

2017

Employment Research, Vol. 24, No. 3, July 2017

---

**Citation**

W.E. Upjohn Institute. 2017. Employment Research. 24(3). [https://doi.org/10.17848/1075-8445.24\(3\)](https://doi.org/10.17848/1075-8445.24(3))

This title is brought to you by the Upjohn Institute. For more information, please contact [ir@upjohn.org](mailto:ir@upjohn.org).

## EMPLOYMENT RESEARCH

## The Current State of Workers' Compensation

## Benefit Adequacy, Return to Work, and Prevention

*Marcus Dillender and H. Allan Hunt*

## ARTICLE HIGHLIGHTS

■ *Various plan-design elements have emerged that seem to provide better adequacy of workers' compensation benefits than the medical-based impairment and gross earnings replacement approach.*

■ *Disability management techniques appear to have the capacity to significantly reduce the burden of work-related disability for both workers and employers in our workplaces.*

■ *Workers' compensation programs have tools available to improve employer safety and prevention performance.*

Workers' compensation programs are state-level insurance programs that provide medical care and income replacement benefits for people injured at work. Although states' rules differ along various dimensions, each state other than Texas has statutes that require employers to provide insurance with specified benefits. Since each workers' compensation program is unique, comparisons across programs can be complicated or impossible. Moreover, data on occupational injuries, compensation, safety, and accommodation practices at firms are typically unavailable. When data are available, they can be suspect and suffer from the disadvantage that they often come from a single jurisdiction. Also, since different data and methods are used across studies, results can be difficult to compare across studies and to generalize to other workers' compensation systems. The result is a rather sparse and dubious-quality research literature.

In our new book, *Workers' Compensation: Analysis for Its Second Century* (see p. 7), we discuss and analyze the status of state workers' compensation programs along the three dimensions of benefit adequacy, return to work, and prevention incentives using the research record that has been compiled to date. We highlight the often-contrasting incentives that firms, workers, and insurers face as they operate within these programs. We consider recent trends in workers' compensation, discuss innovations that have yet to be evaluated, and try to draw conclusions from the research whenever possible and point to gaps in our knowledge that future research should address.

**Benefit Adequacy**

The chapter on benefit adequacy reviews recent studies of workers' compensation in Canada and Michigan. Michigan is unique because,

unlike other states, it does not have a statutory designation of permanent partial disability. And as a "wage-loss" state, Michigan law provides that lost earnings benefits shall be paid for the duration of the disability, with a few exceptions. This contrasts with other states with an "impairment" orientation, where a medical assessment of the degree of disability is made and benefit payments are derived from that rating. Furthermore, there is no designation of the level of disability in Michigan, so there is no impairment rating available, only a record of the payments made. Canadian workers' compensation systems are similar to those in the United States except that all workers' compensation insurance is with public entities, benefits are typically more generous, and waiting periods are shorter or nonexistent.

A study from the Workers Compensation Research Institute finds that the Michigan workers' compensation system provides more adequate benefits than many other state systems (Savych and Hunt 2017). Figure 1 charts workers' compensation benefits and postinjury earnings for workers with more than one month of lost work time or a lump-sum settlement compared to earnings of similar workers with injuries that did not qualify for wage replacement benefits. There is a marked drop in earnings after the injury and a decline in earnings that lasts at least five years, but the addition of workers' compensation benefits brings the earnings replacement rate to 97 percent at 5 years and 88 percent when projected out to 10 years.

This performance appears to be largely due to the wage-loss orientation and the "spendable earnings" wage replacement formula used in Michigan. Taking account of income taxes, payroll taxes, and family size clearly provides the opportunity for tailoring wage-loss replacement more closely to apparent need across all workers.

## ALSO IN THIS ISSUE

**Regulating Access to Work in the Gig Labor Market: The Case of Uber**

Morris M. Kleiner  
page 4

**Workers' Compensation: Analysis for Its Second Century**

So, despite a lower maximum benefit in Michigan, set at 90 percent of the state average weekly wage versus 100 percent in most U.S. jurisdictions, workers' compensation wage-loss benefits in Michigan look pretty good. But if benefits in Michigan appear to be higher than those in some other states, they are clearly not as generous as in the Canadian systems that have been subjected to similar wage-loss studies.

**Return to Work**

While ensuring adequate compensation is a basic legislated priority of workers' compensation, returning injured workers to employment swiftly and safely lowers compensation costs for employers and helps workers by raising their incomes and by serving as part of their physical and emotional recovery from an injury. In our chapter on return to work, we discuss disability management

techniques designed to improve return-to-work performance that include maintaining close contact with the injured worker, improving medical management, and accommodating limitations at work.

