TORT, SOCIAL SECURITY, AND NO-FAULT SCHEMES: LESSONS FROM REAL-WORLD EXPERIMENTS

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In dealing with the problem of personal injury, societies have to make a choice between regimes of tort liability, the general social security system, and tailor-made no-fault compensation schemes. The arguments bearing on this choice are complex and difficult to justify. However, in one important area most industrialized countries operate a no-fault scheme already, and have done so for almost a century, namely workplace accidents and occupational diseases. In spite of the long tradition of workers' compensation systems, it is unclear whether they are a good or a bad thing. A few decades ago and thus relatively recently, two jurisdictions—the United Kingdom and the Netherlands—have abandoned workers' compensation for a combination of employers' liability with rather generous protection under the general system of social security. Now the time has come to review the experience of these jurisdictions and compare it to the performance of workers' compensation systems that continue to operate in much of the rest of the industrialized world. One recent and important example that highlights the differences between the two approaches involves the way each deals with claims for compensation of diseases caused by asbestos. The asbestos cases also illustrate the current challenges faced by workers' compensation systems: tort suits brought against employers alleging intention or other forms of aggravated fault and launched against third parties under theories of products liability. In the United States, workers' compensation systems have been pushed aside by mass litigation, where manufacturers of equipment and raw materials are named as defendants. This development has no parallel in other jurisdictions and raises important policy issues that are ripe for a fresh discussion.

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INTRODUCTION

The choice between tort law and other compensation systems such as social insurance and no-fault compensation schemes has been the subject of academic discussion for decades. While proposals for no-fault compensation schemes, particularly in the area of traffic accidents, were implemented in some jurisdictions, the thrust of this movement has faded away. Currently, there is some discussion on shifting medical malpractice into no-fault compensation schemes. In Scandinavian countries, first-party patient insurance has more-or-less replaced tort, and scholars have advised both European jurisdictions² and the United States³ to follow this model. The discussions of no-fault compensation or insurance schemes as a replacement or a supplement to tort seem to circle around the same issues,

^{1.} The seminal publication is ROBERT E. KEETON & JEFFREY O'CONNELL, BASIC PROTECTION FOR THE ACCIDENT VICTIM: A BLUEPRINT FOR REFORMING AUTOMOBILE INSURANCE (1965); see also DON DEWEES, DAVID DUFF & MICHAEL TREBILCOCK, EXPLORING THE DOMAIN OF ACCIDENT LAW: TAKING THE FACTS SERIOUSLY 22–26 (1996) (providing an overview of the spread of no-fault motor accident schemes and their performance).

^{2.} See generally Jos Dute, Michael G. Faure & Helmut Koziol, No-Fault Compensation in the Health Care Sector (2004).

^{3.} See Frank A. Sloan et al., The Road from Medical Injury to Claims Resolution: How No-Fault and Tort Differ, 60 LAW. & CONTEMP. PROBS. 35, 36 (1997).

regardless of the subject matter involved. Invariably, the driving force behind no-fault plans is to economize administrative costs. The tort system consumes a large fraction of the money that goes around for itself—in the form of court and lawyers' fees instead of allocating the funds to victims for the purpose of compensation. No-fault schemes seek to award the victims a larger share of the overall costs of the system. The main concern advanced against the move away from a tort system is deterrence; the incentives to take care and to adjust activity levels are weakened if the threat of liability is removed. Empirical studies are somewhat diverse but seem to confirm the prediction that incentives to take care suffer with the introduction of no-fault plans. However, where injuries to the victim's health and body are at stake, i.e., damage that is impossible to replace and difficult to "repair," the effect is smaller than anticipated.

This Article does not focus on how exactly the trade-off between efficient administration and efficient deterrence should be made in regard to specific subject-matter areas such as traffic accidents or medical malpractice. Rather, it focuses on the single area where no-fault has in fact been operating for decades in most jurisdictions: workplace accidents and occupational diseases. The no-fault plan that governs in this area is called workers' compensation, which has replaced the liability of the employer that previously existed. The evaluation of these institutions in light of the compensation and deterrence goals raises complex issues about the performance of workers' compensation systems that are already in place, but also about the performance of hypothetical systems of employers' liability that would exist, if it weren't for workers' compensation schemes.

While this Article cannot provide a definite answer to this empirical question, it highlights the experience of two European countries, the United Kingdom and the Netherlands, which decades ago abandoned their systems of workers' compensation in favor of reviving the private cause of action against the employer. Now the time has come to ask how this choice has fared in practice (Part V). In addition, the article confronts challenges to workers' compensation systems that have arisen in the U.S. particularly, namely movements around the immunity rule of workers' compensation, which rely on suits against employers, alleging aggravated fault, and,

^{4.} KEETON & O'CONNELL, *supra* note 1, at 2 (noting that the "operation of the present system [of liability in tort] is excessively expensive").

See Jennifer H. Arlen, Compensation Systems and Efficient Deterrence, 52 MD. L. REV. 1093 (1993).

^{6.} For a recent empirical study see J. David Cummins, Mary A. Weiss & Richard D. Phillips, The Incentive Effects of No-Fault Automobile Insurance, 44 J. L. & ECON. 427 (2001); for an overview of past empirical studies and results, see Yu-Ping Liao & Michelle J. White, No-Fault for Motor Vehicles: An Economic Analysis, 4 Am. L. & ECON. REV. 258, 262–64 (2002).

secondly, damages claims brought against third parties (Part VI). Before confronting these real-world examples it is important to understand the central features of the competing regimes as well as the policy issues underlying the choice between workers' compensation and employers' liability. In order to set the stage, Parts I and II begin with a brief recollection of the basic principles of workers' compensation systems and of employers' liability. Part IV then offers an economic analysis of the relevant policy issues along the three familiar dimensions of efficient deterrence, efficient risk-bearing, and efficient administration of claims. The topics discussed include the choice between liability rules, the existence and scope of the contributory negligence defense, the option of entrusting the administration claims to public or private insurance agencies, and the choice between a judicial or amicable mechanism of dispute of resolution.

I. SYSTEMS OF WORKERS' COMPENSATION: BASIC FEATURES

There is no single workers' compensation system. Instead, there are as many systems as there are jurisdictions running such programs. This is most pronounced in the United States where each state operates its own workers' compensation system.⁷ In spite of all the resulting variation, the central features of workers' compensation systems are surprisingly stable across jurisdictions. These features are outlined below.

A. Compensation Regardless of Fault of Employer and Contributory Fault of Employee

The primary goal of a workers' compensation system is to compensate workers who have suffered job-related accidents or diseases. Thus, workers' compensation systems are based on the principle of strict liability, where workers are entitled to compensation regardless of fault on the part of the employer. Even where due care had been taken, so that the injury or disease is the consequence of a contingency that could not have been avoided at reasonable cost, the employee-victim still recovers. The employer or the workers' compensation organization against which claims are to be directed cannot defend itself by establishing that a fellow employee caused the harm. Finally, the claim even survives in cases where the worker inflicted the injury upon himself through behavior that would be

^{7.} See discussion infra Part II.B.

^{8.} MARK A. ROTHSTEIN ET AL., EMPLOYMENT LAW, Vol. 2, § 6.3, at 5–8 (1999) (regarding United States Law); YVONNE LAMBERT-FAIVRE & STÉPHANIE PORCHY-SIMON, DROIT DU DOMMAGE CORPOREL, SYSTÈMES D'INDEMNISATION, ¶355 (7th ed. 2011) (Fr.) (regarding French law); Hein Kötz & Gerhard Wagner, Deliktsrecht 229–31 (10th ed. 2010) (Ger.).

classified as contributory negligence in tort.9

B. Insurance and Collectivization of Claims

The original German model of workers' compensation deliberately avoided the private insurance market and thus eschewed the option of a combination of strict employers' liability and mandatory insurance. Instead, new administrative institutions were created by combining features of a public insurance company with those of a regulatory agency charged with overseeing firms and ensuring workplace safety. Within this framework, the party who is strictly liable is not the employer himself but the newly created public insurance carrier. However, employers bear the full financial burden of the system and thus remain "strictly liable" for the costs of defending, processing, and satisfying claims for compensation of work-related accidents and diseases.

While most countries in Europe and elsewhere have followed the German model, the United States has taken a different course that relies on the private insurance industry instead of public quasi-insurers. Only six states require the employer to participate in a state-run workers' compensation scheme; the majority merely impose an obligation to insure against the liabilities generated by workers' compensation. What the European systems achieve by transferring liability to public entities, these jurisdictions achieve through a combination of private liability insurance and the involvement of an administrative institution overseeing the program. The personal liability of the employer is not the original one that existed under the common law of torts, but a liability regime created by the workers' compensation statutes themselves and reflecting the

^{9.} ROTHSTEIN ET AL., *supra* note 8, § 6.11, at 48; *see also* PETER M. LENCSIS, WORKERS' COMPENSATION – A REFERENCE AND GUIDE 40 (1998); KÖTZ & WAGNER, *supra* note 8, at 229, 231.

^{10.} See generally John M. Kleeberg, From Strict Liability to Workers' Compensation: The Prussian Railroad Law, The German Liability Act, and the Introduction of Bismarck's Accident Insurance in Germany, 1838-1884, 36 N.Y.U. J. INT'L L. & POL. 53 (2003) (describing the origins and historical background of workers' compensation schemes in the German Accident Insurance Act of 1884, inspired by then-chancellor Bismarck); see also KÖTZ & WAGNER, supra note 8, at 225–27.

^{11.} Compare François Ewald, L'État providence [The Welfare State] 229 (1986) (Fr.) (describing French institutions), with Kötz & Wagner, supra note 8, at 233–34 (describing German institutions): see cmt. to fn. 8.

^{12.} See generally Price V. Fishback & Shawn Everett Kantor, *The Adoption of Workers' Compensation in the United States, 1900-1930*, 41 J. L. & ECON. 305 (1998) (providing a brief and informative overview of the development of workers' compensation in the United States).

^{13.} The states requiring employers to participate in state-run workers' compensation schemes are Nevada, North Dakota, Ohio, Washington, West Virginia, and Wyoming; LENCSIS, *supra* note 9, at 78.

^{14.} DAN B. DOBBS, THE LAW OF TORTS, PRACTITIONER'S TREATISE, Vol. 2, 1098–99 (2001).

^{15.} Rothstein et al., supra note 8, § 6.34, at 159; Lencsis, supra note 9, at 75–82; Dan D. Dobbs, the Law of Torts 1098 (2000).

general features of such systems.

Regardless of these differences, the central feature of workers' compensation remains that the claim of the worker is independent of the solvency or even the continuing existence of the former employer. ¹⁶ In this sense, workers' compensation systems imply a collectivization of claims.

C. Scope of Protection

Workers' compensation systems do not compensate just any harm suffered by employees in the course of work. Their scope of protection remains limited to particular categories of harm, namely personal injury, disease, and death.¹⁷ Damage to property as well as pure financial losses continue to remain outside of the scope of protection. In principle, the same is true for dignitary injuries and other types of harm to nonphysical interests of the person. However, it has become increasingly difficult to draw the line between physical and nonphysical personal rights.

D. Limited Compensation

Tort law generally provides for full compensation. While it may be difficult to establish the elements of a private cause of action in tort, the successful claimant is entitled to comprehensive relief. The party held liable must "make the victim whole again," i.e., restore the victim to the situation she would have been in but for the wrongful behavior. In cases of personal injury, the tortfeasor is liable for the costs of medical care, full replacement of lost wages, and any other pecuniary loss suffered as a result of the injury, such as the costs of devices and appliances that assist disabled persons in their daily lives. On top of that come damages for nonpecuniary loss, i.e., for the pain and suffering sustained due to the injury and the disabilities or disfigurements that remain after the resources of medical treatment have been exhausted. While it may not be possible to render the victim fully neutral between the hypothetical state of the world without the harm and the actual state of the world that includes a money payment, full compensation aims to get as close to this state as possible.

Workers' compensation systems function very differently from the

^{16.} LENCSIS, *supra* note 9, at 9 ("What is given includes something very valuable: the certainty that funds will be available to pay the benefits by virtue of compulsory insurance coverage (or approved self-insured status) for all employers.").

^{17.} ROTHSTEIN ET AL., *supra* note 8, § 6.23, at 85–86, § 6.24, at 99–100 (describing workers' compensation coverage in the United States); DOBBS, *supra* note 14, at 1098 (describing workers' compensation coverage in the United States); LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶ 372–79 (describing workers' compensation coverage in France); KÖTZ & WAGNER, *supra* note 8, at 228 (describing workers' compensation coverage in Germany).

private law of torts and damages. As far as medical care is concerned, workers' compensation carriers normally provide it "in kind," by referring patients to medical service providers operating on their behalf and under their control, or by at least requiring the patient to obtain authorization from the carrier before turning to other physicians and hospitals. Damages for lost earnings are not calculated in each individual case with the aim of making the victim whole, but are based on schedules or grids. To the extent that benefits are not scheduled, they are calculated on the basis of reduced earning capacity or, depending on the jurisdiction, reduced physical capacity, which are both independent of the amount of income actually lost by the victim-applicant. Damages for lost earning capacity or, depending on the jurisdiction, reduced physical capacity, which are both independent of the amount of income actually lost by the victim-applicant.

In many jurisdictions, the common method of benefit-assessment in cases of partial or full, temporary or permanent disablement is to have the handicap resulting from the injury or disease assessed by a medical expert who establishes the percentage-degree of disablement, and then to award a pension which reflects the degree of disablement and the level of wages earned before the harm.²¹ Depending on how the system is calibrated, where the degree of disablement is 100% the employee may be entitled to full income substitution, while in cases of partial disability the level of compensation will be set correspondingly, as a fraction of the income earned at the time of injury.²² Income benefits are commonly subject to an absolute cap, as well as to a relative one expressed in terms of a maximum

^{18.} LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶ 373 (describing medical care provided under workers' compensation schemes in France); ROTHSTEIN ET AL., *supra* note 8, § 6.23, at 85–86, § 6.27, at 120–21 (describing medical care provided under workers' compensation schemes in the United States); LENCSIS, *supra* note 9, at 50–51 (describing medical care provided under workers' compensation schemes in the United States); KÖTZ & WAGNER, *supra* note 8, at 231–32 (describing medical care provided under workers' compensation schemes in Germany).

^{19.} ROTHSTEIN ET AL., *supra* note 8, 1999, § 6.23, at 85-86, § 6.29, at 133–38 (describing calculations for damages for lost earnings provided under workers' compensation schemes in the United States); LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶ 378. (describing calculations for damages for lost earnings provided under workers' compensation schemes in the France).

^{20.} ROTHSTEIN ET AL., *supra* note 8, § 6.23, at 85–86, § 6.28, at 124–33 (describing calculations of benefits provided under workers' compensation schemes in the United States); LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶ 370, 378 (describing calculations of benefits provided under workers' compensation schemes in France); KÖTZ & WAGNER, *supra* note 8, at 232–33 (describing calculations of benefits provided under workers' compensation schemes in Germany).

^{21.} KÖTZ & WAGNER, *supra* note 8, at 232–33 (describing benefit assessments provided under workers' compensation schemes in Germany; LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶370, 378 (describing calculations for damages for lost earnings provided under workers' compensation schemes in France).

^{22.} ROTHSTEIN ET AL., *supra* note 8, 1999, § 6.23, at 85–86, § 6.31, at 143–46 (describing the calculation of income substitution provided under workers' compensation schemes in the United States); LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶378–79 (describing the calculation of income substitution provided under workers' compensation schemes in France).

fraction of pre-injury earnings. In jurisdictions where benefits are not subject to income tax, the typical measure of income replacement for fully disabled workers is two thirds of the pre-injury wages.²³ Typically, compensation is not awarded as a lump sum but in the form of a pension that is paid in addition to wages still being earned. From time to time, the level of the pension will be adjusted to account for inflation and possible increases in the overall level of wages. In this sense, workers' compensation systems grant damages in the abstract, independent of the facts of the case. For example, the U.S. Supreme Court has famously held that a worker who, subsequent to the injury, underwent re-training and managed to earn three times his pre-injury salary was nonetheless entitled to partial disability benefits.²⁴

A striking difference between the damages available under tort and the benefits due under workers' compensation is that the latter excludes compensation for nonpecuniary harm, in particular, damages for pain and suffering. Likewise, while some jurisdictions entertain regimes of punitive damages in tort claims, this remedy is not available in workers' compensation, so injured workers never receive monetary benefits beyond those in the form of pensions.

