmental regulations. EPA's Office of Enforcement and Compliance Assurance does not keep records on the number of small businesses participating in the self-audit program—although data may be available at regional offices. Reed (1999, p. 324) found that EPA has been successful in increasing compliance with the Environmental Audit Policy among large corporations. She speculated that small firms might not want to participate in the program because they feared potentially high costs of correcting violations. Small firms may also have little incentive to participate in the program if they think the probability of direct government enforcement is low. Some states also have adopted audit programs, although coordination between EPA and the states has not been good (Meason, 1998). Under Illinois' "Clean Break" program, businesses agree to come into compliance within a reasonable time in exchange for amnesty for past violations. In spite of Clean Break and EPA small business programs, the audit rate in the Illinois small business community is almost zero (Meason, 1998, p. 12).

This review of research to date suggests that are no easy answers to the question of how environmental regulations have affected small firms relative to larger ones. Moreover, many of the key studies rely on data that are now quite dated. Rapid evolution in environmental regulations and policy may mean that findings of past studies do not reflect today's regulatory environment.

ISSUES FOR FURTHER RESEARCH

Environmental policymaking must balance competing objectives. Ultimately, it is up to policymakers to determine the balance between the benefits of regulatory compliance, and the costs associated with regulation. However, better information would allow policymakers to make more informed decisions, particularly as they related to the impact of regulation on small firms. While the existing body of research on environmental protection in the business context is extensive, further research is needed to better understand how recent trends in environmental regulation, enforcement, and liability are affecting businesses along size dimensions. Better information is also needed concerning which aspects of environmental regulatory and liability policy cause the greatest problems for small firms. Information needs to be synthesized on the environmental damage caused by small firms and the benefits of reducing this damage.

Major environmental initiatives have traditionally focused on large firms, and there is clear evidence that the regulations were formulated with large firms in mind. There is a need to understand whether a different approach to source control, pollution prevention, compliance assistance, and enforcement is needed to deal with the small-scale operations of small firms.

There also needs to be a more thorough evaluation of how different initiatives, such as the Common Sense Initiative and self-auditing programs, have been utilized by small firms and what types of modifications to these programs would make them more attractive to small firms. Large firms are motivated to participate in environmental initiatives partly by concerns about their image in the communities in which they operate or their image with their customers. More research is needed to determine the types of concerns that would motivate small businesses to address the impacts of their operations on the environment.

4. EMPLOYMENT LAW AND REGULATION

The relationship between employer and employee is a critically important one for virtually every business beyond that of a single, self-employed individual. In the United States, the employment relationship is generally viewed as an unregulated "at will" contract between the employer and the employee. However, despite this premise, a variety of regulations, rules, and policies at the federal, state, and local levels influence or restrict the ways in which businesses interact with prospective, current, and former employees. Such regulations and policies recognize that various factors can alter the balance of power between employer and employee and are designed to address concerns that one party (usually, but not always, the employer) might intentionally or unintentionally impose harm on the other. This harm may result from an employer's intentional or unintentional discrimination against certain groups of current or potential employees which denies them access to jobs or fair wages, the establishment of a hostile or unsafe work environment, the exercise of market power to drive down wages, lost wages due to job loss, workplace injury, or, on the employee's side, from the theft of intellectual property or a client base from an employer. Employment laws, regulations and policies, which can range from minimum wage laws and anti-discrimination laws to non-compete agreements, to workers' compensation and unemployment insurance, can protect or benefit one party (usually employees) from such harms, but typically impose some cost on the other party.

In designing these regulations, policymakers strive to strike a balance between costs and benefits. Policymakers often adjust the application of or enforcement of employment-related regulations according to firm size due to the belief that a given regulation or regulatory policy will impose a greater relative cost on a smaller firm. In this chapter, we will examine some of the laws and regulations involving employment and will identify ways in which the interaction between firm size and employment law and regulation could affect explicit and implicit tradeoffs between costs and benefits.

Our focus here is on the ways in which policies regulating the contractual relationships between employers and employees can have a differential impact on small businesses and entrepreneurship.[1] There are two primary policy considerations here. The first is whether or not regulations place a burden on smaller or larger employers in such a way that is unfair or inefficient. The second is whether or not the regulations give small firms an incentive to treat workers in a way that differs systematically, either for better or worse, from the way employees

[1] In many cases the regulations imposed on employers are designed to influence the health and safety environment for workers. However, we defer the discussion of health and safety regulations until the next chapter.

are treated at large firms.[2] These questions can be at least partially addressed through a theoretical or empirical examination of how different employment regulations affect the costs and productivity of various-sized firms.[3] Only by answering these questions can we hope to address a third issue, i.e., how laws and regulations could or should be reformed to better meet their objectives without distorting the efficient level of entrepreneurship.

First, we present a broad overview of the regulatory environment, including a discussion of the employment-related regulations, rules, and policies that we believe are most likely to affect entrepreneurship and small business, as well as their enforcement or implementation. We then discuss the ways in which the costs (or benefits) of compliance and enforcement might vary with firm size. Finally, we conclude with a discussion of potential research that could provide us with important information on how employment regulation impacts the ability of small firms to compete with their larger counterparts in today's economy.

REGULATORY ENVIRONMENT

For the purposes of this section, we categorize employment-related regulations, rules or policies into four groups:

- regulations or rules that govern acceptable employer behavior vis-à-vis potential, current, and former employees
- regulations or rules that govern employee behavior vis-à-vis potential, current, and former employers
- workers' compensation, an administrative compensation program that dictates the remuneration provided to individuals who are injured at or become sick because of their work
- unemployment insurance system, a social insurance program that compensates individuals who lose their jobs and are, at least temporarily, unable to find new work.

It is worth noting one important class of employment regulation that we are explicitly not discussing here: law governing unions and union membership, which we loosely refer to as labor law. While labor law does have important implications for the relationships between employers

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[2] Note that this second issue is not solely concerned with the possibility that regulation could lead larger firms to abuse their bargaining position with workers at smaller firms may be less likely to take advantage of their employer (for example by shirking).

[3] We say partially because in many cases the ultimate question is whether or not shifting higher or lower costs to a firm of a particular size is efficient. As mentioned above, it may be appropriate for small firms to bear higher costs if production there is inherently less efficient. In most cases, a review of the optimal distribution of firm size will be beyond the scope of any single research project. Rather, by documenting the impact of any particular policy we can at least hope to provide important information to those policymakers responsible for weighing these social costs and benefits.

and their employees, there are three central reasons we do not consider it here. The first is that an increasingly smaller and smaller number of workers in the United States are members of a union, particularly in the private sector. A second, related point is that very few workers in small firms are unionized. Both of these points are illustrated in Table 4.1, which uses data from the Current Population Survey (CPS) to describe unionization rates in the U.S. labor force by employer size and the type of employment. The table illustrates that while a large percentage of public sector workers are unionized, a much smaller percentage of private sector or self-employed workers are. Moreover, for private firms employing fewer than 10 people, just 4 percent of workers are unionized.[4] As a final point, we note that labor law has been relatively stagnant over the past 20 years, perhaps a result of the downward trend in union membership. For these reasons, we ignore labor law and focus our attention on employment law and regulations, which have been much more dynamic in recent years and which offer more opportunities for research into the impact of regulation on small businesses.

Table 4.1

Average Union Membership by Employer Size and Ownership, 2003
(number of workers)

	Number of Employees					
	<10	10 to 24	25 to 99	100 to 499	500 to 999	1,000 +
Private Firm	4% (19,959,048)	6% (15,871,037)	7% (21,496,716)	10% (21,299,337)	13% (8,224,409)	13% (51,922,783)
Government Agency	10% (325,840)	21% (527,889)	32% (1,491,519)	41% (3,422,648)	45% (1,764,268)	36% (20,170,598)

Note: Data come from the 2003 Current Population Survey (CPS). Data reflect the use of weights reflecting the sampling for earnings data reported in the Outgoing Rotations File. See "Technical Description of the Quarterly Data on Weekly Earnings from the Current Population Survey," BLS Report #601, July 1980 for further information.

Limitations on Employer Behavior: Government Regulations

Many federal statues have been put in place over the past 40 years that protect individuals against discrimination or a hostile or unsafe environment in the workplace and that prevent employers from terminating employees in specific protected classes for specific reasons. Many of these federal rules are applied according to size thresholds such that businesses with a small number of employees are not covered.

