Workers' compensation was the first of the social insurance programs to be widely enacted in the United States. A number of states in the 1920s and 1930s tentatively expanded workers' compensation to cover a limited range of occupational diseases. The states considered introducing unemployment insurance, health insurance, and old-age insurance during the 1910s and 1920s, but it was not until the 1930s that the federal government established unemployment insurance and old-age pensions for nonveterans. Government health insurance for the elderly followed in the 1960s, while broader government programs for health insurance have been the source of controversy in the 1990s.

Because workers' compensation was adopted during the Progressive Era, there has been a tendency to consider it as just one of the many reforms that the progressives initiated. In the political arena the progressives proposed and enacted the ballot initiative, referenda, popular election of senators, and recall elections for judges across the United States. In the economic realm, reformers sought a variety of labor market regulations and social insurance programs to protect workers against the risks associated with an industrializing society. One might argue that market competition for workers would have provided them with an implicit payment in the form of a compensating wage premium for accepting the risks of unemployment, illness, or accident. Moreover, by understanding that such events could occur, workers could plan their financial affairs in anticipation of experiencing a drop in income.

Social reformers of the early twentieth century understood the logic of the market, however, they rejected such thinking. As prominent economist and social reformer Richard T. Ely (1908, 13–14) argued: "The eighteenth century economic philosophy was . . . based on a now discredited and dis-
carded belief in the beneficent code of nature, ruling the economic life as all other social life spheres, and which, if not interfered with, would bring to all classes and especially the workers, the maximum amount of economic well-being. . . . But experience has shown conclusively that . . . unregulated contract does not always conduce to freedom and fair opportunity—"the square deal"—but frequently means bondage and degradation." Further, according to some reformers, not only did market competition fail to protect workers, but individual workers failed to protect themselves. Reformer Henry Seager (1908, 91) of the American Association for Labor Legislation reasoned that since "the development of saving habits among wage-earners is painfully slow . . . [i]t is my contention that these evils [unemployment, accidents, illness] that are not in practice provided against by individual thrift and forethought can be and should be provided against by collective action." Thus, if the market supposedly could not help workers or if they could not help themselves, then government could.

Of the ambitious plans of reformers during the Progressive Era for a social safety net to protect workers from the potentially deleterious effects of modern industrialism, only workers' compensation was enacted almost universally across the United States. Such limited success, despite their ambitious plans, raises questions about the true strength progressives wielded in the early twentieth century. If workers' compensation was adopted because reformers overwhelmed conservative opposition to the expansion of government, why were the reformers so much less successful in establishing unemployment insurance, health insurance, and many of their other favored programs? Progressives, although they may have raised the public's awareness of the private and social problems that industrial accidents wrought, have probably received more credit for the success of workers' compensation than they deserve.

We offer an alternative interpretation of the success of workers' compensation that builds on and enhances the analyses of earlier scholars. Each of the major interest groups—workers, employers, and insurance companies—anticipated gains from the legislation. Employers were dissatisfied with an increasingly uncertain negligence liability system that engendered substantial frictions and court costs. Further, they were able to pass on to workers a substantial portion of the costs of workers' compensation insurance through wage reductions. Workers received on average much larger payments for workplace accidents than under the old system. Even if workers "bought" most of this increase in average benefits, their welfare improved. They had faced problems in obtaining their desired level of accident insurance before workers' compensation, and the higher average benefits left them better insured. Finally, insurance companies anticipated gains from workers' compensation, as long as they could avoid the introduction of state insurance. Insurers had faced information prob-
lems in writing individual accident insurance. The shift to workers' compensation allowed commercial insurers to sell more coverage for workplace accidents than before as employers ended up purchasing more workers' compensation insurance than the combined amount of accident and employer liability insurance than they had sold before. Thus, instead of revolutionary change, workers' compensation was in fact an evolutionary change. The legislation evolved from the mutual desires of workers, employers, and insurers to resolve problems with workplace accident liability that had developed in the first decade of the twentieth century.

In contrast, employers in the various states showed little interest in supporting state government programs for unemployment insurance, old-age insurance, or sickness and health insurance. They had not been liable to workers in these areas before, and few employers saw much reason to expand their liability during the 1910s and 1920s. In addition, doctors actively opposed government-based health insurance once they had fully considered the implications of the program for their control of patient care. In sum, workers' compensation was the only workplace-based social insurance system that received strong support from all of the major interest groups involved in the issue.