E. Resolution of Disputes Out of Court

The concentration of liability in a single entity, be it a public workers' compensation carrier or a private insurance company that is overseen by an administrative agency, makes it easier to implement special procedures for the purpose of resolving disputes. While institutions and procedures vary across jurisdictions, they all share central features of alternative dispute resolution. Typically, the aggrieved worker files her claim with the competent workers' compensation carrier who, in case of approval, will provide immediate relief in the form of medical care and income replacement. If the claim is rejected and a dispute arises, special dispute resolution boards will investigate the case and, depending on the

^{23.} LENCSIS, *supra* note 9, at 52–58 (describing the calculation of income substitution for fully disabled workers provided under workers' compensation schemes in the United States); LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, ¶378 (describing the calculation of income substitution for fully disabled workers provided under workers' compensation schemes in France).

^{24.} See Metro. Stevedore Co. v. Rambo, 521 U.S. 121, 138–39 (1997) (holding that "a worker is entitled to nominal compensation when his work-related injury has not diminished his present wage-earning capacity under current circumstances, but there is a significant potential that the injury will cause diminished capacity under future conditions").

^{25.} This is also true in those jurisdictions of the US where workers' compensation schemes are based on the market solution of mandatory liability insurance. ROTHSTEIN ET AL., *supra* note 8, § 6.34, at 159–60; LENCSIS, *supra* note 9, at 58–63.

jurisdiction, either propose a settlement or enter a binding decision. While such decisions may always be challenged in a court of law, such non-judicial processes help to settle the majority of disputes without court intervention and thus lowers the overall administrative costs of workers' compensation systems as compared to the tort system.²⁶

F. Immunity of Employers from Damages Suits

The flipside of no-fault liability of workers' compensation carriers for the consequences of work-related injuries and diseases is employer immunity. If, after obtaining workers' compensation benefits, the worker could bring private claims against her employer, the worker would receive double compensation. Conversely, employers would have not only to fund the system of workers' compensation but also to shoulder the costs of individual damages claims brought against them. The costs of this double recovery would eventually have to come out of the pockets of the employees themselves who would have to accept lower wages. For these reasons, workers' compensation systems generally bar individual actions against employers, making the claim against the workers' compensation carrier the sole remedy.

There are several ways for victims to escape the limitations of workers' compensation benefits and to recover full tort damages. One is to rely on the exceptions to the principle of employer immunity that many legal systems allow in cases of aggravated fault.²⁸ Another path that leads out of the immunity principle, which has been used extensively in the United States, is to sue third parties (other than the employer), which contributed to the injury or disease. The incentive to collect fully compensatory and additional punitive damages explains the surge in suits against manufacturers of industrial installations, equipment, tools, and raw materials, in cases involving workplace accidents and occupational diseases.²⁹

^{26.} See discussion infra Part IV.C.

^{27.} See ROTHSTEIN ET AL., supra note 8, § 6.23, at 85–86, § 6.35, at 166–72 (describing conditions for employer immunity in the United States); Code de la sécurité sociale [Social Security Code] Art. L451-1 (Fr.) (providing for employer immunity in France for damages for injuries and diseases as described therein); LAMBERT-FAIVRE & PORCHY-SIMON, supra note 8, ¶ 381 (describing conditions for employer immunity in France); KÖTZ & WAGNER, supra note 8, at 234–36. (describing conditions for employer immunity in Germany).

^{28.} ROTHSTEIN ET AL., *supra* note 8, § 6.23, at 85–6, § 6.36, at 174–76.

^{29.} Infra, Part VI C.

II. EMPLOYERS' LIABILITY: BASIC FEATURES

A. Liability in Contract and Tort

The basic elements of workers' compensation systems have been set out above. The alternative is a system of more or less pure employers' liability. In such a world, the employer is personally liable for the damage sustained by his employees, in the same way that he is liable to third parties. It is a matter of argument whether such liability would result in a contractual claim or in a claim in tort. Civil law systems will ground the action primarily or even exclusively in the law of contract, in the employment contract. In contrast, common law jurisdictions (like England) seem to base it on tort, albeit with strong contractual flavors.³¹

B. Four Features of Private Liability Systems

While the differences between a contract and a tort approach may be important in theory, they remain inconsequential in practice. Under both theories, liability for the consequences of workplace accidents and occupational diseases shares four common features of private claims for damages: First, the responsibility of the employer is based on *fault*, i.e. on a failure to take the requisite care in the organization of the business and of the work flow, the equipment of the workplace, and the training of workers. Second, where liability has been established, the defense of *contributory negligence* remains available to the defendant. Third, however, if the victim succeeds, she is entitled to *full compensation* of pecuniary and nonpecuniary losses. Damages are calculated in every single case and not awarded on the basis of statutory schedules and grids. Fourth, disputes are resolved by the *civil courts*, without prior involvement of ADR-like dispute resolution boards.

C. The Trinity of Defenses

These four features of employers' liability each pose rich and highly complex sets of sub-issues that are absent from workers' compensation

^{30.} SIEWERT D. LINDENBERGH, ARBEIDSONGEVALLEN EN BEROEPSZIEKTEN, 10, ¶ 7.2 (2nd ed. 2009) (Ger.) (citing Art. 7:658 Nieuw Burgerlijk Wetboek [NBW] [Civil Code] (Ger.).; Cour de Cassation [Cass.] (supreme court for judicial matters) soc., Oct. 11, 1994, D. [Recueil Dalloz] 1995, 440 (Fr.); Cour de cassation [Cass.] [supreme court for judicial matters] soc., Oct. 28, 1997, D. 1998, 219 (Fr.); JEAN PÉLISSIER, ALAIN SUPIOT & ANTOINE JEAMMAUD, DROIT DU TRAVAIL [LABOR LAW], ¶986 (22nd ed. 2004).

^{31.} See Wilsons and Clyde Coal Co., Ltd. v. English, [1938] A.C. 57 (H.L.) 78 (U.K.); Harris v. Brights Asphalt Contractors, [1953] 1 Q.B. 617 at 626; W. V. HORTON ROGERS, WINFIELD & JOLOWICZ ON TORT, 413–15, 424–27 (18th ed. 2010).

^{32.} *Cf.* ROGERS, *supra* note 31, at 424–38.

systems. The requirement of establishing fault on the part of the employer requires courts to set the requisite standard of care, which may be a difficult determination to make. Another complex task is to determine the scope of liability in cases where the harm was caused by the negligence of a fellow employee, 33 and when the employee was guilty of contributory negligence.³⁴ The well-established tort doctrines of vicarious liability and contributory fault provided anchors for the holy—or, rather, "unholy" trinity of defenses available to the employer under late-nineteenth-century law: the fellow-servant rule, assumption of risk, and contributory negligence.³⁵ The scope of vicarious liability of employers for harm caused by one employee to another had been seriously curtailed by the so-called "doctrine of common employment" or the "fellow-servant rule," which exonerated the employer from liability for workplace accidents caused by another member of the workforce, provided that the fellow employee was not charged with organizing and ensuring the safety of the workplace. Even where the victim succeeded in establishing a prima facie case against the employer, she was still subject to the defenses of assumption of risk and contributory negligence. Thus, the injured employee lost her claim for compensation if the accident in question involved negligence on her own part, but also where it appeared to be a natural consequence of the general risk caused by the plant or operation in question.

Interestingly, the two European jurisdictions that revived employers' liability and abandoned workers' compensation were careful to leave the unholy trinity of defenses dormant in their graves. In the modern law of employers' liability in England and the Netherlands, *respondeat superior* has trumped the "fellow-servant rule," assumption of risk has been abolished, and contributory fault has been limited to a narrow set of cases involving egregious behavior by the employee.

D. Full Compensation

If the claimant succeeds in establishing the elements of liability, she is entitled to full compensation of losses incurred, including damages for pain

^{33.} Id. at 374.

^{34.} Id. at 384.

^{35.} *Id.* at 363–88; Richard Epstein, *The Historical Origins and Economic Structure of Workers' Compensation Law*, 16 GA. L. REV. 775, 775–76 (1982) ("During the nineteenth century . . . negligence was regarded as the proper basis of liability, the requirements of the employee's prima facie case were not the principal issue. Instead the legal battle raged over the famous trinity of defenses: contributory negligence of the employee, assumption of risk and common employment."). The situation under the old law is nicely described in *New York Cent. R.R.Co. v. White*, 243 U.S. 188, at 198–201 (1917) (holding that New York state's workers' compensation act did not violate the Fourteenth Amendment).

^{36.} See infra Part IV.C.

and suffering and loss of amenities. Lost earnings will be replaced in full, with the size of the award depending exclusively on the decrease in earnings caused by the accident or disease. This calculation requires difficult projections about the earning prospects of the claimant in the impaired versus the hypothetically unimpaired state of the world. In legal systems that permit punitive damages, the victim of a tort may recover damages in excess of her loss, provided that the defendant is guilty of aggravated fault, i.e., acted recklessly or with an intention to harm others.

E. Dispute Resolution through Litigation

Disputes that cannot be resolved by the parties out of court are dealt with under the normal procedures of the civil justice system. While these may seem adequate or even superior to the services of special tribunals set up to dispose of claims brought in workers' compensation, they consume more resources, and they take much longer to dispose of a case.³⁷

F. No Insurance and Collectivization of Claims

Private systems of liability, regardless of whether they are based on contract or tort, are powerless to ensure the actual satisfaction of claims for damages. The victim bears the risk that, at the time of suit or judgment, the tortfeasor or other responsible party may no longer exist or may be insolvent. While the risk of insolvency could be captured by a statutory mandate to take out liability insurance, there is no general duty on firms to do so. Even if such a duty were introduced, it would be powerless to deal with situations where the employee switched from one employer to the next over the course of her worklife so that it is impossible to attribute the loss to one particular employer and his insurance carrier.

III. ECONOMIC ANALYSIS OF WORKERS' COMPENSATION

The choice between workers' compensation and employers' liability involves a whole range of complex policy issues. For the purpose of analyzing these issues, economic analysis offers by far the most elaborate and systematic framework. Surprisingly, however, workers' compensation has remained a rather barren spot within the landscape of economic analysis. While the topic was discussed in the early days of law-and-economics scholarship, 38 modern treatments are generally lacking. Given

^{37.} See infra Part IV.C.

^{38.} Richard A. Posner, A Theory of Negligence, 1 J. LEGAL STUD. 29, 44–46, 67–71 (1972); James R. Chelius, Liability for Industrial Accidents: A Comparison of Negligence and Strict Liability Systems, 5 J. LEGAL. STUD. 293, 298–307 (1976); see also Price V. Fishback, Liability Rules and Accident Prevention in the Workplace: Empirical Evidence from the Early Twentieth Century, 16 J.

the preference of economic theory for market solutions and private ordering, it seems that workers' compensation systems, which substitute the individual action against the employer with a claim against a private or public insurance carrier and even dispense with the defense of comparative negligence are unattractive. However, a closer analysis reveals that things are not as simple and that workers' compensation systems may indeed fare much better than anticipated.

A. Efficient Deterrence

1. Efficient Deterrence from a Torts Perspective

Those jurisdictions that have replaced workers' compensation and revivified employers' liability have universally adopted the fault principle. It seems that this choice was made intuitively, without much reasoning about the trade-offs involved. Lawmakers may have thought that fault-based employers' liability was something of a natural supplement to the protection granted by social insurance programs which, of course, do not require the victim to establish wrongdoing on the part of someone.

In fact, the choice between liability rules is not that easy. Traditional economic analysis suggests that the difference between fault-based and strict liability does not affect incentives to take care.³⁹ Under the assumptions that courts set the standard of care at the efficient level, injurers (employers) will be led to take care because doing so avoids liability altogether. Confronted with the choice either to take efficient precautions and bear the costs of these precautions or to take less than efficient precautions and bear the costs of diminished precautions plus the costs of accidents caused by his actions, the rational employer will take efficient precautions. Under a rule of strict liability, the employer bears the costs of any accidents caused in the course of employment without being able to exonerate himself by establishing his diligence. However, he still has an incentive to take care to the extent that the costs of precautions are lower than the costs of accidents avoided by taking such precautions. In other words, under strict liability the potential injurer has an incentive to adhere to the same precautionary standard he would be held to under a negligence regime. Therefore, both principles of attributing liability theoretically work equally well with regard to care levels.

A second concern of liability rules is to generate efficient activity

LEGAL STUD. 305 (1987).

^{39.} See STEVEN SHAVELL, ECONOMIC ANALYSIS OF ACCIDENT LAW 5–32 (1987) (discussing basic theory of liability and deterrence); RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 226–27 (8th ed. 2011).

levels. The activity level denotes the amount or quantity of a potentially dangerous activity, given a particular liability rule. The goal is to make sure that potential injurers engage in dangerous activities only up to the point where the gain from another unit of the activity is equal to the loss in terms of additional accident costs, assuming that efficient care has been taken. In the case of a business entity, the price charged for its goods and services should reflect the full costs of production, including the costs of any harm caused in the course of production. 40 If the fault principle is applied, firms would be able to deny responsibility for any damage caused, so long as appropriate care had been taken. Since victims, not employers, would bear the costs of the residual harm that was caused in spite of precautions, the balance sheet of the firm would not reflect the full costs of production. Part of the risks associated with the products and services offered by the firm would be externalized to victims who sustained injuries as a consequence of diligent behavior. In turn, firms would not need to account for these costs in setting prices, thus causing prices for the goods and services supplied to be too low. As demand is inversely correlated with price, demand for such goods and services would be too high. In effect, the economy would produce more goods and services than it should in light of the total costs of production, including the damage caused to third parties. In order to avoid the misallocation of resources implicit in excessive demand, "the cost of the production should bear the blood of the workman."⁴¹ Thus, in returning those costs from the victim to the firm in order to generate efficient activity levels, a regime of strict employer liability seems to be preferable to its fault-based alternative.

2. Efficient Deterrence in Employment Relationships

a) Coasean Bargaining

The line of argument sketched above ignores the fact that workplace accidents and occupational diseases are different from ordinary tort cases, for the reason that victim and injurer are in a contractual relationship with one another. This feature is important, because in a setting where transactions costs, including the costs of information, are zero, the parties will invariably reach the efficient result through bargaining, regardless of the initial placement of liability. The attribution of costs associated with a particular liability rule, if efficient, will be replicated in the bargain of the parties or, if inefficient, will be pushed aside. In essence, this is the

^{40.} SHAVELL, *supra* note 39, at 48–51.

^{41.} W. PAGE KEETON ET AL., PROSSER AND KEETON ON TORTS 573 (5th ed. 1984) (footnote omitted).

reasoning that became known as the Coase theorem.⁴²

Applied to the employment contract, the question is how the employer and employee would allocate the risk of workplace accidents and occupational diseases if they made this issue the subject of their bargain. Take first the example of a system where employers are immune from liability. If both employer and employee are perfectly informed about the probability and severity of harm, the wage negotiated by the parties will include a premium that reflects the expected value of the harm.⁴³ Wage premiums that accurately reflect the level of expected harm are equivalent to damages payments due under a liability system. They increase the costs of production by the expected costs of harm and generate incentives to drive down overall costs by reducing expected harm. The employer may reduce expected harm in the two ways familiar from tort analysis: (1) by taking precautions; or (2) by reducing activity levels, i.e., by hiring fewer workers. Where the wage plus the premium necessary to induce employees to accept a given level of risk is higher than the value generated by the work of this particular employee, the employer will abstain from hiring. This, in fact, is precisely what the efficient employer should do. Thus, under the assumption that the parties to the employment relationship are perfectly informed about the risk of harm involved in the job at issue, the employer faces the right incentives to take care and to adjust the activity level so that optimal deterrence obtains.

The presence of a liability scheme alters the dynamics of the parties' negotiations as the employee discounts the expected costs imposed by workplace accidents and occupational diseases by an amount equal to the expected damages payments due to him in case of injury. If the risk of injury is held constant and all else is equal, the presence of liability will reduce the wage premium paid under the respective employment contract, as the demand for labor depends on the total costs of employment and not only on the cash wages received by the employee. 44 Obviously, the effect that the expected costs of compensating workers reduce aggregate salary (wage plus premium) is independent from the nature of the liability regime in question, whether it is workers' compensation or employers' liability.

^{42.} Ronald H. Coase, The Problem of Social Cost, 3 J.L. & ECON. 1 (1960).

^{43.} MICHAEL J. MOORE & W. KIP VISCUSI, COMPENSATION MECHANISMS FOR JOB RISKS: WAGES, WORKERS' COMPENSATION, AND PRODUCT LIABILITY 13–20 (1990) (describing wage-risk tradeoffs, where research "indicate[s] that market mechanisms play a fundamental role in determining both the allocation of workers to jobs and their compensation in those jobs").