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[4] It is worth noting that the CPS data may understate the extent of unionization at smaller firms. The CPS asks "Counting all locations where this employer operates, what is the total number of persons who work for ...'s employer?" If workers at firms with many locations are only informed about the number of workers at their own location, they may under-report employer size and if, as we expect, these workers are relatively more likely to be in a union then it would bias upwards the fraction of unionized workers at small firms in Table 3.1.

Two or more employees. These size thresholds can be quite low, as in the case of the Fair Labor Standards Act of 1938, which applies to businesses with two or more employees. The act guarantees a minimum wage, and 1.5 times the regular rate of pay for hours worked over 40 hours per week. It also restricts the use of child labor and imposes record keeping provisions on employers (http://www.dol.gov/esa/whd/flsa/). Another regulation with a low employment threshold is the Immigration Reform and Control Act, which restricts employers with four or more employees from discriminating against U.S. citizens, nationals and authorized aliens on the basis of national origin in hiring, discharge or referrals (http://www.usda.gov/agency/oce/oce/labor-affairs/ircadisc.htm).

Fifteen or more employees. The core federal anti-discrimination acts apply to employers with 15 or more employees. These include Title VII of the Civil Rights Act of 1964 (discrimination in hiring, employment or termination based on race, color, religion, sex or national origin, sexual harassment), Pregnancy Discrimination Act, Equal Pay Act of 1963, and the Americans with Disabilities Act of 1990.

Twenty or more employees. Employers of 20 or more employees must comply with the Age Discrimination in Employment Act of 1967, which prohibits discrimination against individuals age 40 or over. Employers of this size are also required under the Consolidated Omnibus Budget Reconciliation Act (COBRA) to provide employees and their families with the opportunity to temporarily extend their health care coverage under group heath care benefit plans (if any) sponsored by the employer in certain cases where the coverage would otherwise end (e.g., death of the employee, termination, divorce).

Fifty or more employees. The Family and Medical Leave Act requires employers with 50 or more employees to allow employees 12 weeks of unpaid leave for specific reasons such as the birth or adoption of a child, or to care for a seriously ill immediate family member.

Firms of all sizes. The federal Occupational Safety and Health Act (OSH Act), administered by the Department of Labor's Occupational Safety and Health Administration (OSHA), regulates safety and health conditions in most private industry workplaces. In general, federal health and safety regulations apply to all firms, regardless of size, but enforcement practices vary depending on the size of the employer.

State regulations. In addition to these federal regulations, 49 of the 50 states plus the District of Columbia and Puerto Rico have their own version of anti-discrimination statutes. In many cases, these statutes are more stringent than the federal regulations, either in terms of the size threshold used to determine the applicability of the anti-discrimination statute, or in terms of the type of discrimination covered by the statute. For example, in Massachusetts, the equivalent of Title VII of the Civil Rights Act applies to employers with six or more employees and also protects against discrimination based on sexual orientation, ancestry and veterans status. The

Massachusetts Commission Against Discrimination (MCAD) enforces these rules (http://www.whoi.edu/services/HR/supervis/aim.htm#union). As we shall discuss in more detail later, state-level variation in these thresholds provides potentially useful variation with which to study the impact of these regulations on small businesses.

Limitations on Employer Behavior: Restrictions on Contractual Form

Employer behavior is also circumscribed by restrictions on contractual form that create exceptions to the employment-at-will doctrine. As a general premise, employment in the United States constitutes an "at-will" contract between an employer and an employee. An employer can terminate an employee for no reason, just as an employee can leave a job for any reason. The employment at-will doctrine does not (necessarily) apply if an individual works under a contract, including a union contract. In that case, the contract may dictate terms under which an employer may terminate an employment contract. Either party may be subject to a breach of contract claim if it doesn't live up to the terms of the contract. Generally, there is no threshold that determines whether a firm is subject to a lawsuit or claim for violating an employment contract.

Limitations on Employee Behavior

Businesses can also be influenced by restrictions on contractual form that address employee behavior. Non-compete agreements are one common type of restriction that may be included in the employment contract. These agreements may restrict an employee from "competing" with the employer by engaging in a related business as an employee, contractor, owner or investor both while employed, and often for some period of time after employment ends. They are particularly popular in the information technology area, or other industries where individuals may learn valuable, competitive information in the course of their jobs. Similarly, trade secret rules prevent individuals from making use of information or "trade secrets" that they acquire on the job in order to compete with the employer. Again, there is no size threshold of which we are aware that limits an employer's ability to sue an employee for a similar breach.

Workers' Compensation

Workers' compensation systems are slightly different from regulations or restrictions on contractual form. Workers' compensation functions as a "carve-out" of the tort system, and acts as more of a social insurance system than as a regulatory program. It governs a very specific compensation scheme between employers and workers who are injured at work, dictating the type and amount of compensation provided to the injured workers, eliminating the use of the tort system for these cases in most jurisdictions.[5] Workers' compensation makes employers liable for medical costs and partial income replacement for workers injured at, or because of, their jobs. A number of states exempt very small firms, typically those with five or fewer employees, from workers' compensation coverage.

Unemployment Insurance

Unemployment insurance systems are social insurance programs that provide income replacement benefits to individuals who are unemployed through no fault of their own. Each state administers a separate program, though federal law has established guidelines. Benefits are paid from taxes on employer payrolls. There are very low size thresholds for employers to be liable for the unemployment insurance payroll taxes. Generally, employers are required to pay taxes if they pay wages of $1,500 or more in any quarter of a calendar year or if they had at least one employee on any day of a week during 20 weeks in a calendar year. The standards are higher for agriculture employers, with the wage requirement of $20,000 or more or at least 10 employees.

ENFORCEMENT AND IMPLEMENTATION

Employees who believe that their employers have intentionally harmed them have the right to file a civil suit and seek damages from the employer. The threat of such legal action exists for all employers on a wide range of matters. No employer is exempt. Similarly, employers of all sizes may use the court system to enforce employment agreements if an employee fails to live up to the terms of a contract. However, many argue that civil suits against employers are difficult for employees to mount and to win. The federal regulations, as well as the parallel regulations at the state and local level, create additional avenues through which firms may be punished for specific types of harms. In general terms, this is accomplished through the establishment of a government entity, which is given the legal authority to monitor business activities on specific employment-related matters and to investigate or respond to complaints. The government entity may also have the authority to sue firms, impose fines, or promote mediation between employers and employees.

Administrative Enforcement of Government Regulations

Several of the regulations or statutes have employer size thresholds that determine the coverage of the regulation. Employers that fall below the threshold cannot be sued, fined,

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[5] Workers' compensation is compulsory for almost all private sector employment in all states except New Jersey and Texas, and only Texas allows injured workers to recover damages for workplace injuries or illnesses from (allegedly) negligent employers in the tort system.

charged or otherwise reprimanded under the aegis of the law. In addition, these employers are not subject to the recordkeeping requirements associated with these laws. For example, the Equal Employment Opportunity Commission (EEOC) requires that employers keep all personnel or employment records for one year, and the ADEA requires employers to retain payroll records for three years. Exemption from these obligations is a clear example of the way these regulations impact firms of different sizes differently. As part of the anti-discrimination enforcement, the EEOC requires employers with 100 or more employees (or 50 or more employees and federal contract totaling over $50,000) to file an EEO–1 report that characterizes the workforce by race and gender.

The Equal Employment Opportunity Commission (EEOC) has the legal standing to investigate employee complaints against firms in the area of anti-discrimination to determine whether there has been a violation of the law. If no violation is established, the complaint may be dismissed, but in many cases, the charging party may still file a lawsuit on his or her own behalf. If the government investigation does establish a violation of the law, EEOC may offer mediation to the disputing parties, or attempt to settle with the employer. If these attempts fail, then the EEOC may choose to sue the employer. Settlements may require the employer to remedy the situation that led to a violation of the law and to prevent similar violations in the future. Penalties could include payment of back wages, reinstatement, employment accommodations, as well as the payment of attorneys' fees and court costs. Punitive damages beyond a remedy may also be sought if the violation is deemed to be intentional, malicious or recklessly indifferent. In enforcing the Fair Labor Standards Act, the Department of Labor may recover back wages, assess fines, and pursue civil or criminal penalties against firms for violation of the law.