Disability management's promise for improving the return-to-work performance of workers' compensation systems is reflected in the proliferation of state policy innovations that directly or indirectly support or encourage these interventions. Credible evidence on the impact of return-to-work programs is sparse but promising. Reductions of up to 40 percent in disability duration have been reported among large self-insured firms (McLaren, Reville, and Seabury 2010), and several review articles have found strong empirical support for the effects of disability management techniques.

The widespread adoption of such techniques among private

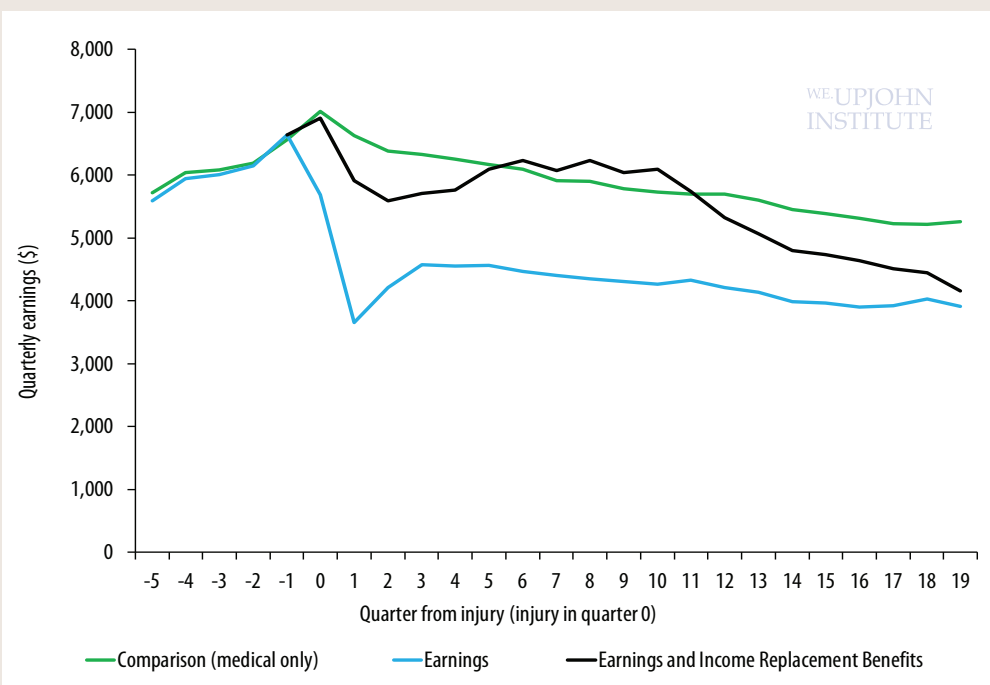
employers throughout the 1990s also demonstrates their efficacy. Figure 2 shows how the balance has shifted from injuries with days away from work to those with restricted activity only. This serves as evidence of the spread of disability management techniques. We conclude that properly motivated disability management techniques can remove many barriers to return-to-work for workers with impairments, which reduces both workers' compensation costs for employers and lost wages for workers.

**Prevention**

As the need for income benefits and return-to-work considerations can both be avoided if injuries are prevented in the first place, we also discuss how workers' compensation insurance can affect both workers' and firms' prevention efforts. As can be seen in Figure 3, average wage loss benefits and average medical benefits have both fallen since the early 1990s as occupational injury rates have dropped, but wage loss benefits have fallen much more dramatically than medical benefits. The increased medical benefits as a percentage of all workers' compensation benefits makes the need for prevention efforts an important component of cost containment considerations regardless of a state's benefit adequacy.

In the chapter on prevention, we discuss how workers' compensation alters both firms' and workers' inherent incentives to prevent occupational injuries and diseases. For workers, more adequate compensation benefits reduce the costs of injuries, which lower their incentives to avoid injury. For firms with experience-rated premiums, higher claim costs increase future premiums, meaning that experience rating gives firms a financial incentive to improve safety. Empirical work has devoted considerable attention to trying to understand which of these conflicting effects dominates, but it is often stymied by the simultaneous effect of workers'

**Figure 1 Average Quarterly Earnings, Workers' Compensation Income Replacement Benefits, and Reweighted Comparison Earnings, by Quarter from Injury, Injuries in Michigan in 2004**



NOTE: Indemnity injury sample includes workers who had more than one month of lost time or received lump-sum payments. Comparison-sample quarterly earnings information covers period between 2003 and 2008. SOURCE: Savych and Hunt (2017).