^{44.} See MOORE & VISCUSI, supra note 43, at 22–23 (describing wage-benefit tradeoffs in the role of workers' compensation); empirical evidence of the passing on of the costs of liability to nonunion workers in the mining industry is presented in Price V. Fishback & Shawn Everett Kantor, Did Workers Pay for the Passage of Workers' Compensation Laws?, 110 Q. J. ECON. 713, 714 (1995).

The reduction in the wage premium will certainly be more pronounced where liability is strict and generous damages are offered, and less pronounced where liability is contingent on a showing of fault and damages are under-compensatory. In addition, the costs involved in the administration of a compensation system will depress wage premiums, too. More efficient systems of liability will, therefore, lead to higher damages levels or to higher wages than less efficient ones. All that can be said from this perspective is that employers and employees would prefer more cost-efficient liability systems to less cost-efficient ones.

In conclusion, the liability rule does not seem to matter at all. Absent liability, the higher the risk of injury caused by a given job, the higher the wage premium will be that the employee is able to negotiate, and vice versa. Firms will always internalize the full costs of accidents and diseases, either in the form of wage premiums to be paid to all members of the workforce ex ante, or in the form of damages payments paid to those actually injured ex post or in any combination of both. From this perspective, a system of no liability generates the same incentives to take care and to adjust activity levels as a system of fault-based or strict liability employers' liability would.

b) Bargaining in the Real World

Note, however, that this conclusion only holds where transaction costs are negligible. In the real world, such low- or zero-cost situations are rare. Major sources of transaction costs are the costs of gathering, processing, and analyzing information that is relevant to the transaction at stake. Where at least one of the parties lacks relevant information, bargaining may not lead to efficient outcomes. The efficient allocation of the costs of harm caused by workplace accidents and occupational diseases by means of contract turns on the ability of the employee to perceive the risk associated with a particular job, to translate it into a number equal to the costs of expected harm, and to calculate a wage premium that reflects the costs of expected harm due to occur within the period of time for which the wage is paid, e.g. a week or a month. While substantial empirical literature shows that wage premiums compensating workers for occupational hazards are in fact paid, ⁴⁷ the existence of wage premiums as such does not prove

^{45.} MOORE & VISCUSI, supra note 43, at 53-68.

^{46.} DAVID DE MEZA, Coase Theorem, in 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 270, 275-278 (Peter Newman ed., 1998).

^{47.} For a summary of this literature, see Alison Morantz, *Opting Out of Workers' Compensation in Texas, a Survey of Large, Multistate Nonsubscribers, in* REGULATION VERSUS LITIGATION: PERSPECTIVES FROM ECONOMICS AND LAW 197, 208–09 (Daniel P. Kessler ed., 2011),

that they adequately reflect the risks of harm associated with various jobs. This fact is acknowledged by the empirical literature itself, which concedes that the results obtained from studies "indicate that complete market failure does not necessarily exist," but they "do not prove that risk is allocated efficiently by the labor market." The extent of market failure due to misinformation about risk and other defects in the bargaining process remains unknown.

For the purposes of the present analysis it is unnecessary to explore further the potential of employer–employee bargaining to incentivize the employer to take care and to adjust the activity level efficiently. That question remains open to empirical analysis on the degree to which workers are well-informed and successfully able to bargain for wage premiums. Rather, the crucial question to ask is whether a system combining a rule of employer immunity with wage premiums produces more efficient incentives than does a rule of strict liability.

As a matter of policy, the first option of strict liability is preferable.⁵⁰ The employer is better positioned than the employee to gather information about occupational hazards and to control them by taking precautions and adjusting activity levels. While it is certainly true that employees might be better informed with regard to the risk posed by fellow employees whose behavior they may closely observe on a day-to-day basis,⁵¹ the employer enjoys informational advantages in all other areas. The employer controls the use of machinery and other equipment, of raw materials and energy, as well as the time, duration, and environmental conditions of dangerous activities. Given their superior information about risks posed by the factors and circumstances of production, employers can rationally weigh the costs and benefits of one course of action against another. To draw on the example of asbestos, it is (or was) the employer who decided to use this material and who controlled the circumstances of its use—e.g., the duration of exposure, the prompt removal of dust through ventilation, the provision of protective clothes and breathing aids, and the supply of showers. Each of these factors influenced the likelihood that dealing with asbestos on the job would result in the contraction of a serious disease such as asbestosis and mesothelioma.

In contrast, workers will tend to have less knowledge about the occupational hazards to which they are exposed, since they have no systematic overview of the accidents and diseases caused by certain

^{48.} MOORE & VISCUSI, supra note 43, at 15.

^{49.} Id.

^{50.} MOORE & VISCUSI, supra note 43, at 121-35.

^{51.} Posner, *supra* note 38, at 44-45.

activities. Rather, their informational resources are usually restricted to anecdotal evidence gathered on the particular job. While this may be valuable, it may not be representative of the larger picture. And even where workers have the relevant information about the risks of injury and disease to which they are exposed, they lack the means for adequate and proportionate responses. During their employment contract, workers' bargaining leverage is only based on the threat of "quitting." While empirical studies have shown that the decision to guit or stay is in fact influenced by concerns of workplace safety, 52 it has never been suggested that these decisions generate optimal incentives to take care on the part of employers. Indeed, such a claim could not be made, since most workers will lack relevant information and because the decision to quit or stay is often influenced by a range of factors other than workplace risk, such as the supply of labor, as expressed in the unemployment rate, and the mobility of the worker, which in turn is influenced by the housing market as well as the personal situation of the worker and her family at their current location.

The analysis so far suggests that employers will be in a better position to gather information about and control occupational risks than workers. However, a bilateral comparison that focuses only on the two parties involved in the employment relationship is misplaced. In reality, workers may be supported by trade unions, while employers will act under the guidance of liability insurers. The empirical literature on labor markets suggests that unionized workers receive higher wages and higher workers' compensation benefits, but it remains ambivalent whether the presence of unions increases workplace safety. Studies on safety standards in the mining industry seem to support the conclusion that unions have a positive effect on workplace safety in that their presence drives down accident rates. As

At the other end of the spectrum, the employer does not operate in isolation either. There is, of course, a layer of regulatory safety standards set by administrative agencies or other regulators, but these may be disregarded in the present context, as regulatory standards affect the behavior of employers and employees alike. While regulation of workplace safety is important, none of the jurisdictions surveyed relies exclusively on regulation. Rather, they operate dual systems of safety regulation and financial incentives generated by liability rules like those underlying workers' compensation schemes as well as employers' liability regimes.

^{52.} MOORE & VISCUSI, supra note 43, at 98-110.

^{53.} Id. at 111-20.

^{54.} Alison Morantz, *Coal Mine Safety: Do Unions Make a Difference*?, INDUS. & LAB. REL. REV. (forthcoming 2012) (manuscript at 4-5) (*available at* http://ssrn.com/abstract=1846700).

Beyond employees and regulators, liability insurers also supervise and control the employers they insure. Unlike first-party health and disability insurers, which are powerless to control occupational hazards, liability insurers have the means and—thanks to competition in the insurance market—the incentive to risk-rate employers adequately.⁵⁵ Commercial liability insurers estimate the risk associated with the potential insured before underwriting, and they adjust premiums ex post through experience rating and retrospective rating for premiums to more finely reflect the insured's actual risk. The same strategies of assessing and rating individual risk are employed by well-run workers' compensation carriers.⁵⁶ To the extent that insurance or workers' compensation carriers succeed in setting premiums that adequately reflect risk, the incentives to take care and adjust activity levels generated by a rule of strict liability remain intact. With regard to emerging risks, which are yet unknown, the presence of liability insurers may even improve incentives over the ones that would exist otherwise. By insuring large numbers of firms, industrial liability insurers not only pool the risks associated with the operation of these firms, but they also pool information with regard to the risks involved. Such pooling of information is particularly valuable with regard to new risks which have not yet been appreciated by the scientific and business communities.

In summary, employers and their liability insurers are in a better position to search and gather information on occupational hazards and to act upon such information than workers, even if the latter are organized in, and assisted by, trade unions. This is not to say that workers and unions are never able to learn about occupational hazards and act accordingly, or that employers and their insurers know everything and take appropriate safety measures. Rather, the foregoing analysis merely suggests that employers and liability insurers (and, for that matter, workers' compensation carriers) are in a *relatively better* position to act in the interest of safety. Even under optimistic assumptions, it is difficult to imagine how the wage premium implicit in an employment contract could fluctuate over time so as to fairly accurately track and reflect changes in workplace safety that occur over the course of the employment relationship. In effect, wages would have to fluctuate much like premiums under liability insurance contracts in order to achieve the same incentives to control risk on the part of the employer. It is reasonable to assume that such dynamic matching of wages and job risks is

^{55.} Gerhard Wagner, *Tort Law and Liability Insurance, in* TORT LAW AND ECONOMICS 377, 386-87 (Michael G. Faure ed., 2010).

^{56.} *Cf.* LENCSIS, *supra* note 9, at 98-104; MOORE & VISCUSI, *supra* note 43, at 25; Hein Kötz & Hans-Bernd Schäfer, *Schadensverhütung durch ökonomische Anreize: Eine empirische Untersuchung*, 189 ARCHIV FÜR DIE CIVILISTISCHE PRAXIS [ACP] 501 (1989) (describing the German System).

not achieved in practice.

c) Empirical Evidence for the Efficiency of Workers' Compensation Systems

The conclusion that workers' compensation systems do a better job than the opposite rule of no liability finds support in empirical studies comparing the accident rates under workers' compensation with those achieved under the systems of employers' liability, which workers' compensation replaced.⁵⁷ With the introduction of workers' compensation schemes, the number of claims for minor injuries tended to rise, while the death-rate and the number of serious injuries declined significantly.⁵⁸ The obvious explanation is that workers' compensation, by introducing strict liability and awarding benefits independent of actual loss, increased moral hazard, leading to more frequent claims for minor injuries.⁵⁹ Deaths and serious injuries are much less likely to fall prey to moral hazard and are therefore a much more reliable indicator of the performance of workers' compensation systems. And it is precisely in this area of serious injuries that these schemes shine, evidencing their beneficial effects on workplace safety.

3. Efficient Employee Behavior

a) Irrelevance of Contributory Fault

Current systems of tort liability routinely provide for the defenses of contributory or comparative negligence within regimes of strict liability. Strikingly, workers' compensation systems diverge from this practice and follow the opposite rule of disallowing the defense of contributory fault, save for narrow exceptions. The latter is understood here to encompass both the doctrine of contributory negligence in a technical sense (which bars the claim against the injurer upon the establishment of victim negligence), and the doctrine of comparative negligence (which reduces the

^{57.} For a summary of these studies, see DEWEES, DUFF & TREBILCOCK, *supra* note 1, at 381-82. Given that schemes providing for broad and generous protection of workers from occupational risk generate both more moral hazard and stronger incentives to take care, and that the only observable data for researchers are the number and value of claims, it is very difficult to isolate the effects of workers' compensation schemes. *Cf.* Morantz, *supra* note 47 at 209-10. And even where it can be done, the question remains: compared to what? Systems of employers' liability vary widely, not only with regard to the scope of liability and defences such as common employment and contributory negligence, but also in the area of damages levels and enforcement. In Texas, for example, where employers may opt out of workers' compensation, practically all of the firms that used this option resorted to mandatory arbitration for resolution of disputes. *Cf.* Morantz, *supra* note 47, at 223, 230.

^{58.} MOORE & VISCUSI, supra note 43, at 121-35.

^{59.} Gary T. Schwartz, Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?, 42 U.C.L.A. L. REV. 377, 392-93 (1994).

damages claim in proportion to the degree and weight of the victim's contribution). In contrast, workers' compensation carriers are liable for the financial consequences of the harm suffered by the victim regardless of fault on the part of the employer, and regardless of negligence of the employee-victim. The claim only fails if the victim inflicted the injury upon herself intentionally. While some jurisdictions provide for a reduction of the damages claims where the victim also acted recklessly or inexcusably, generally courts seem very reluctant to apply this rule to reject or reduce damages claims of employees. ⁶²

b) The Importance of Employee Behavior for Efficient Deterrence

From the perspective of deterrence, the defense of contributory negligence is essential for regimes of strict liability to yield efficient outcomes.⁶³ General economic theory maintains that a regime of strict liability lacking the defense of contributory fault leads to undesirable outcomes, i.e., too many accidents, within settings of bilateral causation. The case of occupational hazards clearly involves a situation where both the potential injurer and the potential victim may affect the probability and severity of accidents through their respective behavior. While the employer chooses the equipment and raw materials, as well as the organization of the workplace and of the production process, the day-to-day operations inside the plant engage the employee. Without the diligent cooperation of workers, safe working conditions are impossible to achieve. Although the employee typically operates within the sphere of the employer, constant supervision and control are impossible. Therefore, the law needs to incentivize both parties, employer and employee, to take precautions in order to achieve the goal of optimal workplace safety. Against this background, it is all the more striking that workers' compensation systems hold employers strictly liable without holding employees accountable for contributory fault. It may seem that employees in their role as potential victims lack any incentive to take care, and will therefore fail to take efficient precautions to avoid the injury in the first place.

^{60.} Cf. DOBBS, supra note 15, at 494-506.

^{61.} See, e.g., ROTHSTEIN, CRAVER, SCHROEDER & SHOBEN, supra note 8, \$ 6.11 (regarding the US policy on intentional workplace injuries); KÖTZ & WAGNER, supra note 8, at ¶ 586 (regarding the German policy on intentional workplace injuries); LAMBERT-FAIVRE & PORCHY-SIMON, supra note 8, at ¶ 387 (regarding the French policy on workplace injuries intentionally caused by the victim).

^{62.} See, e.g., Cour de Cassation [Cass.] [supreme court for judicial matters] 2e civ., Jan. 27, 2004, Bull. civ. II, No. 25; Cass. ass. plén. [supreme court for judicial matters, en banc], Jun 24, 2005, JCPS (Jurisclasseur Périodique Social) 2005, 1056; LAMBERT-FAIVRE & PORCHY-SIMON, supra note 8, at ¶ 387.

^{63.} SHAVELL, supra note 39, at 9-21.

c) Justifying the Disregard for Contributory Negligence

There are several explanations that mitigate the tension between economic principles and the set-up of workers' compensation. First, incentives to avoid loss may be less important where injury or other harm to one's own body is concerned.⁶⁴ Most workers have an intrinsic incentive to avoid losing an arm, a leg or an eye, even if they are promised sizable financial compensation. This is not to deny that full employer liability without regard to contributory fault does weaken the incentives on the part of workers to take care. Evidence from no-fault schemes in the area of traffic accidents suggests that there is a detrimental effect on potential victims' incentives to take care.⁶⁵ The point is only that this effect may be smaller than it would be with other kinds of harm such as property damage or financial losses.

Second, it is misleading to think of the payments available under workers' compensation as the "fair price" paid in exchange for inflicting the harm in question. The bargain implicit in workers' compensation schemes involves a broad liability rule and a rather parsimonious quantum rule. The worker who suffered harm never recovers in full; she receives compensation of her financial losses only. In addition, the award of damages is not assessed on a case-by-case basis but drawn from a schedule of disabilities and associated benefits, regardless of the actual amount of lost earnings incurred by the individual victim. For this reason, the liability rule implicit in workers' compensation has been described as one of "shared strict liability"; ⁶⁶ a better characterization would be "partial strict liability." Far from providing full compensation to the victim, workers' compensation schemes provide limited compensation in the form of pre-fixed benefits and thus leave a significant part of the incentives to protect oneself from bodily harm and disease intact. ⁶⁷

In spite of these optimistic findings, there is room for improvement. As explained below, there is no systematic link between the level of compensation and the associated degree of undercompensation, on one hand, and the preservation of the worker's incentives to take care, on the other. If anything, current workers' compensation systems generate a backwards incentive structure. As the system is set up today, victims of minor injuries stand to receive damages in excess of the harm caused, while

^{64.} MOORE & VISCUSI, supra note 43, at 29.

^{65.} DEWEES, DUFF & TREBILCOCK, *supra* note 1, at 25-26, 415-16 (summarizing empirical studies).

^{66.} Chelius, *supra* note 38, at 300-01.

^{67.} Epstein, supra note 35, at 800-01.