OSHA sets safety and health standards by regulation. Safety standards cover hazards such as falls, explosions, fires, and cave-ins, as well as machine and vehicle operation and maintenance. Health standards regulate exposure to a variety of health hazards through engineering controls, the use of personal protective equipment (e.g., respirators or hearing protection), and work practices. Employers covered by the OSH Act are required to maintain safe and healthful workplaces. These employers must become familiar with job safety and health standards applicable to their establishments, comply with the standards, and eliminate hazardous conditions to the extent possible. Employees must comply with all rules and regulations that apply to their own actions and practices. Where OSHA has not set forth a specific standard, employers are responsible for complying with the OSH Act's "general duty" clause, which states that each employer "shall furnish… a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." The act assigns OSHA two regulatory functions: setting standards and conducting inspections to ensure that employers are providing safe and healthful workplaces.

OSHA regulations cover such items as recordkeeping, reporting and posting. Every employer with more than 10 employees (with employer defined as an establishment, rather than a firm) is covered by OSHA (except for employers in certain low-hazard industries in the retail, finance, insurance, real estate, and service sectors), and therefore must maintain three types of OSHA-specified records of job-related injuries and illnesses. Employers with 10 or fewer employees and employers in statistically low-hazard industries are exempt from maintaining these records. Each employer, regardless of industry category or the number of its employees, must advise the nearest OSHA office of any accident that results in one or more fatalities or the hospitalization of three or more employees. Although small firms are not exempt from health and safety regulations, OSHA has development a special consultation program that is available to firms with fewer than 500 employees.[6] The consultation program is confidential and separate from the inspection process and is designed to help small firms identify and correct potential workplace hazards, thereby complying with regulations.

Fines for OSHA violations are lower for small businesses. OSHA considers the size of the employing firm, among other factors, when determining the penalty to be proposed for any violation. Penalties are generally reduced by 60 percent if an employer has 25 or fewer employees, 40 percent if the employer has 26–100 employees, and 20 percent if the employer has 101–250 employees.

While OSHA does engage in regulatory enforcement, it also encourages states to develop and operate their own safety and health programs.[7] These plans are subject to OSHA approval. In 2005, 24 states ran OSHA-approved state plans.[8] States operating under OSHA-approved state plans enforce safety and health standards in their respective states, while OSHA is responsible for enforcement in the remaining states. The state entities enforce their own safety and health standards, which are at least as strict as federal OSHA requirements, but may have different or additional requirements. Many states offer additional programs of assistance to small businesses.

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[6] http://www.osha.gov/dcsp/smallbusiness/consult.html.

[7] State plans are authorized under Section 18 of the OSH Act (http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=OSHACT&p_id=2743#18)

[8] http://www.osha.gov/fso/osp/ (accessed 8/1/05). Alaska, Arizona, California, Connecticut, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Oregon, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, and Wyoming have OSHA-approved state plans, although the Connecticut, New Jersey and New York plans cover only state and local government employers.

Court Enforcement of Employer and Employee Behavior

Many of the employment-related issues that influence employee or employer behavior must be remedied through the legal system. As discussed above, employers of all sizes may be subject to civil suits on the part of employees who claim that an employer has harmed them. Firms over specific size thresholds may also face criminal suits, civil suits brought by a government agency, and fines for alleged regulatory violations of specific types. Restrictions on contractual form that limit the behavior of either the employer or the employee (e.g., non-compete agreements, or exceptions to the employment-at-will doctrine) are remedied through the court system, which may or may not find these agreements to be legal and binding. That will depend on state and local laws, the scope of the agreement, and legal precedent. There is substantial variation across states in terms of their willingness to enforce such contract terms. For example, in California, non-compete agreements are legal only in cases when an individual sells a business and agrees not to compete with the new owner.

Workers Compensation Insurance

Since the early 20th century, virtually all private sector employers in the U.S. have been required to pay workers' compensation benefits to employees who are injured at work. These benefits cover some portion of lost wages, as well as direct costs associated with the injury itself. While state workers' compensation programs have frequently been subject to reform over the years, there have been few wholesale changes. This places workers' compensation among the oldest and most universal labor market regulations in the United States. Moreover, workers' compensation programs make relatively few distinctions among employers with different characteristics. Thus, the coverage offered by one firm will be very similar, if not identical, to the coverage offered by another, regardless of important differences such as industry, the level of risk, or firm size.[9]

Employers are required either to purchase insurance to cover potential workers' compensation losses or to demonstrate sufficient financial resources to self-insure. For employers who purchase insurance, the market for such insurance is characterized by an experience rating, a tool used by insurers to adjust premiums based on previous claim history and the implementation of specific safety measures.

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[9] In addition to the size thresholds mentioned above, some public employees, most notably public safety employees, receive different coverage. The coverage afforded to agricultural employees varies significantly across states, with only 14 states covering agricultural employees the same as other employees (as of 2003).

Unemployment Insurance

There are a number of similarities between unemployment insurance and workers' compensation. First, they both act as a form of social insurance in which employers are responsible for insuring workers against an adverse outcome. Both offer partial income replacement benefits to avoid the potential for "moral hazard," in other words, to limit the incentive workers have to extend their time out of work due to injury or unemployment beyond that which is absolutely necessary. However, there are some differences, particularly in the finance mechanisms for the programs, which are important for thinking of how they influence small businesses.

As discussed above, workers' compensation is structured and financed as an insurance program, with firms paying premiums calculated using experience rating. Unemployment insurance is difficult to price in the same way, because general economic trends tend to make losses highly cyclical and correlated across firms (Topel and Welch, 1980). Instead, unemployment insurance benefits are paid out of a government fund collected as part of a payroll tax. There is no size threshold for participation in the system, and essentially any business that maintains at least one employee is responsible for paying the tax. There is a federal and state payroll tax. The federal tax is equal to 6.2 percent of the first $7,000 in wages paid to each employee during the calendar year. The state taxes vary both in the taxation rate and the wage base.

In the event that a worker loses his job due to lack of work at the place of employment or for some other eligible cause, he receives a payment from the government until he either finds a job, violates some aspect of the state eligibility criteria, or exceeds the maximum benefit duration. The payment amount varies by state and typically depends on the workers earnings prior to job loss up to some maximum amount. The duration of benefits also varies by state, but is typically 26 weeks. The duration of benefits is often extended during times of high unemployment.

EFFECTS OF EMPLOYMENT REGULATION ON SMALL FIRMS

Administrative Enforcement of Government Regulations

Firms of all sizes are potentially at risk of a civil action in response to claims that the firm's actions have harmed an employee. This risk stems from the possibility that individuals, private groups or organizations might take legal action against the firm. However, federal, state and local regulations increase the risk by establishing a government agency with the authority to investigate firm behavior and take legal action. This implies that the very small firms falling the employment threshold for a regulation to take effect may face a lower risk of legal action in this area. Particularly in the arena of anti-discrimination, where the regulations are fairly vague and therefore the risk associated with legal action may be higher, it is plausible that very small businesses consider the implications of growth that would carry them over the employment threshold stipulated by the regulation and limit that growth to avoid the reporting requirements and the threat of fines or legal action. In addition to the legal risk, administrative enforcement imposes information-gathering burdens (such as the requirement to file an EEO–1 report) on firms above a certain size threshold. The costs of gathering, maintaining and reporting such information impose certain fixed costs on firms, and they may try to remain below the reporting threshold in order to avoid these requirements.

Existing research on health and safety issues has suggested that fatality rates are higher at smaller establishments across all major industry sectors (Mendeloff and Kagey, 1990; Peek-Asa et al., 1999; Bennett and Passmore, 1985). Other research has found evidence that the cost per worker of responding to health and safety regulations is lower at larger and unionized firms. This is consistent with a hypothesis that there are substantial fixed costs involved in complying with health and safety regulations. Research suggests that in some industries large firms and unionized firms are more efficient in implementing health and safety programs in the sense that the cost per worker of such programs is lower. (Bartel and Thomas, 1985). This research shows that large, unionized firms are more profitable at the expense of small, non-unionized firms as a result of regulation.