To the extent that progressive reformers were trying to make government more responsive to the everyday needs of ordinary Americans, perhaps workers' compensation can be considered "progressive." Compensation legislation sprang from the shared interest of employers and workers to correct a market and legal imperfection. Both parties would have liked to have written a contract whereby workers, before any accident occurred, waived their rights to negligence suits in return for a fixed and guaranteed set of benefits. Yet, the common law and legislation in a number of states prevented employers and workers from individually negotiating preaccident contracts. Workers, reformers, and judges seem to have decided that individual workers could too easily have been persuaded to sign away their rights to negligence suits for an inadequate set of benefits, and thus the lot of the typical worker would be improved by having the benefits negotiated through the political process. The workers' compensation laws therefore both allowed these preaccident contracts and completed the contract by establishing the set of benefits to be paid.

Our interpretation of the origins of workers' compensation turns the analysis of the Progressive Era in a new direction. Progressive legislation has been seen by some as either top-down or bottom-up, that is, imposed by employers or won by workers and reformers. Yet reformers typically succeeded only when a variety of interest groups anticipated gains from their proposals. Therefore, future research into this episode of American economic and political history must address why such common ground could not be struck on other plans such as unemployment insurance, old-age pensions, and health insurance. Because progressives failed to rally
support for their other plans, it was workers' compensation that served as a prelude to the welfare state, setting the stage for the dramatic expansion of the government's role during the New Deal and Great Society.

Placing our research into the broader context of the literature on institutional change, our results are consistent with an optimistic view of institutional development. While some recent research shows that expected net gains are neither a necessary nor sufficient condition for institutional change to occur, workers' compensation seems to be a case where legislation popular with large segments of the each of the major interest groups was passed. Early research on the economics of institutional development offered only limited discussion of the actual process of change. Our study has uncovered in detail the important hurdles that must be overcome before a new legal regime is implemented. The realization that the major players could gain from the legislation is only a starting point. The interest groups still have to complete the tedious and often frustrating task of building the political coalition that ensures legislative success.

In the case of workers' compensation, although the majority in each group with a stake in the legislation supported the general idea of a no-fault accident compensation scheme, establishing a consensus on the specific details of the law within each group and across the interest groups often proved quite contentious. The legislation was very complex, consisting of multiple attributes that required multidimensional negotiations and trade-offs. In some cases when a consensus could not be reached, the passage of the income-improving policy was delayed. Thus, although groups may see benefits from a new institutional arrangement, how they resolve the distributional conflicts that naturally arise when the rules of the game are changed is what will determine whether profitable institutions displace the unprofitable. Specifically, because workers' compensation was so widely supported and offered critical relief from the worsening negligence liability system, workers' or employers' groups were willing to settle for less desirable features of the legislation but with the full expectation of amending the system later. In many states, for example, unions accepted relatively low benefit levels in the beginning, despite some internal squabbles, in order to establish the basic law. In many of these states they later succeeded in ratcheting these benefits upward.

Finally, a natural question to ask of any historical study concerns what we can learn from the past. One lesson we might learn is that state-level liability legislation is more likely to become widespread when the major interest groups all favor it. During the 1970s there was a series of attempts to limit negligence liability and introduce no-fault liability for automobile accident insurance, which seems like a move similar to the adoption of workers' compensation. Yet, only sixteen states adopted no-fault laws and several have since repealed them. There were some similarities in the adoption processes. The states where consumers had the greatest rise in
auto insurance premiums were more likely to adopt the no-fault auto insurance laws, just as states that faced the greatest problems with employers' liability adopted workers' compensation earlier in the 1910s. The contrast between the no-fault laws may lie in two areas. First, the expectations for gain might not have been as great for automobile liability. There is only weak evidence that limiting tort liability reduces accident rates and severity. Consumers sought lower insurance premiums, but the evidence that no-fault laws lowered insurance premiums is mixed (Harrington 1994, 277). Second, there is a difference in the extent to which key interest groups were in agreement on the benefits of the liability change. Workers' compensation was favored by most workers, employers, and insurers, all represented by significant lobbying groups. Many attorneys also supported the legislation. On the other hand, no-fault automobile insurance laws, while favored by high-income drivers and the medical community, were vehemently opposed by tort lawyers. The success of the no-fault auto insurance laws in each state therefore was determined more by the strength of opposing lobbies. The limited passage of no-fault auto insurance laws reminds us more of the battles over state insurance waged by insurers and organized labor. In that case the stiff opposition of insurance companies prevented a majority of states from establishing state funds.

We might also ask how the insights gleaned from the history of the adoption of workers' compensation might guide efforts to reform the system today. A central reason why workers' compensation received widespread support in the 1910s was that it helped resolve legal and information problems associated with insuring individual workers' accident risk. The escalation of workers' compensation costs over the past twenty years has led to increasing dissatisfaction with the program. Ironically, a major reason why costs rose so rapidly stems from increasing problems with insuring workers' compensation risk associated with moral hazard.