^{68.} See infra Part VI.B.

those who suffer serious harm are being undercompensated. However, the prospect of receiving compensation will more severely impact the victim's incentives to take care in cases of minor injuries than in cases involving major ones. In addition, minor injuries are particularly vulnerable to ex post moral hazard in the form of false claims and fake injuries. Therefore, limited liability in the form of undercompensation is required most in cases of minor injuries, not major ones, but it is precisely here that the system fails. A decrease in benefits for minor injuries would mitigate these problems, and therefore benefit the overall viability of the system.⁶⁹

With regard to serious injuries, it is essential to focus on the basic justification for the system's disregard for contributory fault. It rests on the recognition that, since mistakes and lapses of attention are inevitable in day-to-day life, allowing the contributory negligence defense, or its comparative negligence companion, would lead to decreased damages claims in routine cases. 70 This concern is particularly acute in the area of occupational risks: since workers spend a large part of their lives at work, it is a statistical certainty that even the most diligent worker will make mistakes and have momentary lapses of concentration once in a while. Furthermore, the worker is typically not in a position to take durable precautions that minimize the risk of lapses and mistakes as it is the employer who controls the organization, equipment, and staffing of the workplace.⁷¹ If these considerations form the basis for excluding the contributory negligence defense, then it would make sense to limit this exclusion to cases of simple negligence, i.e., a lapse or mistake that, in itself, could and should have been avoided but that belongs to a class of lapses and mistakes that will inevitably occur over the course of a worklife. Conversely, the defense of comparative negligence should be available, and damages claims of victims be reduced, where the behavior cannot be excused as an unavoidable lapse of concentration but rather involves conscious disregard of safety rules and the standards of reasonable

^{69.} For details, see infra Part VI.B.

^{70.} Caswell v. Powell Duffryn Associated Collieries Ltd., [1940] A.C. 152 (H.L) 178-79 (Lord Wright) (appeal from Eng.): "What is all-important is to adapt the standard of what is negligence to the facts, and to give due regard to the actual conditions under which men work in a factory or mine The policy of the statutory protection would be nullified if a workman were held debarred from recovering because he was guilty of some carelessness or inattention to his own safety, which though trivial in itself threw him into the danger consequent on the breach by his employer of the statutory duty."); see also Staveley Iron & Chem. Co. Ltd. v Jones, [1956] A.C. 627 (H.L) 648 (appeal taken from Eng.).

^{71.} As to the distinction between durable and nondurable precautions and the risks of inattention, thoughtlessness and forgetfulness that disproportionately affect the latter, see Mark F. Grady, *Why are People Negligent? Technology, Nondurable Precautions, and the Medical Malpractice Explosion*, 82 Nw. U.L. Rev. 293, 302-10 (1988).

behavior. The crucial question is whether the worker made a conscious decision to engage in unreasonable behavior or whether the accident was caused by an unconscious lapse of concentration. The Georgia Supreme Court succinctly described the necessary elements in holding that "willful misconduct includes all conscious or intentional violations of definite law or rules of conduct, as distinguished from inadvertent, unconscious, or involuntary violations."⁷²

While it seems that no jurisdiction running a workers' compensation system openly embraces the distinction between unavoidable lapses of concentration and conscious disregard for safety, they differ as to their resistance to such an approach. Where the claim of the worker may only be denied upon proof of intentional infliction of harm, it remains difficult to interpret this exception in ways compatible with the proposition made here. Workers' compensation systems which allow for the rejection of claims where it is established that the worker acted in conscious disregard of safety rules and safety instructions, are much more amenable to a functional reinterpretation of that concept in light of the distinction between statistically unavoidable lapses of attention and conscious disregard of safety requirements. The same is true for systems like the French one, which expand the exception to cases of inexcusable negligence and allow for a mere reduction of the workers' claims. To the present day, however, the French courts are unwilling to apply the clause vigorously, 73 as would preserve the incentives of workers to take care and to avoid harm.

B. Efficient Risk Bearing

1. Wage Premiums and Strict Liability Compared

Regimes of no liability and strict liability differ from one another not only with regard to efficient deterrence, but also in how they assign the residual risk of harm, i.e., the risk that remains even after efficient precautions have been taken. Strict liability functions like an insurance plan offered by an employer to its workers. Whenever the worker suffers losses as a consequence of workplace accidents or occupational diseases, the employer is liable to compensate her. The risk of accidents and disease, at least as to their financial consequences, is borne by the employer.

Under a rule of no liability the employee bears the risk of workplace accidents and occupational diseases. Whenever such a risk materializes and

^{72.} Roy v. Norman, 404 S.E.2d 117, 118 (Ga. 1991) (emphasis omitted). Regrettably, the court made this definition part of a four-prong test rather than making it conclusive. *See id.*

^{73.} See supra note 62.

results in a serious injury or disease, the worker receives no redress from her employer, because she has already been compensated for her loss in the form of wage premiums collected through the months and years preceding the accident or illness.

The decision between the two regimes of no liability and strict liability seems to be straightforward. It is reasonable to assume that workers will generally be risk averse with regard to the potentially dire consequences of accidents and diseases. Therefore, they would prefer to be insured against the risk of such harm. This is precisely what a system of strict liability provides for; it requires employers to insure their employees against personal injury. It does not matter that employers may be risk averse too, as they in turn can shift the risk of liability to a liability insurer in exchange for a premium.

The conclusion that strict liability is preferable on grounds of risk allocation is still premature, however. First, it ignores the fact that the worker need not insure the risk of harm with her employer; instead, she might buy coverage for the costs of health care and for income replacement on the insurance market. At the time when workers' compensation schemes were introduced in the late-nineteenth and early-twentieth centuries, most workers were unable to buy first-party insurance to protect themselves against accidents and diseases for which the employer could not be held liable. 75 At that time, the introduction of workers' compensation clearly contributed to efficient risk bearing. Today, this situation has changed, as health insurance and disability insurance are well-established lines of the insurance industry and readily available for (almost) everyone who demands them. Within the wage premium model, workers will negotiate a higher wage for accepting increased risks of injury or disease and then turn around and use this premium to cover the risk of such contingencies by taking out first-party health and disability insurance. Thus, from the perspective of the risk-averse worker, the choice is not really between insurance or no insurance, but between insurance on account of the employer and bundled together with the contract for employment or market insurance bought on the market and paid for with the help of wage premiums due under the employment contract.⁷⁶

A second reason why strict liability need not be superior to no liability in terms of risk allocation is that employers might be risk-averse. To the extent that this is true, a rule of no liability is superior because it lets harms

^{74.} SHAVELL, supra note 39, at 189.

^{75.} Price V. Fishback & Shawn Everett Kantor, *Precautionary Savings, Insurance, and the Origins of Workers' Compensation*, 104 J. POL. ECON. 419 (1996).

^{76.} See infra Part IV.A2.

lie where they fall and thus preserves risk spreading, while strict liability leads to a pooling of risks in the lap of the respective employer. But again, this conclusion ignores the availability of insurance, this time in the form of liability insurance. Risk-averse employers may easily cover the risk of loss in the insurance market, while risk-neutral employers will choose to self-insure. In this regard, workers' compensation does not make a difference since it works much like liability insurance. In fact, most U.S. jurisdictions operate workers' compensation systems within a market setting: the insurance industry covers the liabilities of employers under workers' compensation schemes.⁷⁷

As a consequence, the real options are strict employer liability plus liability insurance or workers' compensation, on the one hand, and employer immunity plus wage premiums negotiated by workers, on the other. More precisely, the search for the optimal liability system for workplace accidents and occupational diseases reduces to a binary choice between two systems: One contains the elements of (1) strict liability, (2) liability insurance, and (3) no wage premiums. In the alternative system, (1) the employer faces no liability, but (2) pays wage premiums reflecting the risk of harm, which (3) the employee then applies to the premiums due under health and disability insurance policies bought on the market. In today's economy, which includes well-developed insurance markets for both first-party health and disability insurance and third-party liability insurance, the policy of efficient risk allocation seems to yield inconclusive results. As both parties can insure the risk in question, a comparison of the risk attitudes of the parties concerned does not lead to a definitive answer.

This does not mean the choice between strict liability and no liability should disregard efficient risk spreading altogether; rather, the analysis must focus on choosing, or at least facilitating the use of, the most efficient insurance mechanism. In this regard, and with a view to occupational hazards, a rule of strict liability is preferable because it better combines the objectives of efficient deterrence and efficient insurance. As explained above, the denial of employers' liability would distort the employers' incentives to take care and thus undermine workplace safety. Workers and their first-party insurers cannot effectively control and reduce the ex ante risks of workplace injury. By contrast, under strict liability, employers and their liability insurers would do a better job of providing workplace safety than workers and their health and disability insurers could. For the same reasons, liability insurance for employers would be more efficient and

^{77.} See supra Part II.B notes 12-15.

^{78.} See supra Part IV.A.2b), c).

available at lower prices than first-party insurance for workers.

2. Fault-Based Liability vs. Strict Liability

The goal of efficient risk bearing also informs the choice between strict liability and liability for fault. With regard to efficient deterrence, it has been argued that strict liability is more desirable for its capacity to facilitate allocative efficiency in the market: Strict liability makes the employer internalize the full costs of production, which leads to truthful prices.⁷⁹ Consumer demand responds to these prices, causing employers to produce only the efficient amount of a given good or service. From the perspective of efficient allocation of risk within a world of highly developed insurance markets, liability regimes that depend on fault suffer from their failure to clearly assign the risk of harm. While the principles of no liability and strict liability arrive at clear and wholesale—if opposing attributions of risk, regimes of fault-based liability are more ambiguous. If the employer takes the precautions necessary to comply with the standard of care, the employee bears the remaining risk of harm, while, if the employer fails to take the necessary precaution, the employer bears the all risk himself. In allowing for different outcomes that assign the risk in opposing ways, fault-based liability systems typically create a demand for insurance on *both* ends of the relationship. The employer will cover the risk imposed on him through liability insurance, and the employee will shift the remaining risk to health and disability insurers. The administrative costs of a bilateral—and, therefore, duplicative—system of insurance will be higher than the costs of an alternative system which creates a need only for one party to seek out insurance.

The argument above may seem to be overblown, since third-party liability insurance and first-party accident insurance exist together and overlap in large areas anyway. Even though there is some variance in degree among jurisdictions, most people are in fact insured against the contingencies of injury and disease through health and disability insurers. At the same time, most firms have covered the risk of being held liable through third-party liability insurance. The lines of first-party and third-party insurance exist alongside each other everywhere, so the perceived need to choose between one method of risk-pooling or the other is unrealistic. By making occupational hazards the sole domain of liability insurance or, equivalently, workers' compensation, there may not seem to be much to gain in terms of administrative cost savings. But this conclusion ignores the fact that each area of overlap between liability and first-party

insurance creates the need for estimating and allocating the cost burden associated with the harm in question to one side or the other. At the intersection of fault-based employers' liability and comprehensive health and disability insurance, the costs of health insurance will depend in part on the scope of employers' liability, which in turn will be a function of the way in which courts operate a fault-based liability system. The simpler way to coordinate the two systems would be to allocate the full costs of workplace accidents and occupational hazards to the employer and to allow health and disability insurers to ignore these costs altogether.

In conclusion, the objective of efficient risk allocation does strongly favor one liability regime over another in settings characterized by the omnipresence of first-party and third-party insurance schemes for both potential injurers and victims alike. Even so, the total administrative costs of insurance will tend to be lower in an environment including strict liability of employers for harm caused by occupational hazards than in an alternative world of fault-based employers' liability.

C. Efficient Administration of Claims and ex post Moral Hazard

1. The Advantage of Workers' Compensation Systems

Assuming that a system of strict employers' liability may be justifiable and even desirable, the next question concerns the mode of enforcement. In theory, there are many answers to this question, but in reality there are only two practical solutions. One solution is the civil justice system that is already in place in every jurisdiction and charged with resolving disputes over damages claims generally. The alternative is to devise a separate set of institutions specifically charged with compensating victims of occupational hazards and processing their claims, avoiding the involvement of the courts of general jurisdiction. The two alternatives reflect the choice between systems of employers' liability and systems of workers' compensation. The civil justice system is the natural choice in search for an institution to resolve disputes that involve civil claims for damages. Conversely, workers' compensation systems require some institutional grounding anyway, and these institutions are commonly charged not only with administering the insurance mechanism, but also with receiving petitions for compensation, with processing these petitions, and with hearing disputes where they arise. In such systems, recourse to courts of law is preserved as a means of last resort, and only after the remedies available within the administrative system have been exhausted.

The choice between the judicial system and administrative boards as mechanisms for dispute resolution is closely linked to the difference between tort damages available upon the proof of fault and the more abstract assessment of damages regardless of fault in workers' compensation systems. Establishing an employer's negligence and assessing damages in cases of personal injury are complex tasks that call for a procedural mechanism that matches up to it. Judicial proceedings in courts of law are the natural choice. In contrast, the liability of workers' compensation carriers is strict and independent of contributory negligence, rendering it unnecessary to set standards of care with regard to the behavior of employers and employees. The assessment of damages in workers' compensation does not require extensive fact-finding for the purpose of establishing, upon the balance of probabilities, the loss in earnings caused by the injury or disease in question. Rather, it suffices to establish the total or partial disability of the claimant in terms of an impairment of earning capacity and to then apply the rate of disability to the wages earned before the accident in question. 80 The task of assessing compensation is further alleviated by schedules or scales that translate certain categories of harm into percentage figures reflecting the degree of disability. The determinations necessary to assess damages within such a system are primarily of a medical nature and may thus be made by doctors, who in turn work together with the dispute resolution boards of workers' compensation institutions.

It is received wisdom that private liability systems, for all their benefits, are very costly to operate. In fact, this is the assumption on which the call for no-fault plans and their promise of low administrative costs has always been based. Workers' compensation is no exception; as Peter Lencsis writes: "the delay and expense associated with lawsuits, attorneys, and courts are among the evils that workers compensation is intended to remedy." The idea is that the sizable savings in administrative costs will make the system more efficient because those in need of compensation will receive a larger share of the payments made by injurers and their insurers. The proposition that the operation of no-fault systems involves relatively low administrative costs seems to hold up in practice. However, the

^{80.} See KÖTZ & WAGNER, supra note 8, at 232-33 (describing German law); LAMBERT-FAIVRE & PORCHY-SIMON, supra note 8, at ¶ 378 (describing French law); 2 LEX K. LARSON & ARTHUR LARSON, LARSON'S WORKERS' COMPENSATION, DESK EDITION, Vol. 2, § 80.02 (2010) (describing American law).

^{81.} See, e.g., KEETON & O'CONNELL, supra note 1, at 2, 69-71; STEPHEN D. SUGARMAN, DOING AWAY WITH PERSONAL INJURY LAW: NEW MECHANISMS FOR VICTIMS, CONSUMERS, AND BUSINESS, at xvii, 187-88 (1989); 1 THE AMERICAN LAW INSTITUTE, REPORTERS' STUDY, ENTERPRISE RESPONSIBILITY FOR PERSONAL INJURY 30 (1991) ("Third-party tort insurance is extremely expensive to administer. Individualized decisions must be made about each defendant's fault and each plaintiff's losses, using all the procedural paraphernalia of the civil justice system. As a result, most of the claims expenditure dollar pays for administration rather than ending up in the hands of the victim.").

^{82.} LENCSIS, supra note 9, at 58.

numbers vary widely from jurisdiction to jurisdiction. In the UK, the administrative costs of the industrial disablement benefit scheme are said to be no more than 2 percent of benefit expenditures; 83 the figure for general social security schemes is 5 percent; while average administrative costs of the tort system for personal injury claims routinely *exceed* damages, sometimes by a factor of 1.8. 84 In Germany, the administrative costs of the workers' compensation system are around 10.5 percent of total expenditures. 85 The latter includes not only the pure costs of processing claims and resolving disputes, which together amount to no more than 1 percent of expenditures, but also the overall operating costs of the respective agencies charged with occupational safety regulation and oversight. In the United States, the share of administrative costs of workers' compensation institutions is between 15 percent and 20 percent of total costs of claims, 86 while the respective number for the tort system is said to be between 50 percent and 55 percent of the total costs of claims. 87

2. Containing ex post Moral Hazard and Abuse within Workers' Compensation Systems

In spite of the variance within these numbers, they confirm the view that workers' compensation systems are much cheaper to operate than the combination of tort and liability insurance. This alone does not prove that the former outperform the latter, as it might be the case that the tort system generates more accurate results than workers' compensation systems. In particular, the tort system might be better able to contain ex post moral

^{83.} David Walters, *An International Comparison of Occupational Disease and Injury Compensation Schemes* 5 (2009), *available at* http://iiac.independent.gov.uk/pdf/reports/ InternationalComparisonsReport.pdf.

^{84.} LORD JUSTICE RUPERT JACKSON, REVIEW OF CIVIL LITIGATION COSTS: FINAL REPORT 16 para. 2.6 (2009) (regarding a sample of personal injury cases: "It can be seen that for every £1 which the liability insurers paid out in damages, they paid out £1.80 in claimant costs."); see also id. at ¶19. 4.4.

