Regulation and Economic Performance: Lessons From the States

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Significant progress has been made in deregulating the economy at the federal level. Beginning with the Carter Administration, federal laws governing interstate trucking, railroads, energy, and financial markets were changed to increase competition in those sectors. Clifford Winston (1993) has reviewed the progress made in deregulation at the federal level. The purpose of our paper is to focus on state government regulation. We review evidence on the economic consequences of state banking regulations, trucking regulations, environmental regulations, and labor market regulations. Such regulations interfere with competitive market processes by restricting entry and controlling prices.[1]

A comprehensive review of the existing empirical literature on state regulation shows that it can raise business costs and limit competition in addition to generating negative employment and output effects. Observing the results of state regulatory "experiments" provides a powerful illustration of the dubious consequences of policy activism.

At this time, state government officials are under pressure to intervene to improve economic performance. The studies reviewed here suggest that one policy option is deregulation.

Banking Regulation

There is empirical evidence that state restrictions on bank activities—such as within-state branch banking and interstate banking—

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[1]Evidence on the impact of state taxation and infrastructure investment is not included. While very topical, those areas have been surveyed by Timothy Bartik (1991) and Charles Hulten and Robert Schwab (1993). Also, evidence on the effects of right-to-work laws is not included. Those effects are reviewed by William Moore and Robert Newman (1985). They conclude that it is not right-to-work laws but the extent of unionism in a state that affects union membership, wages, and industry location.

increase bank costs and reduce competition. Economic theory predicts that high costs and lack of competition will reduce banks' ability or willingness to lend, reducing the quantity of credit available to investors through financial institutions. Because credit availability is critical to investment and growth, this restriction on lending should have an adverse affect on economic activity.

Evidence of the effect of bank regulation on bank costs is presented by Mark Flannery (1984). He estimates cost and profit functions and finds that restrictions on branch banking result in higher costs. The literature on cost advantages of size (economies of scale) in banking also finds that branch banking decreases bank costs (Humphrey 1990). Stephen Rhoades (1982) provides evidence showing banking output (loans) in states that prohibit branching to be significantly below levels likely to occur in a competitive environment. On the other hand, branch banking was found to have a positive and significant effect on small business starts at the state level (Bartik 1989).

In a recent article (Krol and Svorny 1994), we examined the impact of state bank regulations that govern interstate banking, intrastate branching, and bank holding company activity. The study covers the period from 1970 to 1988, a period of substantial change in state banking laws. After controlling for observed and unobserved differences in state economies, we found that those states with greater restrictions on bank activity experienced inferior economic performance (as measured by real per capita personal income). The implications of these results are clear: eliminating restrictions on banking activitiy would improve the economic climate in the state and increase economic activity.

Trucking Regulation

The Motor Carrier Act of 1980 passed by Congress significantly weakened the regulation of interstate trucking. Effectively, it gave firms increased freedom to enter and exit interstate trucking markets. In addition, it substantially altered the administration of rate setting. As a result, rates on interstate trucking decreased without any noticeable deterioration in quality of service (for details, see Moore 1986). The predictions of economic theory regarding trucking deregulation are straightforward: a reduction in transportation costs should increase economic activity.

Following interstate deregulation, a number of states deregulated *intra*state trucking. Deregulation of intrastate trucking occurred in Florida in 1980, in Maine and Arizona in 1982, and more recently in

Alaska, Delaware, Vermont, New Jersey, and Wisconsin.[2] Other states are sure to follow suit.

Recent studies by Roger Blair, David Kaserman, and James McClave (1986) and Richard Beilock and James Freeman (1987) examine the impact of intrastate trucking deregulation on carrier rates. Blair, Kaserman and McClave examine the impact of deregulation in Florida while Beilock and Freeman look at Florida and Arizona.

Before deregulation in January 1980, prices and entry in Florida were set by the state's Public Service Commission. There were also controls on areas served, backhauls, types of vehicles, commodities hauled, and customer service coverage. Blair, Kaserman and McClave looked at 10 carriers for 2 years following deregulation. They observed a decline in rates of almost 15 percent. Prices in large markets declined more than in small markets, suggesting that regulators may have been setting rates in a manner that subsidized small markets at the expense of larger ones.

The study by Beilock and Freeman examined data for both Arizona and Florida. Their regression results are unclear about the impact of deregulation, but a comparison of average rates before and after deregulation shows a decline in rates, especially in Florida.

Finally, Clifford Winston et al. (1990) estimate a model of trucking rates based on input prices and shipment characteristics (such as load size) for the deregulated *inter*state trucking market. They combine the estimate of this model with corresponding data on *intra*state trucking in California and Nebraska to forecast intrastate rates in a deregulated environment. For shipments less then 10 thousand pounds, they find that deregulation of intrastate trucking would lead to a 30 percent reduction in shipping rates.