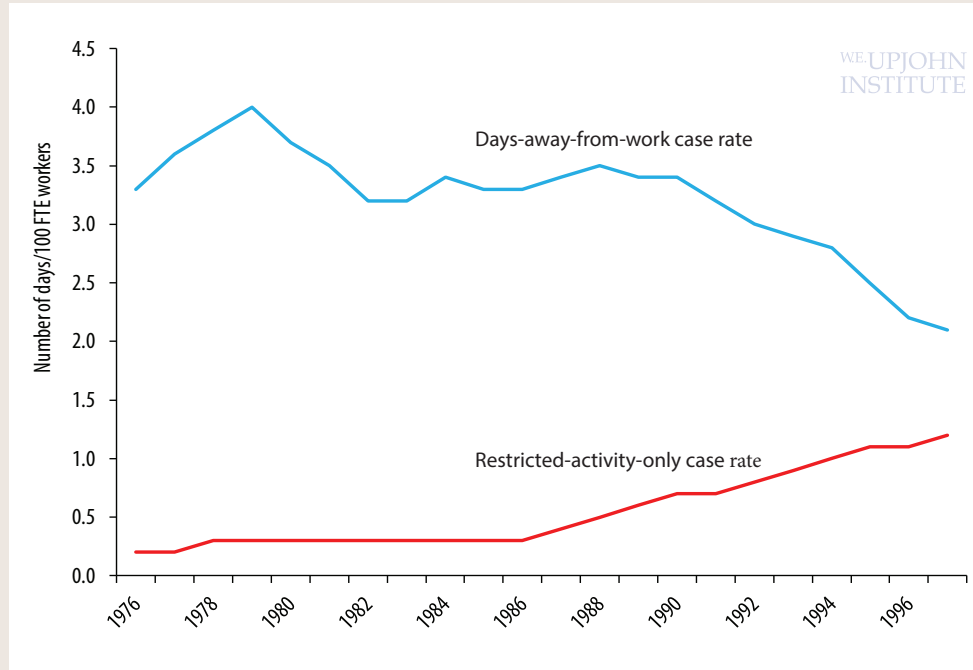
compensation benefits on reporting incentives conditional on the number of true injuries at a firm. When benefits are higher, workers have an increased incentive to report injuries, while firms have incentives to suppress reporting of injuries.

Although much existing empirical evidence points to a positive relationship between frequency of injuries and the level of workers' compensation benefits (e.g., Krueger 1990; Ruser 1985), we feel the evidence is not persuasive that better workers' compensation benefits actually encourage workers to act more recklessly. However, making workers' compensation premiums more accurately reflect the previous claims history of individual employers appears to improve employers' safety and prevention efforts, as well as encourage employers to devote more attention to the worker's successful return to work.

**Conclusions**

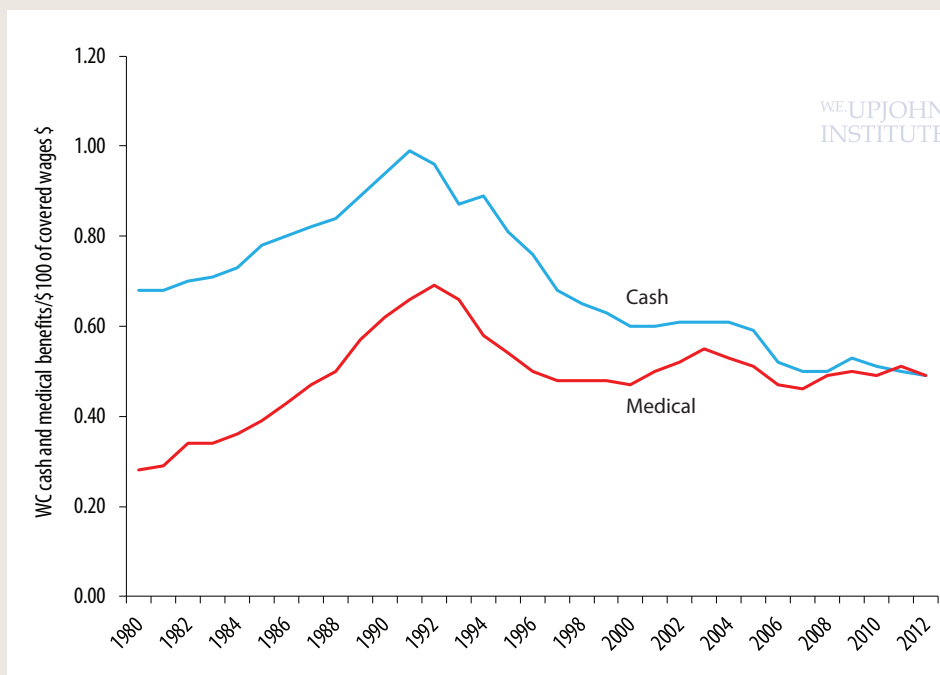
Given the current state of knowledge, we believe that workers' compensation programs could be improved along several dimensions. However, there seems to be a reluctance to consider improvements under the existing political environment. More research is needed on various workers' compensation issues, but we also believe that there are reasons for optimism about the three performance dimensions that we consider. With benefit adequacy, various plan-design elements have emerged that seem to provide better adequacy of workers' compensation benefits than the medical-based impairment and gross earnings replacement approach. With return to work, disability management techniques appear to have the capacity to significantly reduce the burden of work-related disability for both workers and employers in our workplaces. With prevention, workers' compensation programs appear to have tools available to improve employer safety and prevention performance.