^{85.} GESCHÄFTS-UND RECHNUNGSERGEBNISSE DER GEWERBLICHEN BERUFSGENOSSENSCHAFTEN UND UNFALLVERSICHERUNGSTRÄGER DER ÖFFENTLICHEN HAND 2009 (Annual Report of the German Association of Accident Insurers, DGUV) 56, 61 (2009), available at http://www.dguv.de/inhalt/zahlen/documents/GuR Broschuere 2009.pdf.

^{86.} The most recent report of the National Academy of Social Insurance stipulates a benefits-to-total-costs-ratio of 0.73 for 2008, which means that for every dollar paid by employers, either as self-insurers or in the form of insurance premiums under workers' compensation, 73 cents went to injured workers in the form of benefits. In other words, administrative expenses, including the administrative costs and profits of insurance companies, amounted to 27 percent of total expenditures. See ISHITA SENGUPTA, VIRGINIA RENO & JOHN F. BURTON, NATIONAL ACADEMY OF SOCIAL INSURANCE, WORKERS' COMPENSATION: BENEFITS, COVERAGE, AND COSTS, 2008, at 32 (2010), available at http://www.nasi.org/sites/default/files/research/Workers_Comp_Report_2008.pdf.

^{87.} DEWEES, DUFF & TREBILCOCK, supra note 1, at 393-94.

hazard and risks of abuse. Ex ante moral hazard occurs when an agent who is protected against the adverse consequences of harm, and whose behavior cannot be monitored by the principal, takes fewer precautions against harm than she otherwise would. 88 One paradigmatic case is that victims who are protected against losses by a rule of strict liability reduce their own efforts to avoid the injury for which they will readily receive full compensation. The standard response of the legal system is in the form of the defenses of contributory or comparative negligence that allow courts to reject or reduce claims where the victim's behavior contributed to the harm complained of and thereby shift part of the losses to the victim. As has been explained above, this form of moral hazard may not be very significant within the context of occupational hazards where the workers' health and bodily integrity is at stake and where the amount of compensation falls short of actual losses. 89 In this context, ex post moral hazard, which occurs after the injury, at the stage of claiming damages or benefits, remains a concern and tends to be much more significant. 90 Where the liability of social insurance schemes is in question, ex post moral hazard occurs when applicants fake or exaggerate the severity of their injuries and diseases in order to be classified as (partly) disabled and thus obtain benefits that they otherwise would not have been eligible to receive.

Indeed, abuse and fraud seem to be a major risk associated with no-fault insurance schemes of any kind. Abuse is the main explanation why the Dutch system of public disability insurance proved unsustainable, ⁹¹ why the American public disability insurance is said to be on the verge of bankruptcy, ⁹² and why the even broader scheme of accident insurance established in New Zealand had to be reformed with the aim of restricting access and scaling down benefits time and again. ⁹³ With a view to compensation systems that focus on occupational risks, the Californian

^{88.} *See* Morantz, *supra* note 43, at 207) (describing ex ante moral hazard as "risk-bearing moral hazard").

^{89.} See supra, Part IV.A.3.

^{90.} Morantz, *supra* note 54, at 3-4. (labeling ex post moral hazard as "claims-reporting moral hazard").

^{91.} See infra Part V.B.

^{92.} Id.

^{93.} See, e.g., Richard Mahoney, New Zealand's Accident Compensation Scheme: A Reassessment, 40 Am. J. Comp. Law 159, 168 (1992); Richard S. Miller, The Future of New Zealand's Accident Compensation Scheme, 11 U. Haw. L. Rev. 1, 45-638 (1989); Richard S. Miller, An Analysis and Critique of the 1992 Changes to New Zealand's Accident Compensation Scheme, 52 Md. L. Rev. 1070 (1993); Schwartz, supra note 59, at 420-22; PATRICK ATIYAH, THE DAMAGES LOTTERY 183 (1997). But see Peter H. Schuck, Tort Reform, Kiwi Style, 27 YALE L. & POL'Y Rev. 187 (2008), for a more optimistic view of New Zealand's Accident Compensation Scheme. Information regarding the plan may be found at http://www.acc.co.nz.

system of workers' compensation stands out as an example for waste, fraud, and abuse. 94 One major factor driving this abuse seems to be the involvement of middlemen such as cappers, lawyers, and doctors who collaborated in workers' compensation mills and, in California, profited from a local rule holding employers liable for the costs of medical examinations even if the claim turned out to be invalid. 95 The second major cause for skyrocketing costs of workers' compensation was the recognition, by the competent courts, of compensable injuries and diseases, the existence of which are difficult or even impossible to verify. 96 Pertinent examples include physical impairments such as back pain, whiplash and soft-tissue back injuries, but also purely psychiatric or mental harm that exists in the mind of the victim only. This is not to say that mental harm is fictional and should never be compensated. However, courts must remain sensitive to the problem that claims involving harm that is difficult to verify are particularly vulnerable to abuse.

As these examples illustrate, the fact that workers' compensation systems restore financial losses only and fail to make the victim whole is insufficient to fully discipline claimants and their advisers. Less-than-full compensation may be good enough to check ex ante moral hazard but it is rather ineffective against the dangers of ex post moral hazard: exaggerating or fabricating injuries. On the other hand, lawmakers and administrators must avoid throwing out the baby with the bathwater in making the claims procedures in workers' compensation too much like civil litigation. In the eyes of some observers, this is the trap the old English version of workers' compensation may have fallen into: "In no time at all, Workmens' Compensation descended from its lofty ideals of being a no-fault social service into a squalid legal battlefield between trade unions and insurance companies, with lying, cheating and chicanery on all sides and astronomical expenditure on administrative, legal and medical costs." "97

3. Balancing the Costs and Benefits of Controls against Abuse

While the two concerns of controlling ex post moral hazard and of containing administrative costs incurred in the process of claims resolution are clearly in conflict, the conflict does seem manageable in the real world. Existing workers' compensation systems seem to do a reasonable job at containing ex post moral hazard without letting the costs of claims

^{94.} Gary. T. Schwartz, Waste, Fraud, and Abuse in Workers' Compensation: The Recent California Experience, 52 MD. L. REV. 983 (1993).

^{95.} Id. at 1006-07.

^{96.} Id. at 1001-03.

^{97.} O.H. Parsons, A No-Fault System?: Not Proven, 3 INDUS. 129, 137 (1974).

resolution spiral out of control. It seems that the clear, traceable, and palpable attribution of costs to employers on which the funding mechanisms of workers' compensation systems are built leads to tighter controls and more efficient claims resolution procedures than programs funded out of general tax revenues and administered by an agency which is not answerable to any distinct group with an interest in cost control. Where workers' compensation schemes have spiraled out of control, as was the case in California in the 1990s, there were discrete and identifiable reasons for these outcomes, namely lax rules which allowed for broad recognition of nonverifiable diseases and the over-generous compensation of the costs of medical examination.

These problems may be addressed and resolved in a satisfactory manner. The risk of abuse can be reigned in by imposing (1) high recognition thresholds for difficult-to-verify injuries and diseases, and (2) a disciplined screening process that ensures that only genuine claims attract awards. Given that the focus of workers' compensation has always been on physical injury and diseases caused by occupational hazards, these goals are clearly within reach.

IV. REAL-WORLD CHOICES BETWEEN WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY

A. The Motives for the Revival of Employers' Liability

1. Getting Rid of the "Industrial Preference"

The economic analysis of workers' compensation systems in the previous part led to the conclusion that systems of workers' compensation may look rather attractive when compared to the alternative solution of employers' liability. In light of this finding, it is surprising that two modern countries with advanced economies—the United Kingdom and the Netherlands—defected from the dominant solution of providing a separate liability regime for workplace accidents and occupational injuries, instead re-embracing employers' liability. The question is: why?

Certainly, in the Netherlands as well as in the UK, local political predispositions and other contingent factors played a role. But there seems to be a common theme, namely the idea that preferential treatment of workers over nonworkers—the so-called "industrial preference"—is unwarranted.⁹⁸ This proposition assumes that workers' compensation

^{98.} For a contemporary explanation of industrial preference, see generally NICHOLAS J. WIKELEY & ANTHONY I. OGUS, THE LAW OF SOCIAL SECURITY, 717–18 (5th ed. 2005); Richard Lewis, Consultation and Cuts: The Review of Industrial Injuries Benefit, 2 J. SOC. WELFARE L., 330, 333–34

schemes operate within general systems of social security that protect every citizen against financial losses incurred as a consequence of personal injury, regardless of cause. Within such an environment, workers' compensation systems have the effect of privileging workers over other members of society. Workers gain access to benefits exceeding those available under general programs of social security, such as health and disability insurance, while members of the general public do not. This is true even if the types of injury and the kinds of accident in question are exactly the same. If someone falls from a ladder and breaks her leg while painting a ceiling, she will be compensated if the accident happened at work, in the course of her employment, while the same injury is left uncompensated if the ceiling was in her own home and she painted it during her leisure time. From the victim's point of view and based on her needs it is difficult to see the justification for the unequal treatment of these two cases.⁹⁹

In the context of disease, the difference in treatment accorded to the same affliction is even more striking. Here the question is whether the provision of health care, the replacement of lost earnings, and other benefits, should depend on the cause of the disease at all. Health insurance schemes, regardless of whether they are public or private, never look to the causes of disease or injury, but provide assistance and care regardless of the source that caused the need. Therefore, social-policy makers concerned with satisfying needs should abandon cause-based distinctions as irrelevant.

The critical idea of lawmakers in the United Kingdom and the Netherlands, who worked to abandon workers' compensation, was that the financial needs created by bodily injuries and diseases are the same for everyone. The general system of social security was to be designed accordingly, treating every citizen equally and making the level of benefits contingent on needs only. Thus, all that matters in these systems is the severity of the injury or disease and the demand for medical treatment or income replacement created by it.

2. Social Security as Basic Protection, Tort as a Supplement

In a world dominated by needs-based social security systems, the role of tort law is merely supplemental. As social security satisfies the victim's basic financial needs, the private law of torts merely serves to provide additional compensation that is not strictly necessary. Its primary function

^{(1980).}

^{99.} Peter Cane, Atiyah's accidents, compensation and the Law 355 (2006); Jane Stapleton, Disease and the Compensation Debate (1986); Wikeley & Ogus, supra note 98, at 717.

is within the area of nonpecuniary losses, which always remain outside of the scope of social insurance systems. This explains why in both jurisdictions, in English and in Dutch law, the liability of the employer is fault-based, not strict. Given that its primary function was to cover nonpecuniary losses only, the selection of the fault principle makes sense, as there is neither need nor justification to insure the victim on account of the tortfeasor through a regime of strict liability. Thus, somewhat surprisingly, systems of employers' liability in practice do not depend primarily or solely on the tort system to compensate victims, and in this sense they are not "pure" tort systems at all. Rather, they combine broad coverage of needs caused by bodily injuries and diseases under social security schemes with the private tort action for additional damages.

The combination of these two approaches is particularly striking in the law of the Netherlands. In 1967, the Netherlands, which had introduced its workers' compensation system in 1901 based broadly on the original German model, abolished the system and reinstated the private cause of action of employees against employers. 101 However, the need to provide for health care and income replacement within a short period of time after the accident or injury had occurred—which led to the introduction of workers' compensation in the late nineteenth and early twentieth centuries remained valid and urgent following abolition. The Dutch lawmakers accommodated it by creating a general social insurance scheme that provided for compensation in cases of disability, or incapacity to work, regardless of cause. In effect, the Netherlands broadened one aspect of workers' compensation—expedient provision of health care and income replacement—to include the population at large, while at the same time abandoning other aspects of it—the preferential treatment of workers and immunity of employers from tort actions. In essence, the Netherlands replaced the system of workers' compensation, which was focused on the so-called professional risk (risque professionnel), with a combination of generous social security benefits to cover the so-called social risk (risque social), and supplementary employers' liability. 102

Likewise, the development in the United Kingdom must be seen in light of the long-standing policy to create an all-encompassing welfare system, funded out of general tax revenues and providing the same benefits

^{100.} Steven Shavell, Foundations of Economic Analysis of Law 242-43 and 269-72 (2004).

^{101.} LINDENBERGH, *supra* note 30, ¶ 2; Esther F. D. Engelhard, *Shifts of Work-Related Injury Compensation* in 20 SHIFTS IN COMPENSATING WORK-RELATED INJURIES AND DISEASES 9, 41 (Saskia Klosse & Ton Hartlief eds., 2007).

^{102.} LINDENBERGH, supra note 30, ¶ 7.1–7.4; Engelhard, supra note 101, at 41–4.

to every citizen. The intellectual framework for this approach was set out in the Beveridge Report of 1942, which explicitly intended to overcome "sectional interests" and to provide equal protection for every member of society. ¹⁰³ In the years to follow, many of the proposals of the Beveridge Commission were implemented, even though lawmakers did not always follow their recommendations in detail, e.g., preferring flat contributions as well as pre-fixed and flat benefits. ¹⁰⁴ The thrust of the Beveridge Report was incompatible with the English version of workers' compensation that had been put in place in 1897, but had never eliminated the private action against the employer. Consequently, the Beveridge Commission had questioned the program's preferential treatment of workers, but the commission ultimately recommended its continuation. ¹⁰⁵ Parliament followed this advice: it refused to altogether abandon workers' compensation and instead opted for its reform in the guise of the National Insurance (Industrial Injuries) Act of 1946.

To the present day, workers enjoy access to the industrial injuries disablement benefit, which entitles victims of workplace injuries and occupational diseases to pension or lump-sum payments. ¹⁰⁶ Eligibility under the scheme does not depend on employer fault, and benefits remain available even to those employees who contributed to the injury through their own negligence. ¹⁰⁷ The amount of the industrial injuries disablement benefit is regulated by statute and depends on the degree of disablement. ¹⁰⁸ Disputes are resolved by tribunals that operate outside of the civil justice system and are said to be faster and more efficient than courts of law.

B. The Failure of Social Security

In both the United Kingdom and the Netherlands, the move away from workers' compensation and towards revivification of employers' liability was backed up by a rather generous social security mechanism, which was designed to be the same for everyone, workers and nonworkers. In both

^{103.} SIR WILLIAM BEVERIDGE, SOCIAL INSURANCE AND ALLIED SERVICES ¶¶ 7–9 (1942) (U.K.); see Engelhard, supra note 101, at 36–38.

^{104.} BEVERIDGE REPORT, supra note 103, ¶ 80 (referencing a "flat rate of compensation for disability"); $see\ id$. ¶ 304 (referencing a flat rate of insurance benefits, except with regard to losses caused by industrial accident or disease).

^{105.} *Id.* ¶ 80 ("If a workman loses his leg in an accident his needs are the same whether the accident occurred in a factory or in the street."). For a recent discussion [of the worker's compensation program,] *see* Stephen Jones, *Social Security and Industrial Injury in* SOCIAL SECURITY LAW IN CONTEXT 461 (Neville Harris ed., 2000).

^{106.} WIKELEY & OGUS, supra note 98, at 759.

^{107.} Id. at 741.

^{108.} Id. at 753-59.

countries, however, the high level of benefits initially available through social security proved unsustainable in the long run.

In the United Kingdom, the industrial injuries compensation scheme, as originally conceived, looked much like the lost-earnings-prong of workers' compensation systems that it intended to replace. While this characterization was fairly accurate in 1946, it has become quite erroneous today. Over time, the industrial injuries scheme was integrated into the general social security system. Today, it is exclusively funded out of general tax revenues, not through the contributions of employers. 109 At the same time, the level of benefits has gradually decreased. In 1982, the socalled injury benefit, which had compensated victims for short-term losses of income caused by temporary disablement, was abolished in favor of a combination of sick pay and benefits available under general social security programs. 110 Finally, pensions for lost earnings under the industrial injuries benefit scheme were abolished altogether in 1990. 111 While the scheme continues to pay pensions, their amounts depend exclusively on the degree of disablement rather than the victim's income prior to the accident. ¹¹² The maximum pension, paid out for 100% disability, amounts to no more than £150 per week, less than \$240. 113 As a consequence, the so-called disablement benefit is no longer a means to compensate lost wages at all, but a means to compensate nonpecuniary loss, i.e. the loss of amenities resulting from permanent or temporal, partial or full disablement. 114 Today, victims must rely on the protection under general social security to cover their living expenses or resort to tort actions to restore their earnings in full.