Environmental Regulation

Environmental regulation is in direct response to the negative side-effects (externalities) that result from pollution. Government efforts to restrict emissions will, by definition, diminish economic activity. Two studies attempt to quantify the effect of pollution control requirements on economic activity. Using standard metropolitan statistical area (SMSA) level data, Kevin Duffy-Deno (1992) finds weak support for the argument that environmental regulations retard manufacturing activity. Similarly, Timothy Bartik (1988) finds no effect of environmental regulation on business location decisions.

[2]The District of Columbia also has deregulated trucking. Cassandra Moore (1994) provides an overview of recent attempts in state legislatures to deregulate intrastate trucking.

Those tests are constrained, however, by the lack of a useful measure of environmental regulation. Both studies use pollution abatement expenditures to measure the strictness of the regulatory environment. (Bartik also looks at three other measures.) This approach creates problems because federal law requires stricter controls over new firms. As a result, empirical tests are biased toward finding a positive association between high abatement costs and job growth.

Bartik (1988) emphasizes that the variety in state regulations makes it difficult to focus on a single measure of the strictness of state rules. Also, substantial variations in enforcement across states make statutory regulations an imperfect measure of the actual severity of state environmental laws.

Instead of looking at the relation between controls and economic activity, it is more useful from a policy perspective to focus on the cost savings associated with alternative methods of control. There have been many attempts to measure, through mathematical simulations, the benefits of alternative methods of control (Teitenberg 1985, 1987). In addition, there are transactions data on emissions trading that reveal substantial cost savings (Teitenberg 1985).

Emission trading encourages innovation in emission control and shifts pollution abatement to those firms for which the costs of abatement are lowest. Thus, many economists have suggested that emissions trading arrangements are a way for states to reduce pollution abatement costs and encourage economic growth.

Labor Markets

Minimum Wage Legislation

Individual states may set minimum wages that exceed the federal minimum. The decade of the 1980s was unusual in that the federal minimum wage remained constant. As inflation reduced the purchasing power of the minimum wage during that period, 12 states (and the District of Columbia) chose to set state minimum wages above the federal level (Neumark and Wascher 1992).

Economic theory is clear on the expected effect of a minimum wage: higher wages will reduce the amount of unskilled labor that firms choose to hire. Benefits accrue to those workers who obtain employment at the higher wage, but fewer unskilled workers will find employment opportunities open to them. As the economy grows, the number of jobs grows, so the effect of an increase in the minimum wage will not be a reduction in employment but rather a slower rate of growth. Statistical techniques have allowed economists to isolate the effects of changes in the state minimum wage on employment.

Daniel Neumark and William Wascher (1992) find evidence that a 10-percent increase in a state's minimum wage reduces teenage employment by 1 to 3 percent. This finding is consistent with evidence from time-series studies of the U.S. economy as a whole (Brown, Gilroy, and Kohen 1983). Since not all teenagers are employed at the minimum wage and not all industries are covered by the minimum wage, the negative effect on those individuals actually employed at the minimum wage is even larger (Brown 1988). States intent on promoting economic growth may find that a relatively high minimum wage works against their goals.

Three recent empirical studies have received attention because they find little or no adverse effects of an increase in the minimum wage on employment (Card 1992a, 1992b; Katz and Krueger 1992). One would expect large increases in the minimum wage to reduce employment, but results from these studies suggest that small increases may have little or no effect in the short-run or that they may even cause minimum wage employment to increase. Understandably these findings have generated intense debate among labor economists, many of whom are concerned that policy decisions could be based on potentially flawed results. Critics argue that some of these studies (e.g., the Katz and Krueger study) fail to control for other factors that may have influenced employment. Focusing on the changes in labor demand immediately following the change in the minimum wage (as in Card 1992a and 1992b) may also obscure results since adjustment costs may preclude immediate reductions in a firms' labor demand. Card's study of employment in California (1992a) finds an adverse effect of an increase in the minimum wage on teenage employment in eating and drinking establishments only, but not in other areas of employment. This result may be explained by the fact that minimum wage laws are possibly enforced more strictly in eating and drinking establishments than elsewhere. However this debate is resolved, it is hard to believe that the overwhelming evidence of a *negative* relation between employment and wage increases will be overturned. The law of demand is just as applicable to the labor market as it is to the product market. No one has shown convincingly that the price of labor has no effect on the number of jobs and economic activity.

State Fringe Benefit Mandates

Economists have pointed to state mandates of employee benefits as being deleterious to employment and economic growth. Economic theory suggests that firms faced with high costs of labor will hire fewer workers and work the remaining workers longer hours to reduce the burden of state-mandated fringe benefits. Because such mandates

raise firms' costs, they reduce the competitiveness of firms subject to the mandates in national and international markets, further reducing state employment.