Court Enforcement Policies and Regulations

Court enforcement does not explicitly consider firm size. However, as discussed earlier, there are reasons to think that the litigation process might have differential impacts on small firms. One of the key differences between small and large firms is the level of resources available to them to spend on litigation, either as plaintiffs or defendants. There are several means through which these resources might influence the prospects of larger firms in the tort system.

For actions that would be initiated by employees (e.g., discrimination, wrongful discharge, violation of the employment contract), employees (or more realistically, lawyers) might be more likely to go after large firms with deep pockets. On the other hand, large firms with deep pockets might have a stronger incentive to spend substantial resources aggressively defending any one suit so as to deter future suits. This threat of deterrence might make employees less likely to go after large firms because they perceive a lower chance of winning.

For legal actions that would be initiated by firms (e.g., violation of a non-compete agreement or trade secrets suit) and for which the firm seeks redress from employees, large firms can spend more resources litigating employees who violate these agreements, and may have a stronger incentive to do so in order to deter other employees from violating these contract clauses in the future. Small firms are, by nature of their size, more likely to face bankruptcy due to a costly legal action. Of course, small firms may be more vulnerable to breach of a non-compete agreement or violation of trade secrets rules as the entire business may depend on that trade secret. As a result, they may be more likely to prosecute, in spite of the costs and the risks of bankruptcy.

It is currently difficult to assess whether restrictions on the contractual form that employers use to restrict the employee behavior affect small businesses differently than large ones. Nor is there any indication that small businesses are prevented from using non-compete agreements. However, because the agreements can only be enforced through litigation, a small business may face a greater burden in enforcing such a clause. On the other hand, these businesses may also have more to lose in the even that such an agreement is violated. Moreover, non-compete agreements may impact labor supply in a way that has a particularly strong impact on entrepreneurship and/or small business. For example, the natural labor pool for start-ups may include individuals who recently worked for a larger company in the same industry. Non-compete agreements might prevent current employees from leaving a company to start their own business, but might also hinder the ability of employers to employ individuals who had worked for a competitor.

Overall, economic theory points to conflicting forces regarding the question of whether the threat of or use of lawsuits places a greater burden on small relative to large businesses. In the end, it is difficult to conclude who bears a heavier burden from legal costs. A recent study by Pendell and Hinton (2004) suggests that the legal costs per dollar of revenue are substantially greater for small relative to large businesses. For small businesses, defined as those with under $10 million in annual revenue and at least one employee in addition to the owner, account for 25 percent of business revenue, but 68 percent of business tort liability costs. Very small businesses, defined as those with under $1 million in annual revenue, account for 8 percent of business revenue and 26 percent of tort liability costs. The authors find that the tort liability costs per $1,000 in revenue decline steadily as revenue category increases. For firms with revenue less than $1 million, the cost per $1,000 in revenue is $16.58; for firms with revenue greater than $50 million, that figure is $1.68.

Responses to the Workers' Compensation System

Despite the relative uniformity of coverage, there are good reasons to believe that workers' compensation might have a differential impact on different sized firms. Employers are required either to purchase insurance to cover potential workers' compensation losses or to demonstrate sufficient financial resources to self-insure. Large firms typically have a greater ability to self-insure their benefit payments because they are better able to bear the risks involved in a workers compensation claim, which could require a large payout in one period. An ability to self-insure can reduce the expected costs of workers' compensation by allowing firms to bypass an insurance system with two possible sources of inefficiency. First, many argue that workers compensation insurance market is not perfectly competitive and hence premiums exceed the expected value of insurance payouts. Secondly, experience rating, a tool used by insurers to adjust premiums based on previous claim history and the implementation of specific safety measures, is imperfectly applied. This imperfect application of experience rating tends to work to the relative disadvantage of smaller firms, resulting in less reliable experience on which to base premiums. Experience rating is a potentially important tool because it allows insured firms to reap some benefits from investments in safety. Absent any bias in the application of experience rating, smaller firms might still find it more costly to promote safety measures if the implementation of those measures involves substantial fixed costs because there will be fewer workers over which to smooth the fixed costs. If smaller firms are imperfectly experience rated, this further reduces the incentive to promote workplace safety. All of this suggests that workers' compensation insurance will be relatively more costly for smaller employers.

In addition to the higher costs, we might also expect that the outcomes for the injured workers are worse at smaller firms. If, as suggested above, smaller firms have fewer incentives or less ability to implement effective safety measures, then we might expect workers to suffer injuries with greater frequency and perhaps greater severity at small firms. Large firms are also more likely to be able to accommodate injured workers with modified work, and return to work is a critically important predictor of the long-term impact of disability (as shown in Peterson et al., 1997 and Reville et al., 2001).

Programs that encourage return to work can also be an important cost saver for employers. On a theoretical level, employers with higher safety standards should be able to pay workers less of a "compensating wage differential," (or lower wages) because workers face less of a risk that they will become disabled and lose their jobs. Higher safety standards, if accompanied by less severe injury may also reduce the cost of benefits in the event a worker is injured. Many states have "two-tier" Permanent Partial Disability (PPD) benefit systems that allow employers to pay lower indemnity benefits to permanently disabled workers who receive an offer of employment. The recent workers' compensation reform in California introduced just this kind of system, with a 30–percent decrease in disability benefits for workers who receive an offer to return to some modified version of their pre-injury work.

All of this suggests that workers' compensation, and occupational health and safety programs more generally, might lead to significantly different costs for employers and workers depending on employer size. Specifically, there are reasons to believe that employers will face higher workers' compensation costs, while workers will face worse potential outcomes from job-related injures at smaller firms. Given that workers' compensation premiums represent approximately 2 percent of all payroll costs nationwide, this could have substantial implications for the operating costs of small businesses.

Responses to the Unemployment Insurance System

Since all employers are covered by the unemployment insurance system and there is no opportunity to self-insure, we do not expect the response to the unemployment insurance system to vary dramatically by firm size. In principle, the taxes paid by employers should be proportional to the number of employees, reducing any disparities between firms of different size. In reality, employers are experience-rated in the sense that the tax rate they pay depends on their past experience with unemployment. New employers are assigned a flat rate, and over time their rate will change based on the stability of their labor force and the number of layoffs they experience. In California in 2002, for example, the base rate for new employers was 3.4 percent while the minimum rate was 0.7 percent and the maximum rate 5.4 percent. This has the potential to benefit large firms relative to small ones because large firms are probably more flexible in response to changing economic conditions and may be able to avoid some layoffs that would increase their payroll taxes. Smaller firms might not be able to absorb the cost of a worker when faced with lower demand or higher costs, and will bear the full brunt of unemployment taxes. Just how strong this effect would be is an empirical matter.

ISSUES FOR FURTHER RESEARCH

This chapter has discussed a number of ways that policy instruments designed to regulate aspects of the employee-employer relationship might have unintended consequences that impose higher costs small businesses than on larger businesses. The criticality of many of these issues is an open question, and further research is needed to document and measure some of these effects. We conclude the chapter with a brief discussion of some researchable issues with implications for public policy that we think rise naturally from these discussions.

One potential measure of the burden of regulation is evidence that firms go to great lengths to avoid a particular regulation. Policymakers may wish to understand the extent to which regulations impact some of the basic operating decisions of firms, and the growth of small businesses. As noted above, there are many federal statues that protect individuals against discrimination or a hostile or unsafe environment in the workplace and prevent employers from terminating employees in specific protected classes for specific reasons. Many of these federal rules are applied using size thresholds such that businesses with a small number of employees are not covered by the regulation. Similar laws that exist at the state and local levels supplement these federal statutes. Because these regulations increase the risk of legal action by establishing a government agency with the authority to investigate firm behavior and take legal action, the very small firms that fall below the employment threshold for a regulation may face a lower risk of legal action in this area. An analysis of the distribution of firms by size could shed light on the issue of whether firms avoid adding employees when they are close to the employment threshold for particular regulations. Because some states and localities have lower thresholds than related federal regulations, there is substantial variation to explore in this area.