In the Netherlands, the failure of social security is even more striking. The generous social security scheme, which compensated losses due to disability, was created in 1967, at the peak of the post-war economic and demographic boom. Not surprisingly, it turned out that the level of compensation was not sustainable over the years, as economic and demographic growth slowed and moral hazard increased. In a world involving much economic uncertainty, a program that offered generous benefits, often approaching full income replacement, attracted a large number of applicants and, consequently, recipients. As early as the 1970s,

^{109.} Id. at 719.

^{110.} Richard Lewis, *The Abolition of Injury Benefit*, 34 N. IR. LEGAL Q. 44, 44-45 (1983); WIKELEY & OGUS, *supra* note 98, at 716.

^{111.} WIKELEY & OGUS, supra note 98, at 716.

^{112.} Jones, supra note 105, at 481-83.

^{113.} Industrial Injuries Disablement Benefit (Accidents), DIRECT.GOV.UK, http://www.direct.gov.uk/en/MoneyTaxAndBenefits/BenefitsTaxCreditsAndOtherSupport/Disabledpeo ple/DG 10018839 (last visited Sept. 17, 2012).

^{114.} WIKELEY & OGUS, supra note 98, at 716.

the Dutch system was widely perceived to be "out of control" and "unmanageable." If the government had allowed this system to continue, 17% of the population would have received benefits on account of "disability" by 2040. 117

The major cause that, had it been left uncontrolled, would have ruined the system was ex post, not ex ante, moral hazard. In the Netherlands, it seems that the disabilities act, as originally designed in 1967, was abused by employees, often in collusion with their employers, in order to smooth the transition from an industrial economy to a service economy and the transition of Dutch families from the traditional single-earner to the dual career model. These may be honorable goals, but they have nothing to do with disability and cannot be supported on the basis of a system that allows for nearly-complete income replacement.

In order to keep the scheme alive, the Dutch lawmakers had to intervene time and again, beginning in the 1980s. ¹²⁰ Step by step, the level of assistance available under the disability-to-work scheme was lowered, the requirements regulating access to the system were tightened, and a schedule for repeated re-examinations during the currency of benefits was imposed. Together, these measures helped remove the Netherlands from the top position of the OECD's list of countries with the highest ratio of disabled people within the general population. ¹²¹

Today, the same distortions that haunted the Dutch system of disability insurance affect its American counterpart, which has run into serious financial trouble in the aftermath of the 2008 financial crisis. The federal social security disability insurance program provides rather modest benefits to those unable to work. Due to a rather drastic relaxation of the insurance trigger towards a largely subjective multi-factor test in 1984 and the relative increase in the value of disability insurance benefits relative to wages over time, the program was thought to be unsustainable even before

^{115.} Richard V. Burkhauser, Mary C. Caly & Philip R. de Jong, *Curing the Dutch Disease: Lessons for United States Disability Policy* 29 (Univ. of Mich. Ret. Research Ctr., Research Paper No. 2008-188, 2008), *available at* http://papers.ssrn.com/abstract=1337652; *see also* Jan-Maarten van Sonsbeek & Raymond Gradus, *Estimating the Effects of Recent Disability Reforms in the Netherlands* 4 (Tinbergen Inst. Discussion Papers, Working Paper No. 11-121/3, 2011), *available at* http://papers.ssrn.com/abstract=1655706.

^{116.} Van Sonsbeek & Gradus, supra note 115, at 3.

^{117.} *Id.* at 2 (internal citation omitted).

^{118.} See supra, Part IV.C.2.

^{119.} Van Sonsbeek & Gradus, supra note 115, at 4–5 (internal citations omitted).

^{120.} For a description of Dutch legislative intervention, see *id.* at 4–6; Engelhard, *supra* note 101, at 57.

^{121.} Van Sonsbeek & Gradus, *supra* note 115, at 4 (citing OECD, TRANSFORMING DISABILITY INTO ABILITY: POLICIES TO PROMOTE WORK AND INCOME SECURITY FOR DISABLED PEOPLE (2003)).

the economic crisis following the financial meltdown of 2008 hit.¹²² Subsequent to the economic downturn, the payouts of the program have soared, pushing it towards the brink of bankruptcy.¹²³ Over the last ten years, the number of recipients has risen by around 64.07 percent with high concentrations in those areas where the depression has hit hardest and where unemployment rates are highest.

The upshot of the experience described is that general systems of disability insurance are extremely vulnerable to ex post moral hazard, particularly, but by no means exclusively, in times of economic crisis. For this reason, the idea upon which the Dutch lawmakers of 1967 acted, i.e., to combine rather generous benefits familiar from workers' compensation systems with broad coverage against any disability, regardless of its cause, proved to be unworkable. Social insurance systems are always vulnerable to ex post moral hazard and cannot function without the incentives generated by a significant gap between the level of wages and the level of benefits. If people are no worse off within the social insurance system when compared to active participation in the work force, the system is abused for purposes of early retirement and concealing unemployment.

C. Tort as an Indispensible Fall-Back Mechanism

With regard to the consequences of workplace accidents and occupational diseases, the demise of social insurance programs has led to increased reliance on tort. Originally, private claims for compensation were thought to function as an add-on, particularly in addressing nonpecuniary losses. In reality, tort has developed into a full-scale remedy invoked to meet rather basic financial needs. Not surprisingly, the doctrines limiting access to recovery in tort, i.e., the fault principles and its corollaries, were placed under pressure. In this way, disability insurance and employers' liability work together like pistons: the less water the former holds, the higher the water-mark is in the latter.

Again, Dutch law provides the best illustration: in conjunction with the scaling down of disability insurance benefits, lawmakers and courts increased the bite of employers' liability. Under Articles 7:658(1) and 6:170 of the Dutch Civil Code (Nieuw Burgerlijk Wetboek – NBW), the employer is liable not only for the consequences of his own negligence, but

^{122.} David Autor & Mark Duggan, *The Growth in the Social Security Disability Rolls: A Fiscal Crisis Unfolding* 9-15, 20 (MIT Dept. of Econ. Working Paper Series, Working Paper No. 06-23, 2006), *available at* http://papers.ssrn.com/abstract=921123.

^{123.} Disability Payments: The Elephant in the Waiting-Room, THE ECONOMIST (Mar. 12, 2011), at 36–37; Damian Paletta, Insolvency Looms as States Drain U.S. Disability Fund, WALL St. J. (Mar. 22, 2011) at A1, A16.

also for negligence of the other employees. Thus, the conduct of coworkers is attributed to the employer even if the injury did not affect a third party but another employee of the same employer. 124 In doing so, Dutch law avoids the consequences of the former common law "fellow-servant rule" or the "common-employment" principle, pursuant to which the employer was not liable for the fault of other employees. 125 In addition, the defense of assumption of risk has been eliminated altogether, and the employer may defend himself with regard to contributory fault only where he can establish intention or recklessness on the part of the employee (Article 7:658(2) NBW). 126 As if this were not enough, the Supreme Court of the Netherlands (Hoge Raad) applies the fault principle strictly; in other words, the standard of care imposed on the employer is high. 127 At the other end of the employment relationship, the behavior of the employee is measured against a rather lenient standard so that claims for compensation are rarely reduced on account of comparative negligence of the plaintiff. 128 Rather, the employee must have acted with intent or "deliberate recklessness," i.e., she must have been aware of the recklessness of her behavior when committing the act. The Hoge Raad even went so far as to invent a duty to take out market insurance for the benefit of employees. Under this line of jurisprudence, the employer must supply his employees with first-party insurance coverage for personal injuries suffered in traffic accidents. ¹²⁹ Failure to comply with this duty exposes the employer to liability for the consequences of injuries he could not have prevented at reasonable cost but could have insured the worker against. This effectively amounts to a duty of care equivalent to a strict liability regime. The court created an outcome close to what would have been achieved under workers' compensation, albeit through the backdoor.

In the United Kingdom, the action against the employers had always been kept alive, as the old workmens' compensation acts did not grant the employer any immunity under the common law. On the other hand, since the workers' compensation system picked up most of the costs of workplace accidents and occupational diseases, the principles of employers' liability remained in their restrictive state as defined by the trinity of defenses. ¹³⁰ In particular, the defense of "common employment"

^{124.} LINDENBERGH, supra note 30, ¶ 28.

^{125.} See supra Part III.C., at note 35.

^{126.} LINDENBERGH, supra note 30, ¶ 30.

^{127.} Id. ¶ 21–23.

^{128.} Id. ¶ 31.

^{129.} Id. ¶ 41.

^{130.} See supra Part III.C, at note 35.

remained available to the employer and allowed him to reject vicarious liability for the acts of a fellow worker who had caused the accident negligently or even intentionally.¹³¹ The defense was only formally abolished in 1948, with the reform of the social security system inspired by the Beveridge Report. 132 Even prior to that date it was already dead, as the courts had managed to navigate around the rule through the development of a nondelegable duty of care to organize, equip, and staff the workplace with a reasonable degree of safety. 133 Today, vicarious liability of the employer for tortious acts of fellow servants, liability for breach of statutory duty, and the general duty of care to provide "a competent staff of men, adequate material, and a proper system and effective supervision" ¹³⁴ work together to facilitate the recovery of victims against their employers. The employer cannot defend himself by pleading "assumption of risk" based on the fact that the employee failed to guit a dangerous job. 135 Nowadays, the defense of contributory negligence does not suffice to defeat the victim's claim entirely, but only leads to a reduction in quantum. In the overwhelming majority of cases, courts seem to allow workers to recover most of their damages. 136

D. Asbestos-Related Diseases as a Touchstone of Liability Systems

The systems of employers' liability based on tort law that were in place in the Netherlands and the United Kingdom faced their first serious challenge when confronted with the problem of asbestos-related diseases such as asbestosis, mesothelioma, and lung cancer. The first cases involving diseases caused by asbestos entered the English court system in the late 1990s. Given the modest level of benefits available under the industrial injuries scheme, employees suffering from such serious diseases had no choice but to resort to tort claims and to try to enforce them

^{131.} E.g., Priestley v. Fowler, (1837) 150 Eng. Rep. 1030, 1032-33; 3 M. & W. 1, 5-7.

^{132.} Law Reform (Personal Injuries) Act, 1948, 11 & 12 Geo. 6, c.41 (Eng.).

^{133.} Wilsons & Clyde Coal Ltd. v. English, [1938] A.C. 57 (H.L.) 78–81; W. V. HORTON RODGERS, WINFIELD & JOLOWICZ ON TORT, ¶¶ 8-2 to 8-3, 8-10 to 8-14 (17^{th} ed. 2006) (describing the recorded history of employer's liability and the nature of the employer's duty).

^{134.} Wilsons & Clyde Coal Ltd., A.C. 57 at 78 (internal quotations omitted).

^{135.} Harris v. Brights Asphalt Contractors, [1953] 1 Q.B. 617, 628–629; RODGERS, *supra* note 133, ¶ 8-16 ("The general defence of voluntary assumption of risk is rarely available in cases of employers' liability because the courts are unwilling to infer an agreement by the worker to trun the risk of his employer's negligence merely because he remains in unsafe employment.") (internal citations omitted).

^{136.} RODGERS, *supra* note 133, \P 6-52 ("It has often been stated that safety legislation exists to protect workers from consequences of their own carelessness, and the courts will therefore be slow to hold a worker guilty of contributory negligence.") (internal citations omitted).

^{137.} See supra, Part V.B., note 110.

in the civil courts. In doing so, the main obstacle to recovery turned out not to be proving that the employer breached its duty, but rather proving causation, given that most workers had been exposed to asbestos while working for several different employers over the course of their lifetime. In the typical case, only one of the various employers had survived and was in command of assets, including insurance funds, sufficient to cover claims for damages. The (former) House of Lords initially committed to holding each employer liable for the full loss under the theory of joint and several liability. 138 but it later retreated and embraced the principle of proportional liability, holding each employer liable only for a fraction of the total harm that reflects his share of the risk relative to the total amount of risk. 139 Subsequently, the English parliament intervened and restored, through legislation, the original rule of joint and several liability. 140 The latest decision of the UK Supreme Court allowed the claim for compensation even in a case where the exposure of the victim at the workplace increased the background risk of contracting the disease of mesothelioma by no more than 18 percent. 141 Some suggest that this far-reaching decision was influenced by the fact that workers suffering from mesothelioma were otherwise left to rely on the rather basic benefits available under social security programs.

In the European countries that run workers' compensation systems, disease caused by asbestos dust has never been an issue in the civil courts. Rather, these cases have been taken care of by workers' compensation carriers. By aggregating cases, such systems present several advantages over tort litigation in addressing the problems of multi-factor scenarios. First, workers' compensation systems avoid problems related to establishing employer causation. Second, relatedly, they avoid problems with allocating tort responsibility among insurers. Third, unlike liability insurance against tort actions, workers' compensation systems compensate victims at current rates.

Under a system of workers' compensation, it is not necessary for a worker who suffers from mesothelioma to identify the employer on whose premises he inhaled the toxic fiber. Where, as in Germany, workers' compensation carriers are responsible for whole industries, changes of

^{138.} Fairchild v. Glenhaven Funeral Services Ltd., [2002] UKHL 22, [2003] 1 A.C. 32 (H.L.).

^{139.} Barker v. Corus UK Plc., [2006] UKHL 20, [2006] 2 A.C. 572 (H.L.).

^{140.} Compensation Act 2006, c. 29 §3 (U.K.); Alison McAdams, *Barker and the King of Persia*, 156 NEW L. J. 1433 (2006); Rebecca Herbert, *The Compensation Act 2006*, 4 J. PERS. INJ. L. 337, 341–42 (2006).

^{141.} Sienkiewicz v. Greif (U.K.) Ltd. and Knowsley Metro. Borough Council v. Willmore, [2011] UKSC [118].

employment over the course of a work life do not matter much as long as one may be reasonably certain that the disease was contracted at one of the several workplaces. In addition, workers' compensation systems avoid the intricate problems of identifying the relevant insurance contract that is liable to answer in any given case. Within systems of employers' liability, insurance coverage depends on the trigger defined in the insurance contract at issue, be it "injuries caused," "injuries occurring," or "claims made." Different triggers specify different applicable contracts—the contract at the time of exposure, at the time of manifestation of the illness, or at the time of filing the insurance claim. In essence, the problems are identical to the ones that haunted environmental liability insurance in the 1980s and 1990s. 142 With regard to liability for asbestos-related diseases, these same issues are currently litigated heavily in England. 143 Moreover, courts must allocate responsibility among insurers when employers and third parties, such as building contractors, are jointly and severally liable, when the liability of several employers is at issue, or even when the victim spent his whole working life with a single employer. In the last case, the employer may have had multiple contracts with multiple insurers, so courts must identify the answerable insurance contract to determine the amount of coverage and to allocate damages payments to particular insurance periods and insurers. In contrast, under a well-run workers' compensation system, there is no need to force the start of the disease into a time-frame—the system compensates injured workers regardless of when and in whose employment the injury occurred.

Finally, in many cases, it may turn out that the insurance contract that must answer is decades old, so that the sums available as cover are utterly inadequate. In contrast, workers' compensation systems present no danger of inadequate coverage, as workers are compensated for the harm at current levels of damages payments. In France, victims of asbestos-related diseases are even entitled to additional benefits, which are added to the pensions awarded under workers' compensation.¹⁴⁴

^{142.} See Montrose Chem. Corp. v. Admiral Ins. Co., 10 Cal. 4th 645, 655 (1995).

^{143.} Bolton Metro. Borough Council v. Municipal Mutual Ins. Ltd., [2006] EWCA (Civ) 50 (Eng.); BAI (Run Off) Ltd. v. Durham, [2012] UKSC 14. For the time being, the English courts have rejected the so-called "triple trigger theory" adopted by American courts, according to which exposure to asbestos dust, development of an adverse medical condition, and diagnosis of the manifest disease are all equally sufficient to make insurers answerable on their contracts. Keene Corp. v. Ins. Co. of N. Am., 667 F.2d 1034, 1042-1047 (D.C. Cir. 1981).

^{144.} Loi. 2000-1257 du 23 décembre 2000 de financement de la sécurité social pour 2001 [Law 2000-1257 of Dec. 23, 2000 on the Financing of Social Security for 2001], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Dec. 24, 2000, p. 20558, 20568–76, available at http://www.legifrance.gouv.fr.

E. Conclusion

The abandonment of workers' compensation in the Netherlands and the UK is anything but a success story. The promise offered by once generous social security systems turned out to be unsustainable, mainly because of rampant ex post moral hazard. As a consequence of the shortfall of social security, the private action against the employer regained much of its central role. Not surprisingly, the old disadvantages of the tort system turn up again, i.e. an unfavorable ratio between benefits and administrative costs as well as serious difficulties in channeling compensation to victims in cases involving long-tail risks and multiple tortfeasors. It seems that both jurisdictions would have been better advised to stick to the somewhat old-fashioned and boring system of workers' compensation instead of relying on a combination of social security and tort.