**Figure 2 National Trends in Rates Associated with Lost Workdays**



SOURCE: Ruser (1999).

**Figure 3 Workers' Compensation Medical and Cash Benefits per \$100 of Covered Wages, 1980–2012**



SOURCE: Estimates from the National Academy of Social Insurance.

## Workers' Compensation: Analysis for Its Second Century

Count us among those who believe that today's workers' compensation programs have the potential to serve for another 100 years, but they will require significant improvement. We call upon legislative bodies to address current shortcomings, and we call upon the research community to provide appropriate guidance for these efforts.

### REFERENCES

- Krueger, Alan B. 1990. "Incentive Effects of Workers' Compensation Insurance." *Journal of Public Economics* 41(1): 73–99.
- McLaren, Christopher F., Robert T. Reville, and Seth A. Seabury. 2010. "How Effective Are Employer Return to Work Programs?" Rand Center for Health and Safety in the Workplace Working Paper No. WR-745-CHSWC. Santa Monica, CA: Rand Corporation.
- Reville, Robert T., Leslie I. Boden, Jeffrey E. Biddle, and Christopher Mardesich. 2001. *An Evaluation of New Mexico Workers' Compensation Permanent Partial Disability and Return to Work*. Santa Monica: Rand Corporation.
- Ruser, John W. 1985. "Workers' Compensation Insurance, Experience-Rating, and Occupational Injuries." *Rand Journal of Economics* 16(4): 487–503.
- Savych, Bogdan, and H. Allan Hunt. 2017. *Adequacy of Workers' Compensation Benefits in Michigan*. Cambridge, MA: Workers' Compensation Institute.
- Tompa, Emile, Cameron Mustard, Mieke Koehoorn, Heather Scott-Marshall, Miao Fang, and Cynthia Chen. 2010. *WorkSafeBC Study Report 1: The Impact of Bill 49 on Benefits Adequacy and Equity*. Toronto, Ontario: Institute for Work and Health.
- Tompa, Emile, Heather Scott-Marshall, Miao Fang, and Cameron Mustard. 2010. "Comparative Benefits Adequacy and Equity of Three Canadian Workers' Compensation Programs for Long-Term Disability." IWH Working Paper No. 350. Toronto, Ontario: Institute for Work and Health.

➔ Download this WEfocus book for free at [research.upjohn.org/up\\_press/244/](http://research.upjohn.org/up_press/244/).

Marcus Dillender is senior economist and H. Allan Hunt is senior economist emeritus, both at the Upjohn Institute.

# Regulating Access to Work in the Gig Labor Market

## The Case of Uber

Morris M. Kleiner

U.S. labor markets traditionally have included long-term employment relationships that last many years or decades. They also have been characterized by internal labor markets, unions, and a web of rules that, often by law, both employers and workers are required to observe. New innovations and technologies, such as smart phones and their accompanying apps, have allowed labor markets to become more fluid and responsive to spot market supply and demand conditions. They have allowed workers more flexibility in their choice of hours worked, and have allowed consumers to better evaluate the quality of services. As a result, gig labor markets, which let workers easily book jobs by the hour or project, have grown and flourished. The number of workers directly working through apps now comprise nearly 1 percent of the total workforce, making gig labor markets one of the fastest growing areas in the labor force (Katz and Krueger 2016; Torpey and Hogan 2016).