The legal and regulatory system appears, on the face of it, to be neutral toward small firms when it comes to the enforcement of contractual limitations on employee behavior. However, research suggests that small businesses do bear a disproportionate share of litigation costs in general. Because non-compete and trade secrets agreements can be enforced only through litigation, a small business may face a greater burden in enforcing such a clause and thus may be on a more equal footing with larger firms in states that limit the use of such agreements. Moreover, non-compete agreements may impact labor supply in a way that has a particularly strong impact on entrepreneurship and/or small business. For example, people who recently worked for a larger company in the same industry may staff start-ups. On the other hand, small businesses may have more to lose in the event of a violation of such agreements on the part of their employees. An empirical examination of the relationship between the stringency of state court enforcement of non-compete agreements and trade secrets agreements and the level of entrepreneurship could help inform the debate as to whether these agreements are an overall positive or negative for small business. The results of such an analysis might motivate states to change their approaches on this issue.

There are a number of interesting questions to be studied regarding workers' compensation. States have a great many policy levers in this area, and as a result, workers' compensation policy varies significantly across states, and to a lesser extent over time. This provides useful variation with which to analyze different policies that involve firm size directly, e.g., through size thresholds, or indirectly, e.g., through self-insurance requirements or two-tiered benefit programs. This variation could be used to test the effect of these and other policies (and policy changes) on a number of important outcomes. Perhaps the most obvious question is whether or not workers' compensation affects the distribution of firm size, a question that could be addressed using existing data, such as the Current Population Survey (CPS). In addition, the CPS (and possibly other sources such as the National Longitudinal Survey of Youth (NLSY)) could be used to estimate the effect of firm size on claims rates and the economic impact of workplace injuries for workers (at least in short term). Similar studies could potentially be done with regard to unemployment insurance, with the objective of determining whether the system for financing unemployment insurance has a differential impact on small businesses. Such studies could assist states in identifying policies that are effective for small business.

Another promising and as yet underemphasized area of research would be a systematic comparison of the costs and benefits of regulating employment contracts for different-sized firms. While past research on workplace fatalities has shed light on the potential benefits of health and safety regulations, the focus of that research has been on establishment size rather than firm size. This is a considerable oversight, given the importance of the employer-employee relationship to both sides. Information on these cost-benefit tradeoffs could help policymakers design more effective policy.

The list we provide here is by no means an exhaustive one. Our understanding of the impact of regulation on entrepreneurship could be greatly expanded by further exploration into these and related topics of interest.

5. HEALTH INSURANCE REGULATIONS

Firms face myriad regulations governing the health insurance coverage that they offer to their employees. However, health insurance regulations are generally targeted to insurance companies that sell group health insurance products to firms, rather than toward the firms that offer health insurance to their employees.

In this chapter, we provide an overview of state and federal health insurance regulations that affect health insurance access and benefits, and that mandate provider and patient protections. We discuss the potential differential effects of these regulations on small firms relative to larger firms. We also discuss how regulations that may appear to apply evenly to small and large firms may evoke different responses in firms of different sizes because of structural differences between firms. Finally, we evaluate the effect of existing regulations in light of the intended policy goals, and discuss policy issues requiring further research.

REGULATORY ENVIRONMENT

Although health insurance regulation has emerged in response to a general concern about the cost of access to health insurance, there is particular concern about access for individuals who are employed by small businesses. Nearly three-fourths of employed Americans obtain health insurance through an employer. However, while 79 percent of workers in large firms have employer-provided health insurance, only 36 percent of workers in small firms have such coverage. This difference stems mostly from the fact that small firms are substantially less likely to offer health insurance coverage than large firms. In particular, only 40 percent of firms with fewer than 10 workers offer health insurance, compared to 99 percent of firms with more than 500 workers (Agency for Healthcare Research and Quality, 2000). The difficulties that small firms face in obtaining and maintaining health insurance for their employees have been widely documented (Brown, Hamilton and Medoff, 1990; McLaughlin, 1992; Fronstin and Helman, 2000). Among small firms that offer coverage, health insurance is routinely cited as the most salient area of concern.[1] The low proportion of small firms offering health insurance coverage has been attributed, in part, to the high cost of health insurance for small firms, the low demand for insurance among workers in these firms, and the unwillingness of insurers to take on small firm risks (McLaughlin, 1992; Fronstin and Helman, 2000; Monheit and Vistnes, 1999). The role of health insurance regulation in driving up health insurance costs continues to be an active area of study that has found somewhat mixed results.

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[1] http://www.nfib.com/page/researchFoundation.

The intention of small firm health insurance regulation has consistently been to make health insurance more accessible and affordable for small-firm employees. Several goals have dominated the policy landscape (Blumberg and Nichols, 1995). Because small firms may be disadvantaged relative to large firms, reforms have aimed to extend economies of size to small firms. Small firms are disadvantaged relative to large firms in two ways: first, insurance companies face substantially higher administrative costs in insuring small firms, which has led to higher premium levels for these firms; second, small firms have limited opportunities to share health care risks with other individuals or groups, which can threaten access to insurance for some small firms, especially those with high-cost employees. Policy reforms have also aimed to promote competition in the private insurance market. A competitive insurance market is likely to lead to more efficient delivery of health services, higher service quality, and decreases in average premium levels. The more informed the purchasers of services are, the more that providers of services will compete on quality and cost. Therefore, an important goal of policy is to promote various avenues for small firms to obtain health insurance. Policy reforms also aim to expand insurance coverage within small firms.

Policymakers have had to balance the concerns of insurers against the needs of small firms. Insurers have resisted stringent regulations on premiums and underwriting, and have stopped doing business in some states that have had excessively restrictive regulations (Epstein, 1996). As a result, in many cases, health insurance regulation has been weak and ineffective. In other cases, as discussed later in this section, regulations have had unintended consequences on labor market outcomes and possibly on business size.

To understand the effect of health insurance regulations, it is necessary to review the provisions of the Employee Retirement Income Security Act of 1974 (ERISA). ERISA preempts state regulation of self-insured health plans. Essentially, this implies that firms can avoid potentially burdensome state health insurance regulations by choosing to self-insure rather than purchasing coverage from a health insurance company. Self-insurance is an attractive option for larger firms that are able to diversify variations in worker medical costs internally. However, small firms are less able to do this, and therefore are usually unable to self-insure. A recent survey found that 10 percent of covered workers in all small firms (3–199 workers) are in self–insured plans, compared to 50 percent of workers in mid-size firms (200–999 workers) and 79 percent of workers in jumbo firms (5,000 or more workers) (Kaiser Family Foundation, 2003). As a result, small firms are more likely to face the burden of state health insurance regulations than large firms even if there are no explicit size thresholds in the state legislation.

Regulations can affect small firms differently from large firms along several dimensions. In particular, health insurance regulations might affect health insurance access, health insurance premiums, workforce composition, compensation, worker turnover, and business size.

Health Insurance Access

Many federal and state regulations aim to increase access to health insurance for firms and individuals.[2]

COBRA. The federal Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1986 provides continuation of group health coverage that otherwise would be terminated when an employee leaves a job. COBRA applies to firms that employ more than 20 workers. COBRA contains provisions giving certain former employees, retirees, spouses and dependent children the right to temporary continuation of health coverage at group rates. Job leavers are entitled to continue purchasing group coverage from their former employers for up to 18 months after a separation at a maximum of 102 percent of the average group rate paid by the employer.[3] In practice, a relatively low proportion of job leavers have taken advantage of COBRA benefits. This low proportion has been attributed to the relatively high cost of health insurance at a time when financial resources may be strained due to the loss of employment income (Kapur and Marquis, 2003).

State Continuation Coverage Laws. Many states have continuation coverage laws that specify that employees and their families may continue coverage for a specified length of time after job termination. In some states, the length of time for continuation coverage is longer than that mandated by federal law. Unlike COBRA, these laws apply to firms of all sizes that are not exempt from state regulation by ERISA. The majority of states (39) extended the federal COBRA requirements to individuals covered by group health insurance provided by businesses with fewer than 20 employees (GAO, 2003).

HIPAA. The federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) added several provisions to ERISA that are designed to provide participants and beneficiaries of group health plans with improved portability and continuity of health insurance coverage. The HIPAA portability provisions relating to group health plans and health insurance coverage offered in connection with group health plans are set forth under a new Part 7 of Subtitle B of Title I of ERISA.[4] These provisions are also designed to improve access to insurance and protect against discrimination on the basis of health status. Specifically, HIPAA limits the scope and length of exclusion periods for persons with pre-existing conditions in group health plans. HIPAA also prohibits a person's health coverage from being canceled because of sickness. Moreover, HIPAA requires that health insurance coverage be guaranteed issue and

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[2] For another source of information on health insurance, see "Private Health Insurance: Federal and State Requirements Affecting Coverage Offered by Small Businesses," GAO–03–1133, 2003.