V. CIRCUMVENTIONS OF WORKERS' COMPENSATION SYSTEMS

A. Dissipating the Savings in Administrative Costs

The previous part has shown that doing away with workers' compensation altogether involves serious disadvantages. However, on a smaller scale, the same problems also surface in jurisdictions that held on to the traditional model of workers' compensation. In many countries that continue to operate such systems there is an increasing tendency to circumvent workers' compensation and instead rely on tort for the compensation of losses caused by industrial injuries. The common root of the challenges posed by such attempts seems to be the obvious divergence between the benefits available in workers' compensation and in tort. As explained above, workers' compensation systems avoid the calculation of damages in each individual case and instead award pensions on the basis of an abstract assessment of losses in terms of the degree of disablement. While it is not clear that this move undercompensates victims systematically, it does undercompensate those workers who sustained the most serious injuries and are thus completely disabled, losing their earning capacity altogether. The wedge between workers' compensation benefits and tort damages is further increased by the unavailability of pain and suffering damages as well as punitive damages in workers' compensation.

The shortfall of workers' compensation benefits compared to full tort damages has triggered a number of troubling developments that tend to undermine the principles of workers' compensation and, more importantly, dissipate the advantages the system was set up for in the first place. The two main inroads into these principles are:

Victims seeking to upgrade workers' compensation benefits to

full tort damages—i.e., full income replacement plus compensation for nonpecuniary harm—by suing the employer for aggravated fault.

• The prosecution of third parties who are not subject to the immunity rule that protects the employer from private suits.

While the first point is internal (in the sense that it could be resolved within the framework of workers' compensation), actions against third parties raise important and difficult issues that relate to the positioning of workers' compensation within the overall architecture of accident law writ large. Consequently, the challenge posed by third party actions can only be resolved within the general context of the liability system. However, both options raise serious concerns as they threaten to dissipate the main advantage that justifies workers' compensation in the first place, i.e. the significant savings in administrative costs in comparison to a combination of employers' liability and liability insurance.

B. Suits against Employers

1. Inroads into the Immunity Principle

In all jurisdictions that operate workers' compensation schemes, the immunity rule steps aside where the employer intentionally caused the harm. 145 In such cases, the employee may sue her employer in civil court, either in contract or in tort, to recover full damages. While these principles are followed everywhere, the scope of the exception varies greatly. A narrow reading of intention would require the employer to have acted with an intention to cause bodily harm to the employee, while for a more lenient view, it would be sufficient if the employer intended to commit the act or omission that was the cause of the injury. Under the lenient definition, it is sufficient for a finding of intention that the employer knowingly breached safety regulations that were imposed on him. The majority of jurisdictions subscribed to the narrow view and refused to relax the immunity that shielded employers as long as the harm was caused accidentally, even if the conduct of the employer amounted to gross, wanton, willful, deliberate, intentional, reckless, culpable, malicious or other kinds of aggravated negligence. 146

In many jurisdictions courts have gone far beyond the core meaning of the concept of intentional harm and have included accidental injuries. In French law, the move away from a narrow exception to the immunity

^{145.} See, e.g., KÖTZ & WAGNER, supra note 8, at 234 (describing Germany's worker compensation scheme); see ROTHSTEIN ET AL., supra note 8, § 6.23, at 85-86, § 6.36, at 174.

^{146.} LARSON'S WORKERS' COMPENSATION, supra note 80, § 103.03, at 103-7.

principle was initiated by the legislature. While the French social security act incorporates the common rule that the employer may be sued in civil court where he caused the harm intentionally, 147 it goes beyond it by carving out another exception for cases of inexcusable negligence (*faute inexcusable*). Where inexcusable negligence has been established, the victim receives her ordinary pension plus an additional sum as compensation from the competent workers' compensation carrier. Alternatively, she may sue the employer directly before the same administrative tribunal that is competent to hear the claim in workers' compensation. Provided that this tribunal finds that the behavior of the employer amounted to inexcusable negligence, the workers' compensation institution may recoup any payments made to the victim from the employer so that the latter bears the full loss. 149

In addition, France made the interesting choice to award victims of asbestos-related illness the privilege of full tort damages independent of a showing of intention or inexcusable negligence by entrusting the compensation of these victims to a special branch of the social security system. 150 The so-called FIVA (Fonds d'Indemnisation des Victims de l'Amiante) serves the double function of, on one hand, supplementing the workers' compensation system by providing additional benefits in the form of higher pensions and a lump-sum payment for nonpecuniary harm, and, on the other hand, providing compensation to "secondary victims" like the spouses of workers who were exposed to asbestos dust through their interaction with the primary victim. As a practical matter, the availability of additional funds for compensating victims of asbestos helped to deter litigation in the civil courts where victims had begun to claim for full damages based on the theory that employers were guilty of gross negligence (faute inexcusable) and thus could not avail themselves of workers' compensation's immunity rule.

In the United States, the broadening of the concept of intention as it was traditionally understood within the context of employers' liability¹⁵¹ was orchestrated not by lawmakers but by the courts which developed the so-called "substantially certain" test that equates foresight with intention. Where the plaintiff succeeded in establishing facts that suggested that the employer had been "substantially certain" to cause harm, the immunity rule

^{147.} LAMBERT-FAIVRE & PORCHY-SIMON, supra note 8, para. 384.

^{148.} LAMBERT-FAIVRE & PORCHY-SIMON, supra note 8, para. 385-86.

^{149.} FRANCE, Code de la sécurité sociale, Art. L 452-2, available at http://www.legifrance.gouv.fr.

^{150.} See Loi. 2000-1257 du 23 décembre 2000.

^{151.} See supra, note 142 and accompanying text.

stepped aside.¹⁵² In many American jurisdictions, the concept is not limited to cases where the employer intended to do harm but rather extends to situations where the employer willfully or recklessly failed to comply with safety rules or instructions or removed safety devices that would have protected the worker from injury.¹⁵³ While the former cases are rare, the latter may be plentiful, given the elasticity of such concepts as recklessness.

As a consequence of the relaxation or supplementation of the intentional-harm exception, litigation for additional benefits has increased considerably. In France, it seems that an allegation of inexcusable fault is now almost routinely added to a claim for workers' compensation benefits. The French courts have facilitated this development by interpreting the concept of *fault inexcusable* in an objective, strict-liability-like way: under the theory of a strict duty to provide a safe work environment (*obligation de sécurité de résultat*), the employer is liable if it can be established that rules of safety had not been followed.

With regard to American law, it was proposed to go even further and allow the injured worker to sue the employer in tort whenever the hypothetical tort claim exceeded the benefits received under workers' compensation by at least \$10,000.¹⁵⁵ While the implementation of this solution would increase the amount of litigation quite dramatically, it would simplify the resolution of these disputes, as there would be no need to plead and prove elusive concepts like "inexcusable negligence."

2. The Substantive Issues: Full Income Replacement and Damages for Nonpecuniary Losses?

a) The Seriousness of the Harm

The drive towards private causes of action is fueled by the shortfall of workers' compensation benefits as compared to the amount of damages available in tort. An alignment of workers' compensation benefits and tort damages would remove the incentive to turn to the civil courts and to enforce claims against an employer guilty of intention or aggravated

^{152.} The development of the case law is described by William J. Maakestad & Charles Helm, Promoting Workplace Safety and Health in the Post-Regulating Era: A Primer on Non-Osha Legal Incentives that Influence Employer Decisions to Control Occupational Hazards, 17 N. KY L. REV. 9 (1989), at 32-37; LARSON'S WORKERS' COMPENSATION, supra note 80, § 103.04 ("erosion of the requirement of actual intent").

^{153.} LARSON'S WORKERS' COMPENSATION, supra note 80, § 103.04, at 103-23, 103-36-103-39.

^{154.} Cour de cassation [Cass.] [supreme court for judicial matters] soc., Feb. 28, 2002, D. [Recueil Dalloz] 2002, 2696 (Fr.); LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, para. 386-86.

^{155.} Theodore F. Haas, On Reintegrating Workers' Compensation and Employers' Liability, 21 GA. L. REV. 843, 894 (1987).

negligence. The question of whether workers' compensation benefits should be upgraded to approximate or equal tort damages raises two separate points, namely income replacement and damages for nonpecuniary losses. As it happens, the two are closely linked to each other.

Workers' compensation systems do not award damages for nonpecuniary losses, such as pain and suffering, disfigurement, and loss of amenities. This is not to say that the damages available under workers' compensation systems never include such a component. In cases of comparatively minor bodily injuries that still impede or destroy some bodily functions, the victim will be awarded a pension for the resulting loss of her ability to work. While the degree of disability will be small and the pension modest, over time it will accumulate to a sizable damages award. However, in many cases of minor injuries, the victim's income is not diminished, presumably because many victims adapt quickly to the disability and manage to make up for it in daily life. Even when no pecuniary loss is suffered, the pension will be awarded and continue to run during the work life of the victim. In such cases, the victim is being overcompensated for her pecuniary losses; thus, the pension assumes the function of compensating nonpecuniary losses. It allows the injured party to engage in some costly activities that otherwise would not have been affordable.

The matter is different for serious injuries and diseases that leave the victim fully disabled. For this class of victims, which remains excluded from the workforce, the pension will often fall short of the actual loss in the form of lost earnings, particularly where these pre-injury earnings had been above average. To the extent that the full pension is needed and used for the purpose of income replacement, as it often must in cases involving serious injuries or diseases, it does not contribute anything towards the compensation of nonpecuniary harm. With regard to serious injuries, the black-letter proposition that workers' compensation does not offer benefits for pain and suffering is still valid.

Arguably, it amounts to a failure of workers' compensation systems that over-compensates the lightly injured and under-compensates those who have been seriously disabled. In Germany, the exclusion of damages for nonpecuniary losses from the benefits offered by workers' compensation schemes has been challenged on constitutional grounds twice. The petitioners pointed to the inconsistency of a legal regime that

^{156.} See supra, Part II.D.

^{157.} Bundesverfassungsgericht [BVerfG] [Federal Constitutional Court], Nov. 7, 1972, ENTSCHEIDUNGEN DES BUNDESVERFASSUNGSGERICHTS [BVERFGE] 34, 118, 129-135; BVerfG, Feb. 8, 1995, NEUE JURISTISCHE WOCHENSCHRIFT (NJW) 1995, 1607 f.; KÖTZ & WAGNER, *supra* note 8,

leaves victims empty-handed by denying compensation for nonpecuniary losses while simultaneously extending the immunity rule to shield the employer from liability for such losses. The Federal Constitutional Court disagreed. In the eyes of the justices, workers' compensation systems are based on an implicit bargain in which the worker eschews full compensation of any loss sustained in exchange for no-fault liability of a public insurance carrier which both provides rather generous support in cases of minor injuries, only adequate compensation in cases of major injuries, and eliminates the risk of insolvency.

b) Including Damages for Non-Pecuniary Losses

While this is all true, the question remains whether it is sound policy to exclude nonpecuniary losses from the scope of compensation altogether and whether it makes sense to overcompensate those who sustained only minor injuries. As a matter of policy—rather than constitutionality—these choices seem hard to defend. First of all, empirical studies suggest that workers would be prepared to pay the price, in the form of reduced wages, for more comprehensive coverage. This finding contradicts the assumption, made in the general economic theory of compensation systems, i.e., that it is not in the interest of workers to insure against nonpecuniary losses, provided that they have to pay for it, as they must here in the form of wage reductions. 159 The major shortfall of the current system seems to be that there is no inverse relation between the gravity of the injury and the demand for pain and suffering damages. Quite the opposite: victims who have the strongest interest in damages for pain and suffering are those who have sustained the most serious injuries. But it is precisely this class of victims who suffer most from the current system. It seems absurd that the current system denies compensation of this part of the total losses to those who need it most and awards it to others who need it less. If any discrimination between victims were appropriate, then the rule would have to be the other way around, i.e., to award damages for nonpecuniary loss to the severely injured and deny it to those who have suffered only minor injuries.

c) Restraining Moral Hazard

An important consideration counseling against an increase in workers'

at 236-37.

^{158.} MOORE & VISCUSI, *supra* note 43, at 51 ("Taken at face value, these results imply that existing levels of workers' compensation benefits are suboptimal from the standpoint of insuring income levels.").

^{159.} SHAVELL, *supra* note 39, at 228-30.

compensation benefits is moral hazard. ¹⁶⁰ It has been explained above that the unusual combination of strict liability and the absence of a contributory negligence defense, which is the hallmark of a workers' compensation system, is sustainable partly because benefits fall short of full compensation. ¹⁶¹ Because workers are not made indifferent between the state of injury plus a compensation package, and the state without the injury and without the compensation package, their incentives to take care and avoid injuries remain largely intact. The expansion of benefits to approximate full compensation seems to remove the essential safeguard against moral hazard, i.e., the undercompensation of victim-employees. Indeed, empirical studies have shown that increases in benefit levels generate moral hazard in the form of an increased number of claims and a longer duration of disablement. ¹⁶²

However, this conclusion does not necessarily counsel against increasing benefits for serious injuries because moral hazard would remain manageable. With regard to ex ante moral hazard, workers will still prefer the state of the world without the serious injury—e.g., loss of leg, loss of eyesight—to a state with the injury even if the compensation package were increased significantly. This is most pronounced in the case of fatal injuries: increasing the benefits available to the family of dead workers does not lead to a decrease in precautions against death. In addition and even more importantly, the risk of ex post moral hazard—i.e., the fabrication of injuries—seems to be manageable, too. Since serious injuries are much more difficult to imitate, the risk of abuse and fraud is only minor. Again, fatal accidents provide the best example.

d) Economizing Administrative Costs

Second, the exclusion of damages for pain and suffering generates strategies to circumvent the immunity rule and to sue the employer for aggravated fault or to go against third parties. Within the current system, workers who suffer injuries receive less compensation than the victims of other accidents, such as traffic victims. As a consequence, workers injured on the job will try to circumvent the workers' compensation system and to top-up their damages by suing either the employer, alleging intentional wrongdoing or inexcusable negligence (depending on the scope of the exception from the immunity rule), or third parties who may be liable in

^{160.} See Epstein, supra note 35, at 801, 809.

^{161.} See supra, Part IV.A.3.

^{162.} MOORE & VISCUSI, supra note 43, at 53-68.

^{163.} See supra, Part. IV.A.3.

^{164.} MOORE & VISCUSI, supra note 43, at 29.

tort. 165 To the extent that this happens, another layer of administrative costs is added to the bill that employers have to pay.

e) Conclusion

In light of these considerations lawmakers would be well advised to redistribute the payouts under workers' compensation away from the lightly injured in favor of the seriously injured. As to the latter, pensions should be increased up to the point of full equivalence of after-tax income, and damages for pain and suffering should be added to the bill. As it is close to impossible to imitate serious injuries or diseases, the risk of abuse posed by such a move should be negligible and the consequences of such a reform therefore predictable and manageable.

3. The Administrative Issue: Upgrading Workers' Compensation Benefits vs. Private Suits against Employers

The next question concerns the choice of a procedural mechanism suitable to claims for full compensation. One way to improve the current situation would be to abandon the immunity principle altogether and to allow ordinary tort suits against the employer in all cases. Such a move would obviously raise the fundamental question of the justification for the continued existence of workers' compensation systems. Why run special compensations schemes if the victims may resort to the general law anyway? To the extent that victims used workers' compensation as an institution of first resort and the tort action as an opportunity for additional damages, such duplicative mechanisms would be very costly to operate. The reinstatement of the private action against the employer would have to coincide with the scrapping of workers' compensation institutions. The experience of the United Kingdom and the Netherlands suggests that such a move would not be wise.

An alternative to the present state of affairs, where exceptions to the immunity rule increase in number and scope, is offered by the French solution of integrating claims for full compensation based on inexcusable fault into the system of workers' compensation. In cases of inexcusable fault, the victim may either sue the employer or collect additional damages from the competent workers' compensation carrier. In the latter case, the courts of general jurisdiction are not involved at all. One important advantage of this solution is that claims are settled in one step and within a single type of proceeding, either (exclusively) a lawsuit or (exclusively) a workers' compensation claim. This solution avoids the duplicative

^{165.} See infra, Part VI.C.

^{166.} LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, para. 384-86.

litigation of identical issues before both civil courts and workers' compensation boards, thus sparing scarce judicial and administrative resources.

