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Liability Rules, Compensation Systems and Safety at Work in Europe

by Chris Parsons*

This paper begins by tracing the development of work injury compensation systems in Europe and discussing their rationale. It goes on to classify and compare compensation systems, exploring, in particular, the relationship between employers' liability and workers' compensation regimes. In doing so, it analyses the relationship between the legal bases of the various regimes, the security systems they employ and the incentives they create for workers, employers, insurers and others. After comparing European statistics for industrial injuries the paper considers the determinants of industrial safety and, in particular, how the operation of various work injury compensations systems affects accident levels. The paper then considers the impact that health and safety legislation set at European level has on workers, employers and other stakeholders in compensation systems, including insurers. It ends by considering the question of harmonization: is there any case for greater harmonization of work injury compensation systems at European level and, if it is considered desirable, is there any real prospect of such harmonization actually being brought about?

1. Introduction

Work accident compensation is a field where there is much scope for scholarly research. The confluence of several streams of jurisprudence, including labour law, tort law and social security law produces interesting territory for lawyers, economists and students of social policy. There is also a complex interplay of different types of security system. These systems include, in varying combinations from one country to another, commercial and social insurance, first-party and third-party covers and an array of public, semi-public and private insurance carriers. In fact, in Europe no two systems for compensating work injuries are the same. We may note that that the system in the U.K., the author's country, is more different than most.

Of course, work injury compensation is also of great importance to millions of people who have no interest at all in such abstruse academic matters. Every year around 4.75 million people in Europe suffer an injury at work that results in more than three days' absence[1] and, especially where the injury is serious, they rely on prompt and fair compensation to maintain the quality of their lives and support their families. Governments acknowledge this imperative and, almost universally, have given work injury compensation priority over most other social security needs. Whether governments should do this is another question, and one that we will consider shortly.

This paper begins by tracing the development of work injury compensation systems and then classifies and compares them. It analyses the relationship between the legal bases of the

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[1] Didier Dupré, "Accidents at work in the EU in 1996", *EUROSTAT,* 2001.

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various systems, the security systems they employ and how all these things affect industrial safety. The paper also considers the impact that health and safety legislation set at European level has on workers, employers and other stakeholders in compensation systems, including insurers. It also touches upon the question of harmonization: is there any case for greater harmonization of work injury compensation systems at European level and any real prospect of a such harmonization actually being brought about?

2. The development of work injury compensation systems

Compensation systems for work injuries began to emerge in the 19th century. A number of factors contributed to their development. The most obvious was growing industrialization in Europe and elsewhere. This was followed, in due course, by mounting concern about the human cost, in accidents and illness, of the "factory system" to which industrialization gave birth and associated developments in the use of mechanical power, including steam. Pressure generated by social reformers and increasingly powerful labour unions moved governments to act, persuading them to introduce systems that gave priority to injuries which were inflicted in the workplace. Of course, whether systems that provide special compensation to people who are injured in the course of their employment can be justified on economic or moral grounds is a moot point. Various reasons have been advanced to justify preferential treatment of work injury victims, for example:

- The high value which society places on work;
- The fact that employees are obliged to obey their employers and the latter have ultimate control over conditions in the workplace and matters of safety;
- The need to provide an incentive for people who carry out dangerous but essential work, such as mining.

In fact, none of these propositions is especially convincing. The first argument, based upon the social value of work, is weakened by the fact that many work compensation schemes do not compensate self-employed persons, whose work is just as valuable as those who are employed. Furthermore, no special compensation system exists for many other groups who make a valuable contribution to society. It has also been suggested that the benefits of work are largely private, creating gains principally for employers and employees, so there is no particular reason why the state (as distinct from the employer) should develop special compensation arrangements.[2]

The second point, the control exercised by the employer, is a good argument for safety legislation, but not for compensation. Indeed, the provision of compensation for industrial injuries may do very little to improve safety and, in some cases, may actually discourage the taking of safety measures. It is often suggested, for example, that "no-fault" compensation schemes, by failing to distinguish between negligent and non-negligent employers discourage safety measures, especially when employers' contributions are not linked to the incidence of injury within the firm. This subject is considered later in the paper.

The same arguments can be used to counter the third proposition, compensation as an incentive to carry out dangerous work. In any case, employers can easily provide a greater incentive to carry out risky work by paying higher wages, should they wish to do so.

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[2] Clark, D. and Smedley, I., 1995, *Industrial Injuries Compensation, Incentives to Change*. London: The Social Market Foundation.

In reality, government decisions to introduce special compensation schemes for industrial injuries have often been heavily influenced by political considerations, including a desire to satisfy the labour unions. This was certainly the case with Bismarck's ground-breaking German workers' compensation scheme of 1884. These schemes can best be regarded as concessions won by representatives of organized labour which, once they have been achieved, the latter have been reluctant to give up.

Historically, there are three main phases in the early development of work injury compensation systems. However, one phase or another has been omitted in some countries and there are many variations in matters of detail. The three phases are:

(1) A "common law" period, when work injury compensation, to the extent that it was available at all, was governed by the ordinary principles of tort law.
(2) A period of employers' liability law, when the common law was modified or replaced by more specific tort-based rules imposing liability upon the employer.
(3) A period of workers' compensation law, either in addition to or in substitution for employers' liability law. As we shall see, this workers' compensation law was also, in some cases, effectively an insurance law.