[3] The following sections of U.S. code pertain to COBRA: 29 U.S.C. 1162, 26 U.S.C. 4980B, and 42 U.S.C. 300bb–1 through 300bb–8.

[4] For further details on HIPAA, see http://www.cms.hhs.gov/hipaa/.

renewable for small employers (2–50 employees). HIPAA also prohibits any employer-sponsored health coverage from charging employees a higher premium based on health-related factors. Employers may treat groups of individuals differently if the groups are based on an employment class (such as full-time or part-time). However, it is important to note that these requirements regulate only the premium charged to employees, not the premium faced by employers.

Americans with Disabilities Act. The Americans with Disabilities Act (ADA) is a federal law focusing on employment and other rights for the disabled. The ADA contains several provisions that apply to employer-provided health insurance. (ADA's implications for employment are discussed in Section 4.] In particular, ADA prohibits employers from discriminating against individuals with disabilities in the provision of health insurance; however ADA explicitly allows medical underwriting.[5] An employer who treats individuals with disabilities differently under an insurance or benefit plan because the people who are disabled represent increased risks or costs is not in violation of the ADA if the employer treats the disabilities in the same manner as other conditions of the same risks/costs. Fair, unbiased application of actuarial principles in providing benefits is allowable under the ADA. While an employer must provide people with disabilities equal access to the health insurance coverage provided to all employees, the employer may offer a policy that has limitations in coverage. Limitations in the number of treatments and/or exclusions from coverage that are not "disability-based," including pre-existing conditions, are permissible. ADA applies only to businesses with more than 15 employees.

Regulation of Small Group Health Insurance. During the 1990s, most states passed laws regulating the terms and conditions of health insurance provided to small firms (Monheit and Cantor, 2004). States have tended to pass these reforms in packages that generally contain the following provisions:

- *Guaranteed issue/renewal laws*. Every state that has passed small group insurance reform, except Georgia, has included guaranteed renewal reform in its package. This reform requires insurers to renew coverage for all groups, except in cases of non-payment of premium or fraud. Guaranteed issue legislation, on the other hand, is excluded from the reform packages of eight states that have passed guaranteed renewal laws. Some guaranteed access legislation requires a guarantee only with respect to one or two specific benefits plans, while others require all insurance products to comply with the legislation. These laws have now been preempted by the federal HIPAA.

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[5] See http://www.usdoj.gov/crt/ada/cguide.htm for details on the ADA.

- *Pre-existing condition exclusion laws.* Health plans often impose waiting periods for coverage. These waiting periods may pertain to all coverage or coverage for pre-existing health conditions. In some instances, health plans permanently exclude coverage for specific health conditions. State reforms limit the length of time for which pre-existing health conditions can be excluded from coverage. Most states limit the waiting period for coverage for pre-existing conditions to a maximum of 12 months, and allow only conditions present in the past six months to be defined as pre-existing. The Health Insurance Portability and Accountability Act (HIPAA) reinforces pre-existing condition exclusion limitations.
- *Portability reforms*. Portability reforms ensure that an individual who is covered by health insurance on a previous job does not face any new pre-existing condition exclusions or waiting periods as a result of changing jobs. Note that portability reforms do not place any restrictions on either premiums charged by insurance companies to small firms or premium contributions that firms charge workers. Portability and pre-existing condition limitation laws have been enacted at the same time in most states.
- *Premium rating reforms*. State reforms have placed restrictions on the factors that can be used to set health insurance premiums, and/or have limited the rate variations to specified ranges. Most states' premium rating reform follows the rate-banding approach that limits insurers to a set number of classes for which they can charge separate rates. The reform restricts the variation in premiums that the insurer can charge to firms within each of these classes and restricts the variation allowed between business classes. Most states allow nine business classes, with about 15– to 30–percent premium variation within and between classes, although these numbers vary somewhat from state to state. About 10 states have implemented an adjusted community rating through which the use of claims experience and health factors in setting premiums has been restricted. The use of factors such as group size, family type, age and other demographic variables to set premiums is generally allowable.
- *Purchasing cooperatives*: Some state small group health insurance reforms have included provisions to establish a publicly sponsored purchasing pool for small employers. In a purchasing cooperative, firms join together to purchase insurance in larger volumes at more affordable prices, thereby aiming to diversify risk and reduce administrative costs. Most purchasing cooperatives are private, but a few states have public cooperatives. By one estimate, almost a third of small firms purchase their health insurance through some form of cooperative purchasing arrangement (Long and Marquis, 1999). Participation in cooperatives is voluntary, and therefore should not be considered as "regulation" on small firms, per se.

- *Reinsurance provisions*. Another major component of the insurance market reforms is an administered reinsurance mechanism that allows individual insurers to reinsure any firms that are expected to generate costs exceeding the prices of insurance. Reinsurance allows insurers to pass their highest-risk clients over to an industry-funded reinsurance pool. This outlet encourages insurers to accept all clients and suppresses the incentive to engage in risk selection in various indirect ways such as through targeted marketing, selective poor service, or "field underwriting" (informal screening by agents). This also makes it less risky for insurers with small market shares to remain in a market with guaranteed issue.

Premium Assistance Programs for Small Businesses. Tax incentives are often used as a tool for encouraging access to health insurance for small businesses. A common strategy is for small businesses to receive transitional tax credits when they insure for the first time. More than 10 states offer some form of tax incentives.

Another form of premium assistance relies on direct subsides to small businesses. Several states have implemented programs to subsidize premiums using public dollars under the Health Insurance Portability and Accountability Act. In some states the employee is subsidized directly, while in others the subsidy goes through the employer (GAO, 2003; Williams, 2003).

Health Savings Accounts/MSAs. Health Savings Accounts (HSAs) came into effect on January 1, 2004. These are tax-free savings accounts for medical expenses. Taxpayers with high-deductible insurance plans can contribute up to $2,600 a year ($5,150 for families) into an HSA account. The new law also allows both employers and employees to contribute to these accounts. HSAs replace Medical Savings Accounts (MSAs), a temporary program that had tighter eligibility and contribution restrictions. While HSAs are not explicitly targeted to small businesses, it is yet to be seen if small businesses are more or less attracted to high deductible plans compared to large businesses.

Health Insurance Benefits

Another set of regulations place restrictions on the package of benefits offered by health insurers.

Mental Health Parity. The federal Mental Health Parity Act of 1996, which took effect in January 1998, stipulates that the dollar limits on mental health benefits have to be equal to dollar limits on medical benefits if mental health coverage is offered. The federal parity legislation exempts businesses with fewer than 50 employees. The Mental Health Parity Act was scheduled to expire in December 2002 but has been given yearly extensions.

Pregnancy Discrimination Act. This is a federal law that requires businesses with 15 or more employees to cover expenses for pregnancy and medical conditions related to pregnancy on the same basis as coverage for other medical conditions.[6]

State Benefit Mandates. State-mandated health insurance benefits laws regulate the services that insurers must cover in order to sell health insurance in a state. While all states have mandated that certain benefits be covered by health insurance policies, the number, type, and scope of the states' requirements vary substantially. According to a survey published in 2002, the total number of mandated benefits varied among states from fewer than 10 in five states to more than 30 in seven states. The two most commonly mandated benefits, required by 43 or more states, were mammography screening and diabetic supplies. Less commonly mandated benefits, required by five or fewer states, included hair prostheses for individuals with cancer or other diseases, prescription drugs, and chemotherapy. The specific terms and scope of certain mandates also varied from state to state. For example, there is variation in the diagnoses for which mental health coverage must be provided as well as in the number of allowable inpatient days and outpatient visits for mental health coverage varied. States also have provider mandates that specify that insurers must cover the services of certain providers. Common provider mandates include chiropractors (42 states), psychologists (41 states), and optometrists (36 states). It is important to note that most states allow the sale of bare-bones policies that do not need to comply with benefit mandates (GAO, 2003).