Workers who have entered the gig labor market have few of the government regulations or web of rules that govern traditional labor markets. In addition, labor laws such as the Fair Labor Standards Act and the National Labor Relations Act usually do not apply to these workers (Harris

and Krueger 2015). Yet one area of labor market regulation, occupational licensing, is pervasive, and in this article, I examine the interaction of this institution in one large company that operates largely in the gig economy.

### The Uber Innovation

The ride-sharing firm Uber has come to exemplify the recent technology "revolution" and labor market outcomes embodied in the gig economy. It had 84–87 percent of the total ride-sharing trips (i.e., cab-substitute markets) in 2016 and is currently active in 450 cities in the United States and worldwide.<sup>1</sup> Uber began offering its first rides in 2010 in San Francisco and in New York City in 2011 as a way to match individuals who needed rides to work or recreation with those individuals who were willing to provide those rides for a price. The creation of an app and accompanying software allowed this matching process to be done in an efficient and profitable manner for the company (Roth and Ockenfels 2002). Uber takes a percentage of the ride price for the company as their fee for matching the drivers and riders. The drivers anticipate an ample supply of customers, and the waiting times for drivers in traditional cabs were reduced and revenues enhanced for those

### ARTICLE HIGHLIGHTS

- The number of workers directly working through apps now comprise nearly 1 percent of the total workforce, making gig labor markets one of the fastest growing areas in the labor force.
- Evidence from a quasi-experiment in New York and New Jersey suggests that there are few gains from occupational licensing of ride-sharing providers as assessed through customer satisfaction or measures of customer safety.

providing rides. Drivers can choose when and how many hours they want to work. In 2017 the company had more than 734,000 active drivers in the United States and more than 1,500,000 drivers worldwide.<sup>2</sup> The economic value of the company is estimated to be almost \$70 billion, and despite recent negative publicity, it is still one of the major economic success stories and labor market innovators (Bensinger 2017).

One unique aspect of the Uber performance evaluation system is that the customer evaluates the driver and vice-versa on a scale of one to five, with five being the highest. The majority—nearly 86 percent—of drivers earn a rating of 5. Drivers and customers whose ratings fall below a specified value determined by the company lose their ability to access the app and are effectively fired from using the ride-sharing system. Consequently, there are incentives for both customers and drivers to do well in their respective roles.

**Regulations for Driving**

One of the major labor market issues affecting Uber drivers is occupational licensing (Porter 2015). About one-quarter of the U.S. workforce must acquire a license from the government in order to work for pay (Bureau of Labor Statistics 2016). In some cities—New York, for example—ride-sharing without a taxi license is illegal. The requirements for licensure in New York City are stringent, and the licensure process takes three months on average, with upfront costs of at least \$2,000. In addition, the driver must complete a defensive driving course, pass a medical exam, be subjected to a drug test, undergo fingerprint and background checks, take classes on wheelchair-accessible vehicle training, acquire a commercial vehicle license, and purchase commercial vehicle insurance. These substantial fixed costs result in fewer drivers but much lower

turnover rates for Uber drivers in New York than in any other U.S. city where the company operates; they also result in longer working hours (Hall et al. 2017). Figure 1 shows driver turnover by city. New York City has lower turnover, and Houston, which has few regulations for drivers, has relatively high turnover of drivers.

Figure 2 shows that the ratio of New York Uber drivers to the population of the city or the metropolitan statistical area is considerably lower than either Chicago or San Francisco, and the base prices are higher (Hall et al. 2017). Although traditional medallion taxi drivers can serve as substitutes for Uber drivers in any city, the number of Uber drivers in New York is considerably lower than in Chicago or San Francisco. Also, the base Uber fares in Chicago and San Francisco are lower than those in New York City for both 2015 and 2016.