Jonathan Gruber and Alan Krueger (1991) look at the effect of mandated workers' compensation insurance costs on state employment. Variations in state programs allow an analysis of the effect of workers' compensation on employment. Based on admittedly "extremely imprecise estimates," Gruber and Krueger report that a 1 percent increase in workers' compensation rates causes employment to decline by .11 percent.

A study by Gruber (1992) provides stronger evidence of negative labor force effects of mandated benefits. Looking at three states that mandated health insurance benefits for maternity, Gruber finds that employment falls for that portion of the labor force to which this benefit would apply (young women and their husbands). As with minimum wage legislation, decisionmakers must weigh the benefits of mandated benefits against the costs—a reduction in state employment opportunities.

Wrongful Termination Protection

Changes in laws involving the relation between workers and their firms can have a significant impact on employment. An area of labor law that has received considerable attention recently is wrongful termination protection. Many state courts and legislatures have moved away from the common law "employment-at-will" doctrine. This doctrine has been historically interpreted to mean that employment is for an indefinite period and there are few restrictions on the basis of termination by the employer, the exceptions being a contract or a specific statue. Many states have reevaluated the employment-at-will doctrine and have expanded wrongful termination doctrines. This change has resulted in a significant increase in employer liability.

The reasons for these changes and their impact on employment have been carefully evaluated in a study by James Dertouzos and Lynn Karoly (1993). Dertouzos and Karoly find states are more likely to adopt wrongful termination laws where unionization has declined, where there are no right-to-work laws, where the lawyer-per-capita ratio is high, and where neighboring states have already adopted a similar law.

Most important for this review is their analysis of the impact of those legal changes on employment. Economic theory suggests that such changes will negatively impact state employment. The reason is simple, wrongful termination protection raises the relative cost of labor. Firms will tend to spend more time and dollars screening

potential employees, fail to terminate lower productivity workers, and have greater legal expenses.

After carefully controlling for differences across states, Dertouzos and Karoly find that the adoption of wrongful termination laws reduces state employment between 2 and 5 percent. The impact appears to be smallest in manufacturing, where unions have already institutionalized many protections, and in small firms, perhaps because those firms' smaller net assets make it less profitable for employees to file wrongful termination suits.

State courts must weigh the benefits of protecting worker rights with increased worker compensation rules against the cost in terms of reduced employment. In addition, the courts and lawmakers need to recognize that firms have incentives to establish internal worker appeal systems where workers find them of value.

Regulation of the Professions

There is evidence that state regulation of professions including medical doctors, dentists, lawyers, electricians, and plumbers raises costs to consumers. Although the effect of any particular restriction on aggregate state economic activity is hard to measure, economists generally think that state-imposed barriers to entry increase prices and reduce competition in the relevant market. This result is in direct contrast with a world in which low prices and widely available services facilitate economic growth and well-being.

Jeffrey Perloff (1980) shows that local and state licensing laws that limit the number of electricians and plumbers (through entry restrictions) insulate wages of those groups from general movements in wages, preventing the equalization of wages between those groups and similar workers that leads to the efficient use of labor. B. Peter Pashigian (1979) finds that licensure limits the efficient mobility of lawyers across states.

Looking at dental markets, Arthur DeVany (1982) reports that state restrictions on the use of paradentals have resulted in dentist-paradental ratios that are higher than in states without such restrictions; evidence that restrictions limit the efficient combination of labor. Lawrence Shepard (1978) shows that dental fees are significantly higher in states unwilling to automatically license dentists licensed in other states. Those states also employ fewer dentists.

Medical markets also are affected by regulation at the state level. Lee Benham (1972) presents evidence that restrictions on advertising by optometrists raise prices of eyeglasses significantly in areas where such advertising is prohibited. Shirley Svorny (1987) finds that states using superfluous medical licensure restrictions in the mid-1960s

(citizenship and anachronistic basic science certification requirements) had relatively fewer physicians per capita.

While some professional regulation or certification may properly fall to the state government, it appears that many regulations restrict the efficient use of resources. States seeking to enhance economic well-being should consider revising their professional statutes to promote entry and competition.

Conclusion

It is important to be aware of the consequences of government actions. Quantification is a first step toward providing policymakers with information that will allow them to make balanced decisions. Most areas of government regulation of markets have not been the subject of careful empirical tests—evaluation is often constrained by lack of useful data. The research findings that do exist, however, support the idea that elimination of regulatory constraints should be considered by politicians interested in enhancing the level of economic activity in their state.

The studies reviewed here suggest that allowing interstate and intrastate branch banking, deregulating intrastate trucking, allowing states to choose low-cost strategies for pollution abatement, ending distortions in the labor markets caused by the minimum wage and occupational licensing, and limiting mandated benefits and wrongful termination protection, are among the policies that can contribute to improved state economic performance. There are, of course, additional potential gains in other regulatory areas that have not been the subject of empirical analysis.

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