The proposal to provide for additional compensation for serious injuries and diseases within the scheme of workers' compensation mirrors the French approach to inexcusable fault that allows for the supplementation of the compensation awarded to the victim within the institutions and processes of the workers' compensation system. However, unlike in France, the upgrade available for serious injuries and diseases must be made mandatory, excluding the option to sue the employer for damages in civil court. In addition, the upgrade available in workers' compensation should not be limited to cases involving aggravated fault. 167 In limiting the additional compensation to cases of aggravated fault, French law introduces a requirement that is foreign to the other areas of the workers' compensation system and whose elements are difficult to prove. Therefore, it is not surprising that litigation around the concept of faute inexcusable is intense and administrative costs are significant. In addition, the requirement of aggravated fault does not remedy the inconsistency inherent in current systems of workers' compensation, i.e., to overcompensate minor injuries and to undercompensate the severely injured. There is no correlation between the degree of fault and the severity of the injury or disease. If the current situation is to be improved, additional benefits must be channeled into the pockets of those victims who suffered the most serious harms and not be distributed evenly across the class of victims who were affected by an employer's grossly negligent behavior.

Changes in the law that would allow the seriously injured to recover damages for nonpecuniary harm, and a pension achieving full income replacement, would adequately correspond to the shortcomings of current workers' compensation systems while at the same time avoiding the additional litigation and associated costs the current system generates. Within a system that allows the seriously injured to recover additional benefits, there is no incentive for separate actions launched against the employer individually, and even less so for separate civil actions that would be particularly costly. Rather, it would suffice if the victim applied for additional benefits and the workers' compensation carrier or the competent dispute resolution board found that the injury was serious enough to warrant additional compensation.

C. Claims against third parties

1. U.S. Exceptionalism

Another strategy aimed at making victims whole within the current, undercompesatory system targets not the employer, but third parties. Even though the immunity granted by workers' compensation schemes in all jurisdictions is limited to employers, suits against third parties are pervasive only in the United States. In the United States, manufacturers of machinery, plant equipment, and raw materials have been sued on a large scale by employee-plaintiffs seeking to recover full damages for workplace accidents and diseases. ¹⁶⁸ In fact, the pursuit of claims against third parties in cases involving occupational hazards has become routine in the United States, even though these claims should be the primary responsibility of workers' compensation carriers.

The most prominent examples are the various illnesses caused by the inhalation of asbestos dust at the workplace. The descent of the major American producers of asbestos products into bankruptcy from an avalanche of tort claims is well-documented, and the evolution of American tort law that helped to bring about this outcome has been discussed repeatedly. From a comparative perspective, one striking feature of this story is the total absence of workers' compensation from the picture. The was easy to foresee that asbestos-related diseases would create problems in jurisdictions that had abandoned workers' compensation, like the United Kingdom and the Netherlands, but in the United States, one would have expected that asbestos would be dealt with primarily, if not exclusively, under workers' compensation schemes. But, in fact, rather than bankrupting workers' compensation carriers, the flood of claims for damages associated with asbestos bankrupted the manufacturers of asbestos-made products. The obvious question is how could this happen?

2. Explanations

The explanation for the large-scale responsibility of third-parties for

^{168.} See Paul C. Weiler, Workers' compensation and Product Liability: The Interaction of a Tort and a Non-Tort Regime, 50 OHIO St. L.J. 825 (1989); see also Richard A. Epstein, The Legal and Insurance Dynamics of Mass Tort Litigation, 13 J. LEGAL STUD. 475, 485-88 (1984); William A. Dreier, Injuries to Production Workers: Reform of the Workers' Compensation Product Liability Interface, 48 RUTGERS L. REV. 813 (1995-1996).

^{169.} The leading bankruptcy case is *In re* Johns-Manville Corp. 68 B.R. 618 (Bankr. S.D.N.Y.), decision *aff'd in part*, 78 B.R. 407 (S.D.N.Y. 1987), *order aff'd*, Kane v. Johns-Manville Corp., 843 F.2d 636 (2d Cir. 1988). For a comprehensive study by the RAND Institute for Civil Justice *cf.* STEPHEN C. CARROLL, DEBORAH HENSLER, JENNIFER GROSS, ELIZABETH M. SLOSS, MATTHIAS SCHONLAU, ALLAN ABRAHAMSE & J. SCOTT ASHWOOD, ASBESTOS LITIGATION 107-123 (2005).

^{170.} For an early critique of this situation see Epstein, supra note 162, at 486.

the harm caused by asbestos products covers two areas, namely the interface between workers' compensation and tort on the one hand, and products liability on the other. To begin with the first area, the relationship between workers' compensation and the general law of torts is organized by two principles:¹⁷¹

- No immunity for third parties. While the employer is protected from private suits for damages based on workplace accidents and occupational diseases, third parties are not so protected. They remain fully exposed to employees' damages claims.
- Right of recourse against third parties for employers and workers' compensation carriers. To the extent that third parties are being held liable for the consequences of workrelated risks, their responsibility takes priority over the responsibility of the employer, or the workers' compensation carrier that insulates the employer from liability. One consequence of the priority of third-party liability is that a court awarding damages to the victim in a successful tort action against a third party has to set off prior benefits received from workers' compensation institutions. In the face of this prospect, the incentive of the victim to seek benefits from workers' compensation carriers is rather weak in the presence of a strong third-party claim, as there is nothing to gain but an advance on the recovery available in tort. 172 Secondly, and depending on the way in which workers' compensation systems are set up, either the employer or the workers' compensation carrier succeeds to the damages claim of the victim against the third party by way of subrogation or assignment. With regard to claims with a relatively low probability of success, damages suits against third parties for personal injuries are often not even initiated by victims and their lawyers, but by employers and their insurers who bring or finance tort actions for their own benefit. 173 An empirical study has found that no less than one quarter of product liability actions involving occupational hazards were brought not by victims, but by employers or workers' compensation carriers, enforcing their subrogation rights. 174

^{171.} LENCSIS, *supra* note 9, at 42-43.

^{172.} See Epstein, supra note 168, at 486.

^{173.} See Weiler, supra note 168, at 836.

^{174.} W. Kip Viscusi, The Interaction between Product Liability and Workers' Compensation as Ex

The combination of these doctrines caused a considerable portion of the costs of workplace injuries and diseases to be shifted away from employers and workers' compensation carriers and onto manufacturers of equipment and raw materials. As early as the mid-1970s, the total payouts to employees under tort for permanent disablement were more than twice the amount of the benefits received under workers' compensation. This result is surprising in light of the fact that the two principles—no immunity against tort claims protecting third parties, and rights of recourse of employers or workers' compensation carriers against third parties who are liable in tort for the same harm—are not exclusive to American law but a common feature of workers' compensation systems. Thus, the prevalence of third-party suits in the U.S. remains a puzzle.

The key to understanding the developments in the U.S. is not in the interface between workers' compensation and tort; rather, it lies in the distinctive features of American tort law, or rather, of its special branch of products liability. The concept of product defect was applied to tools, machinery, equipment, and raw materials as if equipment and materials had been distributed to employees, without accounting for the involvement of employers. Under current doctrines of products liability law, equipment manufacturers must make sure that their products are safe even if the harm was caused by the negligent or even reckless behavior of the employer.¹⁷⁷ In the leading case for this doctrine, the operator of a high-lift loader was injured after he had jumped off the vehicle in apprehension of its tipping over. The manufacturer of the loader was held liable even though the victim had never received adequate training to operate the device and had been assigned to the task by his employer on the day of the accident only because the regular operator had not reported for work. 178 What is most remarkable about this decision is not its result but that the court did not even care to discuss the involvement of the employer. Instead, it analyzed the case as if the loader had been distributed directly to consumers—a proposition clearly in conflict with the facts. 179 Manufacturers of equipment and raw materials are held liable for the consequences of workplace accidents and diseases not only if the employer entrusted the

Post Remedies for Workplace Injuries, 5 J.L. ECON. & ORG. 185, 192 (1989).

^{175.} Weiler, supra note 168, at 829.

^{176.} As to Germany KÖTZ & WAGNER, *supra* note 8, at 306-307; as to France LAMBERT-FAIVRE & PORCHY-SIMON, *supra* note 8, para. 388.

^{177.} The leading case is, Barker v. Lull Eng'g Co., Inc., 573 P.2d 443 (Cal. 1978); within the context of asbestos the leading case is, Anderson v. Owens-Corning Fiberglass Corp., 810 P.2d 549, 552-553 (Cal. 1991); *cf. also* Weiler, *supra* note 168, at 836-837.

^{178.} Barker, 573 P.2d at 447.

^{179.} See id. at 454.

equipment to unskilled, untrained, or otherwise unable employees, but also if he failed to take simple precautions, ignored safety instructions, or removed safety devices installed by the manufacturer. A study undertaken in the 1970s—before the onslaught of mass tort litigation involving asbestos-related diseases—found that one quarter of all product liability cases filed by employees against third parties involved some negligence on the part of their employers. ¹⁸⁰

3. A Critique of Third-Party Liability for Industrial Injuries

The legal problem that lies at the root of the current situation is not the immunity of third parties in general. The failure to grant third parties the same immunity as the employer is common to all workers' compensation systems. This is for good reason, since it is essential to preserve the incentives of third parties to take care.

a) Deterrence

The real issue is not the liability of third parties in general, but the duties of care imposed on manufacturers of equipment and raw materials in particular. Obviously, the safety measures taken by equipment manufacturers interact with the precautions taken by the employer. To a large degree, the precautions of employers and those of equipment manufacturers are substitutes of one-another. In such a situation, it is essential to adjust the standard of care and the attribution of liability in a way that the total costs of precautions taken to reach the efficient level of harm are being minimized. This cannot be done if the focus is on one party only, i.e., the equipment manufacturer, and the outcome will be even worse where the focus is on the wrong party, i.e., on the party that is not in control of the decisions proximate to the accident or cause of disease.

Employers are not only buyers of equipment and raw materials but professional parties with duties of their own to control the use and operation of such equipment and to manage the associated risks. It is the employer who controls the workplace and is thus in the best position to manage occupational risk. The employer decides which safety equipment to install and how to use it, how to educate and train employees, how long to expose employees to hazardous conditions, which employees to assign to a certain task, etc. To the extent that a large portion of the costs of workplace accidents and occupational diseases is shifted away from employers and onto equipment manufacturers, the incentives of employers to take precautions and to invest in workplace safety are seriously undermined. In effect, the party that is closest to the risk and could most

effectively control the level of workplace safety—the party who is the "cheapest cost avoider"—is insulated from liability. The adverse effects of such a rule are particularly pronounced where the employer entrusts dangerous machinery to employees who are unskilled in its proper use. In this case, a liability rule targeting the manufacturer generates incentives to make equipment fool-proof, i.e., so safe that it can even be operated by unskilled people without causing any harm. The same level of safety could be achieved at lower cost if the employer contributed his share of precautions. These arguments also apply to asbestos-related diseases as the employer decides on the duration and conditions of exposure, e.g., whether to install ventilation or provide protective clothing. To place the full burden upon manufacturers of asbestos products is not the most efficient way to achieve a desired level of safety.

The choice of precautions and the distribution of the costs of liability between employers and their suppliers of equipment and raw materials should be left to the contractual arrangements of these parties and not be superimposed by an overbroad system of products liability. Under the current system, the parties to the sales contract of work equipment lack the power to allocate the responsibilities for safety measures and the resulting liabilities between them. This situation cannot be remedied within workers' compensation law but must be addressed in the law of products liability. With the exception of cases of flagrant product defects, the responsibility for the safety of work equipment must be focused on the employer, not the manufacturer.

b) Administrative Costs

The second concern raised by adding third party liability relates to administrative costs. While workers' compensation systems are much cheaper to run than the tort system, they still consume resources in their administration. These resources are well invested if workers' compensation institutions manage to settle the dispute. In the United States, however, this is not the case. Workers' compensation provides only the first layer of compensation, if the employee claims anything from these carriers at all. In many cases, a second suit is brought in tort so that another layer of dispute, litigation and, in case of success, compensation is added. Given that the administrative costs of the tort system are already high on

^{181.} SHAVELL, *supra* note 100, at 189-90 (discussing the notion of least-cost avoider in bilateral relationships). The present case is different as it presents a trilateral relationship involving the victim-employee, her employer, and the manufacturer of equipment or raw materials.

^{182.} See supra, Part V.D.

^{183.} Weiler, supra note 168, at 839.

their own, the total sum of administrative costs will be truly exceptional if the costs of two systems are added together. In granting full tort damages on top of benefits available in workers' compensation, American law puts a double burden of administrative costs on society. To put this point in perspective, consider the following estimates of costs spent dealing with asbestos-related diseases. In the U.S., these costs as of 2005 were estimated to run up to \$72 billion, of which \$40 billion or roughly 57 percent were spent on litigation costs. These costs are likely to increase in the future, as illustrated by the (failed) proposal of the Fairness in Asbestos Injury Resolution Act of 2005, which contemplated setting up a trust fund in the amount of an additional \$140 billion. 184 In contrast, the German workers' compensation carriers are expected to spend roughly \$10 billion on benefits and health care for asbestos related diseases. 185 Given that the administrative costs of this system are 10 percent and that the population of Germany is a little more than one quarter of the U.S.', these numbers translate into a hypothetical bill of \$44 billion. This includes administrative costs of \$4 billion, as compared to U.S. litigation costs of \$40 billion.

VI. CONCLUSION

General social security schemes awarding substantial benefits for disability regardless of cause do not work since they are vulnerable to ex post moral hazard, i.e., abuse and fraud. The taxpayer, the government, and the agencies of the social security administration are unable to successfully control abuse. The experience of the United Kingdom and the Netherlands, both of which abandoned workers' compensation for a combination of general social security benefits and employers' liability, is not encouraging enough to recommend such a move. Therefore, the replacement across the board of liability in tort by general no-fault compensation schemes is not desirable. This is true even if the adverse effects of such schemes on incentives to take care and adjust activity levels are ignored. If the adverse effects of ex ante moral hazard in the form of reduced care and ex post moral hazard in the form of phony claims are added together, the case against no-fault is even more compelling.

Focused no-fault schemes like workers' compensation do work if they are managed well. Overall, it seems that the traditional systems of workers' compensation have done much better in coping with the retreat of the welfare state and with the onslaught of long-tail risks in the form of

^{184.} Lester Brickman, An Analysis of the Financial Impact of S. 852: The Fairness in Asbestos Injury Resolution Act of 2005, 27 CARDOZO L. REV. 991 (2005-2006).

^{185.} Joachim Breuer, Asbest – eine globale Herausforderung, 2005 BUNDESARBEITSBLATT 20.

illnesses involving long latency periods, such as asbestosis and mesothelioma. The crucial element that defined the relative success of workers' compensation is that there is a party, or a group of parties, who have to come up for the bill and therefore have an incentive to control costs, an incentive the taxpaying public does not have or cannot articulate effectively. These parties must be put in charge of the claims resolution process, not in the sense that they are able to control outcomes but in the sense that they determine how the trade-off between administrative costs and accuracy in sifting out invalid claims is being made.

Once a focused no-fault scheme has been established, courts and legislators must ensure that the system is not doubled up by the liability system. Otherwise, the promise of workers' compensation, namely substantial savings in administrative costs, is wasted. Workers' compensation systems are currently in danger of being pushed aside by ever more expansive exceptions from the immunity principle in cases of aggravated fault. Lawmakers could deflate incentives to circumvent the immunity principle and to sue employers for full damages in tort by increasing the benefits available to victims of serious injuries and diseases. This group of victims does not receive full compensation under the current regime and thus has a strong incentive to resort to tort remedies rather than to workers' compensation in search of full income replacement, as well as damages for nonpecuniary losses. The additional benefits should be made available within workers' compensation rather than adding tort as another costly compensation system on top of workers' compensation schemes. The risk of ex post moral hazard in the form of exaggerating or imitating injuries, while considerable in the area of minor injuries, seems manageable with regard to serious injuries and, particularly, cases involving death.

The development in the United States is particularly troublesome for the additional reason that workers' compensation has been overtaken by third party liability for defective products in many important areas, such as the harm caused by asbestos-related diseases. Legal systems that run workers' compensation schemes and liability systems in tandem and with regard to the same type of injury save nothing in terms of administrative costs but rather impose a double burden on society. In addition, the shifting of the costs of work-related accidents and diseases onto manufacturers of equipment and raw materials distorts incentives to take care. Employers rather than equipment manufacturers are the cheapest cost avoiders with regard to occupational hazards and thus must be made to internalize the costs associated with workplace accidents and occupational diseases. As a consequence, products liability law needs to retreat from industrial injuries.

The responsibility for the safety of the workplace vis-à-vis workers must be focused on the employer, and the liability of equipment manufacturers should be left to the contract made between them and employers.