The increase in moral hazard problems may stem from the expansion in benefit levels and injury coverage from the beginning of workers' compensation to the modern setting. The workers' compensation laws in the early 1900s explicitly limited problems with moral hazard. Workers bore a significant share of the burden of the injury because they received at most two-thirds (and often less) of their income in replacement. Medical costs were covered, but only up to a maximum level typically ranging from one hundred to two hundred dollars. Finally, the types of accidents arising at the time were relatively easy to monitor. Workers at the time were sustaining severe sprains, breaking bones, or losing limbs.

Since that time the level of benefits has been determined in the political arena. Into the 1970s, wage replacement rates were relatively low, in part because legislatures in a number of states were slow to raise weekly maximums. But in the 1970s legislatures finally responded to the demands of workers by raising the weekly maximums paid for benefits. Changes in the
extent of taxation also played a substantial role in making benefits more lucrative because workers' compensation benefits are not subject to income taxes. Prior to World War II, less than 7 percent of American households paid income tax and prior to 1935 there was no social security tax. Thus, very few workers were subject to income taxes and there was almost no gap between after-tax income and pretax income. As tax rates have increased and the income levels at which taxes are paid have been lowered, the gap between after-tax income and regular income has grown. In consequence, workers' compensation benefits today replace from 80 to 100 percent of after-tax income, even though they may only replace 45 to 67 percent of pretax income. In addition, the costs of medical care for compensation injuries have risen sharply and in many states there is no deductible nor is there a limit on insurance payments. Finally, the most common types of injuries now are ones where detection is more problematic, particularly back injuries, and in some states coverage has been expanded to include job-related stress.

All three of these trends have contributed to increased problems with moral hazard. In response, employers and insurers have proposed reforms designed to reduce problems with moral hazard by limiting benefits, introducing medical copayments and narrowing the range of compensable injuries. For the reforms to succeed, employers and insurers likely will have to persuade workers to join in a coalition favoring reform. In return for their support, workers must anticipate some benefit. They might be willing to participate in such a reform coalition if they expected their wages to rise in response to diminished postaccident benefits, as most empirical studies of compensating differences predict. However, would risk-averse workers be able to use the wage premiums to purchase private insurance to replace the reduction in their benefits? Certainly the disability and health insurance markets have broadened and deepened since the early 1900s. On the other hand, workers would be trying to replace the segment of the benefits that may have been the primary source of the modern increase in moral hazard problems. In fact, Moore and Viscusi (1990, 62) found that workers valued the increase in benefits in the 1970s so highly that they were willing to accept wage reductions that were nearly triple the increase in expected benefits.

Studying the origins of workers' compensation convinces us that the success of uniting workers, employers, and insurers to reform the modern workers' compensation system turns on workers' ability to privately insure some aspects of their own workplace accident risk. Because the moral hazard and adverse selection problems of insuring an individual's accident risk are great, especially for hard-to-detect injuries, it is not clear that workers will be able to find private insurance for the greater coverage that they received from the reforms of the 1970s. By raising benefit levels and expanding coverage, a move that workers valued greatly and that generally
seemed humane, the states have created a situation in which insurance problems have contributed to escalating workers' compensation costs.

To resolve the insurance issues may require reducing the benefits and coverage from levels highly valued by workers. Employers would experience a reduction in their workers' compensation premiums that reflects both the lower benefits and reduced moral hazard problems. Yet, for workers to be made whole in this setting, if Moore and Viscusi's estimates of workers' valuations for the 1970s are correct, wages would have to rise by triple the decline in expected benefits. It is not clear that employers would be willing to pay such an increase in wage rates and, given the general distrust of markets as protectors of workers' interests, it might be harder still to convince workers that they would receive such a large increase. Thus, a modern reform would likely mean making one group better off at the expense of the other. The introduction of workers' compensation was relatively easy because so many interest groups gained. In contrast, reforming the modern problems with workers' compensation might be far more vexing because there may not be a simple reform that allows both workers and employers to gain relative to their positions under the current system.

Notes

1. See, for instance, Libecap (1989a) and Kantor (1998) for historical case studies showing the complex process of institutional change.
2. Our description of the adoption of automobile no-fault insurance laws is drawn from Harrington (1994).
3. Studies of the impact of higher benefit levels suggest that the number of reported temporary total disability accidents rises when benefit levels increase, while fatal and severe accident rates do not rise and in some cases fall. Kniesner and Leeth (1991) and Viscusi (1992) claim that this may be a sign that the problems with moral hazard may be less a function of workers' reducing the care that they exercise in the workplace and more a problem with increased reporting of accidents and possible fraud. Results also suggest that extending the waiting period reduces the number of reported accidents.