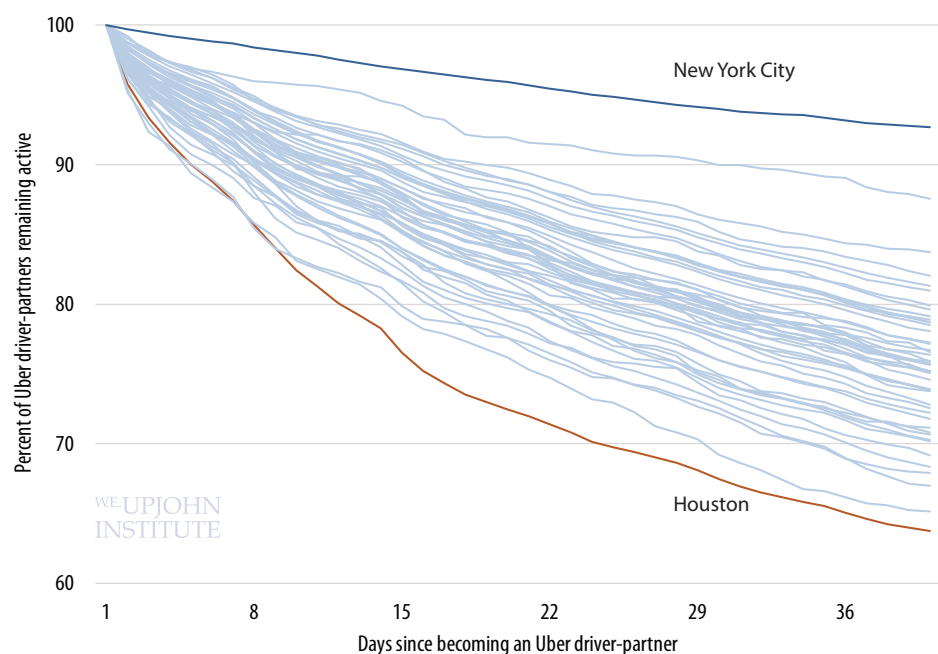
**Evaluating Quality**

One of the least studied areas of occupational licensing is its influence

on the quality of services (Kleiner and Kudrle 2000). However, a recent analysis in the New York City/New Jersey area notes that drivers who sign up to drive on the Uber app can perform pickups in New Jersey, which is directly on the opposite side of the Hudson River from New York City, but drivers who sign-up in New Jersey, which does not require an occupational license, cannot perform pickups in the city (Hall et al. 2017). Thus, the study compares quality and safety outcomes for rides performed in New Jersey by New York City and New Jersey drivers.

There is quasi-random assignment of rides because Uber’s dispatch algorithm, which determines the driver for a particular ride request, is based on factors other than licensing. While the algorithm has evolved over time, it is mainly based on a driver’s proximity to a rider’s location (also based on time to the customer). Consequently, a ride is essentially randomly assigned to a licensed driver from New York City or an unlicensed driver from New Jersey for pick-up requests that occur in many

**Figure 1 Percent of Uber Driver-Partners Remaining Active, by City**



SOURCE: Uber Technologies, Inc.

**Regulating Access to Work in the Gig Labor Market**

parts of New Jersey. The results of the data analysis using the quasi-random assignment of rides methodology show very little statistically significant differences in measured quality by riders through measures of rider satisfaction. Also, there was little or no difference in the safety of rides based on the number of driver hard stops, rapid accelerations, or complaints to the company of poor ride performance, based on whether the driver was from a jurisdiction that required a license in order to work.

**Implications for Policy**

Two of the most rapidly growing segments of the labor market are the growth of the gig economy and occupational regulations in the labor market through licensing by government. Uber is faced with both issues because of its business model. As current findings suggest, cities that impose rigorous licensing standards, such as New York, have fewer Uber drivers per capita and higher base fares than either Chicago or San Francisco.

The evidence from a quasi-experiment in New York and New Jersey suggests that there are few gains from occupational licensing of ride-sharing providers as assessed through customer satisfaction or measures of customer safety. Before state or local government enact additional regulations, access to the labor market and its influence on customer prices, satisfaction, and safety need to be considered as key elements of governmental labor market licensing policies.

**NOTES**

1. DMR Statistics <http://expandeddrambings.com/index.php/uber-statistics/> (accessed July 7, 2017).
2. Data provided from company sources, June 8, 2017.

**REFERENCES**

Bensinger, Greg. 2017. "Uber Posts \$708 Million Loss as Finance Head Leaves." *Wall Street Journal*, June 23, <https://www.wsj.com/articles/uber-posts-708-million>

-loss-as-finance-head-leaves-1496272500 (accessed June 28, 2017).

Bureau of Labor Statistics. 2016. "Data on Certificates and Licensing." Cambridge, MA: Bureau of Labor Statistics. <http://www.bls.gov/cps/certifications-and-licenses.htm#highlights> (accessed July 7, 2017).

Hall, Jonathan, Jason Hicks, Morris M. Kleiner, and Rob Solomon. 2017. "Occupational Licensing of Uber Drivers." Paper presented at the Labor Studies and Personnel Economics sections, National Bureau of Economic Research, Cambridge, MA, July 26.