Other Patient and Provider Protections

ERISA. ERISA lays out administrators' fiduciary standards (to administer the plan in the best interests of beneficiaries) and provides for internal review of denied claims, requirements for plan descriptions to be given to enrollees, and reporting to the federal government. ERISA sets uniform minimum standards to ensure that employee benefit plans are established and maintained in a fair and financially sound manner. In addition, employers have an obligation to provide promised benefits and satisfy ERISA's requirements for managing and administering private pension and welfare plans.

Managed Care Laws. Most states have enacted one or more laws to regulate the nature of the provider panels created by managed care firms and the administration of managed care benefits. The extent to which these laws are preempted by ERISA is still unknown.

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[6] The Newborns' and Mothers' Health Protection Act of 1996 mandates a minimum length of stay after childbirth; however this legislation applies equally to businesses of all sizes that offer health insurance. Similarly, the Women's Health and Cancer Rights Act of 1998 requires that employer-sponsored health cover reconstructive surgery after mastectomies—this regulation also applies to firms of all sizes.

- *Any willing provider.* These laws require managed care plans to allow any provider to be included in the network if he or she is willing to abide by the terms and conditions of the network contract.
- *Freedom of choice.* These laws require that a managed care subscriber be allowed to obtain services outside the network from any licensed provider as long as the subscriber pays a larger amount out-of-pocket.
- *Review of denied claims.* States have stipulated a process for the internal review of denied claims. Most states have also mandated an external review process that requires an independent external review of denials by managed care companies. As of 2002, 43 states had laws establishing independent external review of denied claims for insurance policies, although states varied substantially in their definition of the claims eligible for external review, individuals' access to the process, the qualifications of the reviewer, and the time allowed for a review to be completed.

Other Regulations. Many states have enacted patient protection laws to protect consumers through means such as the availability of a point-of-service option. Most states also had patient protections that allowed patients direct access (without prior approval) to certain health care providers and services, such as emergency services and obstetricians/gynecologists. Most states also prohibit "gag clauses" in insurers' contracts with health care providers. These laws allow physicians to inform their patients about treatments that are not covered by their health insurance policy. States have also regulated utilization review by requiring registration and accreditation. In addition, states have instituted solvency requirements and reporting requirements. Many of these regulations are more stringent than ERISA. Most states require health insurers to maintain certain minimum level of reserves (Intergovernmental Health Policy Project, 1995).

Proposed Legislation

Health insurance is an active area for legislation. At this time, a number of regulations have been proposed in the House or Senate. We describe some of this legislation.

Tax Incentives for Small Businesses to Offer Health Insurance: The Small Business Health Insurance Affordability Act of 2003 amends the Internal Revenue Code to permit a limited tax credit for employers of 15 or fewer employees based on premiums paid for health insurance for employees.

Association Health Plans. Association health plans consist of groups of small employers who pool together for the purpose of purchasing health insurance. The Small Business Health

Fairness Act of 2003 is legislation to strengthen and expand Association Health Plans (AHPs) by exempting them from state regulations. This legislation has not yet been enacted.

Pay or Play Mandates. These mandates stipulate that employers provide health insurance to their employees or pay a fee into a pool that will provide health insurance to uninsured workers. While Washington, Massachusetts, California and Oregon had passed such mandates, they were repealed before being implemented.

EFFECT OF HEALTH INSURANCE REGULATIONS ON SMALL FIRMS

The regulations reviewed in the previous section might affect health insurance offering, premiums, labor market outcomes, and business size. Some of these effects have been intended, while others are not.

While there is a growing literature examining the effects of health insurance regulation on small firms, a number of questions remain unanswered. It is beyond the scope of this section to review all existing research on the effects of regulation; however, we provide a brief overview of some research areas of interest for small business. We also assess whether the regulations have met their intended goal, and if not, whether there are any indications from existing research on useful directions for future research and policy.

Health Insurance Coverage and Premiums

Health insurance regulations that affect small firms differently from large firms might be expected to impact the likelihood that small firms will offer health insurance coverage or lead to changes in health insurance premiums. Furthermore, the cost of state regulation might influence small firms' decision on whether or not to self-insure.

Several studies have examined the effect of state small group health insurance reform on health insurance coverage, firms' propensity to offer coverage, and health insurance premiums. This research generally has shown little or no effect on small firms' propensity to offer health insurance or on employees' insurance coverage; however, a few studies do find modest effects of the reforms on insurance (Marquis and Long, 2002; Monheit and Schone, 1998). The Health Insurance Association of America estimates that guaranteed issue provisions have a small impact on premiums, equal to about 2–4 percent.

Another line of research has examined the effects of mandated benefits on health insurance costs and offerings. Two studies have estimated that the additional costs associated with state-mandated benefits represented about 3–5 percent of total premium costs (GAO, 2003). Another study finds little effect of mandated benefits on insurance coverage among employees in small firms, primarily because most firms offer comprehensive benefits even in the absence of the mandates (Gruber, 1994a; 1994b).

In general, it appears that health insurance regulations have had little effect on premiums and health insurance coverage. Proponents of small group health insurance reforms are likely to find these results disappointing. The lack of realizable effect on insurance may be due to the lack of effective price controls. In most states, limitations on premium increases and premium rating factors are weak. As a result, guaranteed issue provisions mandating coverage for small groups, or continuation coverage laws mandating all employees to be offered coverage, have a muted effect since the available coverage is too expensive for small firms. Without stronger and more effective premium regulation, we are unlikely to see the insurance changes that policymakers had envisioned. Non-price factors such as the relative ineffectiveness of small firm purchasing alliances and the lack of information on health insurance alternatives may also be partly responsible.

Workforce Composition

Health insurance can be thought of as a fixed cost associated with hiring a worker. Health insurance regulation can affect this cost, and therefore result in changes in employer hiring practices. In particular, regulation might affect an employer's choice of hiring full-time workers versus part-time workers. If a firm offers health insurance, it must be offered to full-time employees, but is not required for part-time employees. In addition, small firms may prefer to hire personnel with demographic characteristics associated with low and stable health insurance premiums. Empirical evidence suggests that the workforce composition in small firms might have shifted as a result of health insurance regulations and costs (Kapur, 2001). Similarly, workforce composition might be affected by the possibility of health and safety violations in small firms.

A business may be able to reduce its compensation costs if it can encourage its employees with working spouses to take family coverage from the other employer. Earlier research found that about 10 percent of employees and dependents with coverage from a large firm have a working family member in a small firm, suggesting that large employers may "subsidize" small employers (Monheit and Vistnes, 1994). Some empirical support for the idea that employers adopt strategies, such as raising contribution rates, to shift family workers' coverage has been presented; however, there is further scope for research that examines if small firms systematically shift their workforce composition to avoid facing the burden of health insurance costs.

Even though the primary goal of health insurance regulation has been to improve access and affordability of health insurance, the policy community has also claimed that such regulations have reduced labor market distortions by, for example, providing insurance protections to certain groups of people. While there is evidence that small group reform may have reduced distortions for some groups (such as workers with certain pre-existing medical conditions), others who are not explicitly protected by the reforms might now face higher costs. In addition, with rising health insurance costs, we are likely to see a growing trend towards hiring part-time and other types of employees that do not have to be offered health insurance.

Worker Turnover

Health insurance regulations might also potentially affect worker turnover. For instance, small group health insurance legislation and HIPAA include portability and pre-existing condition exclusion provisions that might make it easier for individuals to accept jobs at small firms. However, two existing studies that examine the labor market effects of small group health insurance reform, including job mobility, find little or no effect on mobility; however, no research has examined the labor market implications of HIPAA (Kaestner and Ilayperuma, 2002; Kapur, 2003). Other research has examined the effect of continuation coverage mandates and has found that these mandates increase mobility, and therefore reduce labor market inefficiency (Madrian, 1994). Further research on worker turnover may benefit from focusing more closely on the variation in state continuation coverage laws and their effect on small businesses.

The lack of controls on premiums is likely to be the most important factor preventing HIPAA from increasing transitions and insurance coverage. Policymakers will need to balance pricing policies with the potential distortions that might arise from instituting price regulations.

Business Size

Virtually no research has examined the effect of health insurance regulations on business size. The explicit size thresholds in many health insurance regulations suggest that firms considering changing their workforce size might be influenced by health insurance regulations. For instance, in the case of small group health insurance regulations, small firms that can obtain health insurance that is protected by small group regulations might choose not to expand beyond the upper size threshold. On the other hand, if the regulations result in higher premiums and lower availability, small firms might prefer to expand to a size that is beyond the reach of small firm regulations. Other regulations such as state-mandated benefits may also affect business size, since larger firms can self-insure and avoid state regulation.