Harris, Seth, and Alan Krueger, 2015. "A Proposal for Modernizing Labor Laws for Twenty-First-Century Work: The 'Independent Worker.'" Discussion Paper No. 2015-10. Washington, DC: Brookings Institution.

Katz, Lawrence F., and Alan B. Krueger. 2016. "The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015." Working Paper No. 603. Princeton, NJ: Princeton University.

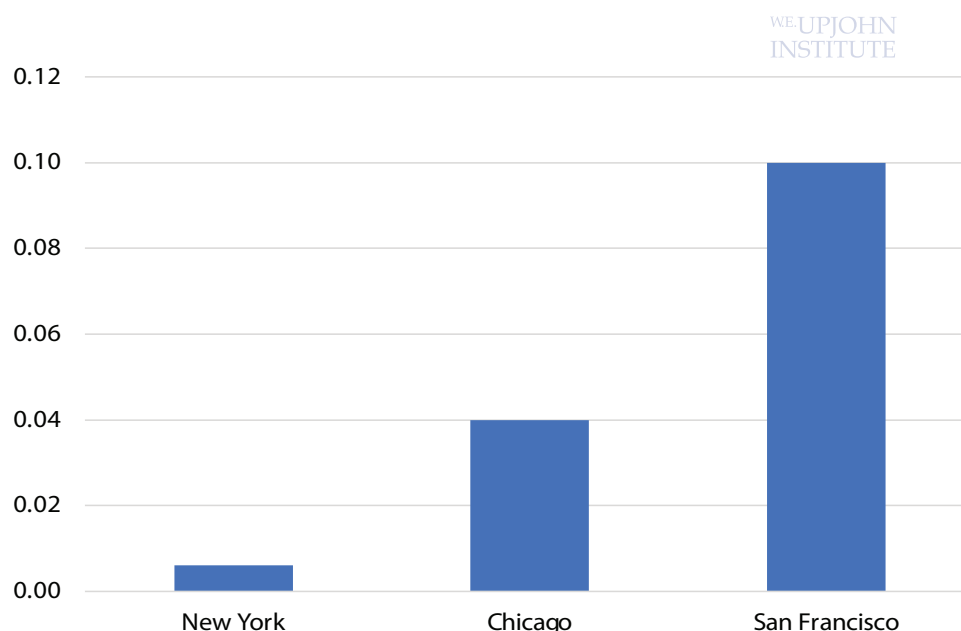
Kleiner, Morris M., and Robert T. Kudrle. 2000. "Does Regulation Affect Economic Outcomes? The Case of Dentistry." *Journal of Law and Economics* 43(2): 547–582.

Porter, Eduardo, 2015, "Job Licenses in Spotlight as Uber Rises." *New York Times*, January 27, B:1.

Roth, Alvin E., and Axel Ockenfels. 2002. "Last-Minute Bidding and the Rules for Ending Second-Price Auctions: Evidence from eBay and Amazon Auctions on the Internet." *American Economic Review* 92(4): 1093–1103. doi:10.1257/00028280260344632 (accessed July 7, 2017).

Torpey, Elka, and Andrew Hogan. 2016. "Working in a Gig Economy." *Career Outlook*, May. Cambridge, MA: Bureau of Labor Statistics. <https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm> (accessed July 7, 2017).

**Figure 2 Number of Uber Drivers per Capita in the Selected City, 2016**



WE UPJOHN INSTITUTE

SOURCE: Uber Technologies, Inc., and U.S. Census Bureau, American FactFinder: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed July 20, 2017).

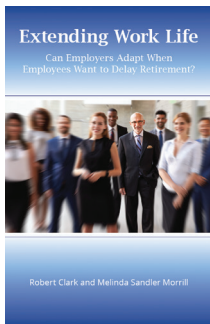
*Morris M. Kleiner is a professor at the Humphrey School of Public Affairs, University of Minnesota, and a visiting scholar at the Upjohn Institute.*

# New Books from the Upjohn Press

## Extending Work Life Can Employers Adapt When Employees Want to Delay Retirement?

Robert Clark and Melinda Sandler Morrill

According to the authors of this *WEfocus* Series book, “Many policy analysts, economists, and demographers have argued that individuals must extend their work lives if they are to achieve their



desired standard of living in retirement. Increases in longevity imply that individuals who leave the labor force at traditional retirement ages must either save more during their working careers or consume less during their retirement. Reductions in the generosity of employer- and government-funded retirement programs exacerbate this problem. Thus, workers today must save more than their predecessors to achieve the same level of retirement well-being. The idea seems clear—working longer and retiring later is the only way future retirees can sufficiently finance their retirement.”

While working longer may be necessary to support more years in retirement, few studies have examined this phenomenon from the employer perspective. This book seeks to fill that gap by providing a comprehensive assessment of the costs and benefits to employers of accommodating an increasing desire for delayed or phased retirement.

**WE**focus  
series

88 pp. 2016

\$14.99 paper 978-0-88099-528-3

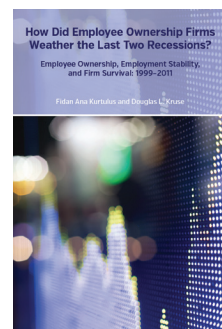
PDF is free at [research.upjohn.org/up\\_press/237/](http://research.upjohn.org/up_press/237/)

## How Did Employee Ownership Firms Weather the Last Two Recessions?

### Employee Ownership, Employment Stability, and Firm Survival: 1999–2011

Fidan Ana Kurtulus and Douglas L. Kruse

Employee ownership firms offer workers the opportunity to own a stake in the firms where



they work. This affords them the ability to share in profits and have a voice in firm-related decision making. In this comprehensive new book, Kurtulus and Kruse provide new evidence on whether employee

ownership firms are better equipped to survive recessions. In particular, they focus on broad-based employee ownership, which includes ownership at all levels in the firm’s hierarchy.

The authors begin by defining employee ownership, and then discuss the prevalence of such firms in the United States. They also examine how employee ownership affects employment stability and why employee ownership firms have survived recessions more successfully than other firms.

Kurtulus and Kruse conclude by saying that the benefits they observed in employee ownership firms, particularly the greater employment stability and survival rates, can help the overall economy. Therefore, increased government support to broaden employee ownership programs is merited.

178 pp. 2016

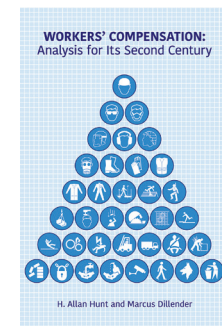
\$18 paper 978-0-88099-525-2

\$40 cloth 978-0-88099-526-9

## Workers’ Compensation: Analysis for Its Second Century

H. Allan Hunt and Marcus Dillender

Workers’ compensation (WC) is the original form of social insurance as well as the first no-fault insurance program. Under WC, workers receive



compensation and treatment for workplace injuries and disease in exchange for giving up the right to sue their employers for negligence. Each state and Canadian province runs its own WC program, and how each is administered and the level of benefits provided vary considerably. Therefore, assessing best practices among these programs is tricky.

H. Allan Hunt and Marcus Dillender provide a succinct analysis of the state of WC programs in North America by focusing on three key performance issues: 1) the adequacy of compensation for those disabled in the workplace, 2) return-to-work performance for injured workers, and 3) prevention of disabling injury and disease. Following a brief introductory chapter that provides a discussion of the difficulties of trying to compare so many diverse programs, Hunt and Dillender devote a chapter to each of the three performance issues and provide empirical findings and useful guidance for policymakers and researchers as they set their sights on adapting WC for the twenty-first century.

**WE**focus  
series

132 pp. 2017

\$14.99 paper 978-0-88099-530-6

PDF is free at [research.upjohn.org/up\\_press/244/](http://research.upjohn.org/up_press/244/)



W.E. **UPJOHN INSTITUTE**  
FOR EMPLOYMENT RESEARCH

300 S. Westnedge Avenue  
Kalamazoo, MI 49007-4686

---

Nonprofit Org.  
U.S. POSTAGE  
**PAID**  
Kalamazoo MI  
Permit No. 756

## Connect with us



W.E. Upjohn Institute for  
Employment Research



@UpjohnInstitute

WEBSITE

[upjohn.org](http://upjohn.org)

INSTITUTIONAL  
REPOSITORY

[research.upjohn.org](http://research.upjohn.org)

**Vol. 24, No. 3**

**Employment Research** is published quarterly by  
the W.E. Upjohn Institute for Employment Research.  
Issues appear in January, April, July, and October.

*The Institute is a nonprofit, independent research  
organization devoted to finding and promoting solutions to  
employment-related problems at the international, national,  
state, and local levels.*

**W.E. Upjohn Institute for Employment Research**  
300 S. Westnedge Avenue, Kalamazoo, MI 49007-4686  
(269) 343-5541 • [www.upjohn.org](http://www.upjohn.org)  
Randall W. Eberts, President