ISSUES FOR FURTHER RESEARCH

Businesses face a vast array of health insurance regulations either directly or indirectly via their contracts with health insurers. These regulations might be expected to affect health insurance choices, workforce composition, turnover, and size. Even though there is some research that examines the differential effect of these regulations on small and large firms, there is substantial scope to expand this research agenda. An important policy issue is whether policymakers should consider pricing regulation to accompany health insurance access regulations. Premium regulations are likely to increase the number of small firms offering health insurance. However, the magnitude of the increase depends on small firms' price sensitivity. In general, small firms have not been very responsive to price incentives. Excessively stringent premium regulations may also drive insurers away from unprofitable markets, resulting in worse insurance availability. Furthermore, premium regulations may change the landscape of labor market distortions. Policymakers will need to carefully balance these considerations in revising existing health insurance regulation.

In this dynamic and rapidly changing area, research on the impact of recent reforms could help inform the development of new health insurance regulations or the modification of existing regulations. Key questions of interest are whether health insurance mandates had influenced firm behavior (including the choice of firm size and the decision to offer health insurance), and whether small businesses have made use of some of the new health insurance innovations such as Health Savings Accounts.

6. CONCLUSIONS

The Kauffman-RAND Center for the Study of Small Business and Regulation seeks to improve our understanding of how the business response to the regulatory environment differs by firm size and what implications this differential response has for economic outcomes. In this paper, we have examined what is currently known about these issues in the context of four key regulatory areas: corporate securities, environmental protection, employment and health insurance.

Across these four areas, we find that regulation tends to originate from concerns about the behavior of large businesses, and that the strategies for addressing these concerns tend to focus on actions that would most effectively influence the behavior of larger businesses. This is true even for health insurance regulations, which, although intended to benefit small businesses and to improve the ability of small businesses to offer affordable health insurance to their employees, are directed at the health insurance companies—which are large businesses. However, the attention given to large businesses does not mean that regulators are unconcerned about the potential impact of small firms' behavior on employees, customers, or society as a whole, but, perhaps more that the behavioral response of large businesses dominates the policy debate.

There is broad recognition that the regulation impacts small businesses differently than large businesses. For this reason, small businesses often receive special consideration in the policymaking process. As discussed in this paper, such special consideration takes many forms, including opportunities to voice specific concerns or raise issues about proposed regulations before they go into effect, exemptions from regulation, modified compliance procedures, reduced penalties for violation of regulation, and special programs to assist small firms in complying with regulation.

Across the board, there is little evidence as to whether the special consideration offered to small businesses in the regulatory context makes sense from a cost–benefit perspective. There is little evidence that regulations designed to benefit small businesses achieve their intended aims or that programs designed to assist small businesses comply with regulations are well targeted and well utilized. Similarly, there is no evidence that the thresholds that define exemptions from regulations are based on a careful consideration of the relative costs and benefits of regulation.

This review has highlighted some fruitful areas for research on the impact of regulation on small business.

Regulations or programs designed to benefit small business are rarely criticized or questioned. However, it is important to consider whether such measures are meeting their objectives, whether they are well targeted and whether they have unintended consequences that interfere with intended aims. For example, the regulation of health insurance appears not to have resulted in the intended benefits for small businesses. Although health insurance regulations have been designed and implemented by nearly all states with the purpose of improving access to health insurance among employees of small businesses, research suggests that the regulations have had no impact on the propensity of small firms to offer health insurance. The explicit size thresholds in many health insurance regulations suggest that firms considering changing their workforce size might be influenced by health insurance regulations. For instance, in the case of small group health insurance regulation, small firms that can obtain health insurance that is protected by small group regulations may choose not to expand beyond the upper size threshold. On the other hand, if the regulations result in higher premiums and lower availability, small firms may prefer to expand to a size that is beyond the reach of small firm regulations. Virtually no research has examined the effect of health insurance regulations on business size. This is an area where additional research could help policymakers better understand the impact of the regulatory environment on small firms and identify adjustments that could improve the outcomes for small firms.

As discussed in this paper, the choices that entrepreneurs make regarding incorporation, organizational status, and publicly-held status, can have important implications for firm behavior, growth and success. As a result, corporate and securities law, which receives scant attention in the study of small business, clearly has important implications for entrepreneurship. We have highlighted several topics related to corporate and securities law and small business that are ripe for additional research. Research on how state differences in corporate and securities law impact the success of small business is one potential avenue for research. More specific studies on reform to personal bankruptcy laws, the use and effects of new business forms and the effects of the Sarbanes-Oxley would shed light on the implications of reforms in the corporate and securities law sphere for small business.

This paper discussed a number of ways that policy instruments designed to regulate aspects of the employee-employer relationship might have unintended consequences that impose higher costs on small businesses than on larger businesses. The criticality of these issues is an open question, and further research is needed to document and measure some of these effects. For example, there are many federal statutes that protect individuals against discrimination or a hostile or unsafe environment in the workplace and prevent employers from terminating employees in specific protected classes for specific reasons. Many of these federal rules have size thresholds such that businesses with a small number of employees are not covered by the regulation. Because these regulations increase the risk of legal action by establishing a government agency with the authority to investigate firm behavior and take legal action, the very small firms that fall below the employment threshold for a regulation to take effect might face a lower risk of legal action in this area. An analysis of the distribution of firms by size could shed light on the issue of whether firms avoid adding additional employees when they are close to the employment threshold for particular regulations. Evidence of such behavior would suggest a need to better understand the benefits of such regulation and argue for development of special programs to assist small businesses in complying with those regulations.

The use of the tort system to enforce regulations appears, on the face of it, to be neutral toward small firms. Although research suggests that small businesses do bear a disproportionate share of litigation costs in general, it is also plausible that large firms provide a larger target for litigation and hence face larger litigation risk. In general, we need a better understanding of whether the threat of litigation poses a larger burden for small businesses. In addition to this general question, there are specific regulatory areas for which enforcement is conducted primarily within the tort system and for which the relative net cost of the regulation to small firms is unclear. For example, non-compete and trade secret agreements can be enforced only through litigation. On the one hand, such regulations might be expected to impose a larger burden on small businesses. A small business may face a greater burden in enforcing such a clause and thus may be on a more equal footing with larger firms in states that limit the use of such agreements. Moreover, non-compete agreements might impact labor supply in a way that has a particularly strong impact on entrepreneurship and/or small business. On the other hand, small businesses might have more to lose in the event of a violation of such agreements on the part of their employees. An empirical examination of the relationship between the stringency of state court enforcement of non-compete agreements and trade secrets agreements and the level of entrepreneurship could help inform the debate as to whether these agreements are an overall positive or negative for small business.

A systematic comparison of the costs and benefits of regulations is a promising avenue for research in several areas. For example, researchers might be able to get a handle on the benefits of regulation is in the realm of workplace health and safety regulations. Existing research on workplace fatalities sheds light on the potential benefits of health and safety regulation, but the focus of that research has been on establishment size rather than firm size. Similarly, information needs to better be synthesized concerning the environmental damage caused by small firms and the benefits of reducing this damage.

Information on these cost-benefit tradeoffs could help policymakers design more effective policy.

The list we provide here is by no means an exhaustive one. Our understanding of the impact of regulation on entrepreneurship could be greatly expanded by further exploration into these and related topics of interest.

Finally, research on regulatory implementation and enforcement could more carefully consider the impact on small businesses. Regulatory agencies have been experimenting with new approaches to regulatory enforcement and compliance, but we have a limited understanding of how small firms react to such innovative approaches. This is a particularly salient issue in the environmental realm, where there is a need to understand whether a different approach to source control, pollution prevention, compliance assistance, and enforcement is needed to deal with the lean operations of small firms. There also needs to be a more thorough evaluation of how novel regulatory enforcement initiatives, such as the Common Sense Initiative and self-auditing programs, have been utilized by small firms and what types of modifications in the programs would make them more attractive to small firms. Large firms are motivated in part to participate in environmental initiatives by concerns about their image with their customers or in the communities in which they operate. More work needs to be done to identify the factors that would motivate small businesses to address the impacts of their operations on the environment.

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