During the first, "common law" period, the chance of an injured worker actually obtaining compensation was often, in reality, almost non-existent. The lack of adequate remedies was a consequence of the undeveloped state of tort law in many jurisdictions, and the availability in some countries of defences that an employer could easily use to defeat claims by injured workers. For example, Anglo-American common law granted employers an "unholy Trinity" of three defences, one or another of which could be used to defeat almost any claim. These were the defences of "*volenti non fit injuria"* (consent or assumption of risk on the part of the employee), contributory negligence (which was a complete defence in England until 1945), and the doctrine of common employment, or "fellow servant rule" as it is known in the U.S. This last defence was particularly effective. It was based on the supposition that an employer could not be held responsible for an injury which one worker inflicted upon another. Courts sometimes allowed this defence to be taken to ridiculous extremes, holding, for instance, a station-master to be in "common employment" with a labourer on the railway line who was injured in a railway accident attributable to the negligence of the former.

In the second phase, legislatures typically aimed to mitigate the harshness of the common law by introducing specific rules of employer liability, or at least, weakening the effect of defences such as those described above. Thus, the English Employers' Liability Act of 1880 effectively abolished the "fellow servant" rule and rendered the employer liable for injuries arising from defects in the working environment which were attributable to the negligence of the employer or of a manager or supervisor to whom authority had been delegated. England was not the first country to enact such a law, somewhat similar legislation having been introduced earlier in Germany (1871) and Switzerland (1877).

Rules based on employers' liability, whether those of the common law or based on specific legislation, proved inadequate in every case. Workers remained restive and pressure for compensation systems that did not depend on fault or negligence persisted. Thus, before long, a third phase of development began, that of workers' compensation. In swift succession, workers' compensation laws were passed in Germany (1884), Austria (1887), Norway (1895), Denmark and England (1897), Finland and Italy (1898), and France, Spain and Switzerland (all in 1899). In England and France, initially, the employer was required to make the compensation payments and was given the privilege to insure against this liability or not, as he saw fit. In most other countries, however, insurance was compulsory, so workers' compensa-

tion laws were, in effect, insurance laws. The United States, which at this time tended to follow European practices (and, in legal matters, the common law of England) was remarkably slow to follow. The first employers' liability statute of any kind was adopted by Alabama in 1885, followed by Massachusetts in 1887, and in later years by many other states, but no single state adopted a workers' compensation law until long after every major European country had such a law in full operation. Only from 1911 onwards did workers' compensation begin to replace employers' liability in the U.S.

Once the basic pattern described above had been set, detailed development of work injury compensation systems continued. However, the process of evolution varied considerably from one country to another, so the systems of today are by no means all alike. In the next section we will attempt to classify modern systems and make some comparisons.

3. Classification of work injury compensation systems[3]

Comparing work injury compensation systems is not easy because they are subject to a large number of variables. However, the following factors provide a reasonable basis for comparison:

(1) The degree of integration, i.e. the extent to which the arrangements for work injuries are integrated with those for compensating other injuries;
(2) The relationship within each system between (a) tort compensation ("employers' liability") and (b) non-tort compensation ("workers' compensation");
(3) The nature of the insurance arrangements (if any) for both (a) and (b);
(4) The distinctions (if any) which each system makes between accidents and diseases or between some diseases and others.

Each of these things is considered in turn.

3.1 Total, partial, or non-integration?

In most countries some, if not all, compensation for work injuries is provided through a state social insurance scheme. In some cases, industrial injury compensation is a separate component, but in others integration is almost total, in the sense that the system makes little distinction between work accidents and other sorts of injury. The key example of this approach is found in New Zealand, where the state accident compensation scheme does not distinguish between different sources of injury, except as regards compensation for disease, which is limited to occupational illnesses. At the same time, an employee's right to sue his or her employer in tort has been abolished in New Zealand. As a result, concepts such as "employers' liability" and "workers' compensation" have become almost redundant, because the injured employee has hardly any special rights.[4]

No European country has gone this far. The nearest equivalent is the Netherlands, where the social insurance programme provides, amongst other things, the same compensation for

[3] This section of the paper, and parts of section 5 and 6 are developed from an earlier article by the author: "Compensation and insurance for injuries at work: a European perspective", *International Journal of Insurance Law*, July, 1999, pp. 214–233. The author would like to thank the publishers, Lloyd's of London Press, for their permission to reproduce the material here.

[4] Except in respect of occupational disease.

injuries and diseases regardless of whether they are job-related or not. On the other hand, claimants in the Netherlands, unlike those in New Zealand, are not barred from suing their employers in tort and can obtain extra compensation in this way, although such actions have been fairly infrequent, at least in the past.[5] To this extent the Netherlands' compensation system retains an "employers' liability" element, albeit a fairly small one.

All countries surveyed by the author, other than those mentioned above, have compensation systems that make some distinction between occupational and non-occupational injuries. As we have seen already, people who suffer industrial injuries have usually been given better rights to compensation than those who are injured in other circumstances. The extent of this "industrial preference" (or "industrial premium") has been reduced in many countries, including the U.K., but it is still a distinct feature of many accident compensation systems even though, as we have seen, it is hard to justify.

We will now consider the methods by which special compensation for work injuries can be delivered and, in particular, the relationship between tort compensation for industrial injuries and non-tort compensation.

3.2 Employers' liability and workers' compensation systems

Neither the term "employers' liability" nor "workers' compensation" is particularly precise. However, these are useful expressions to describe two basic methods of delivering industrial injuries compensation, which can operate either exclusively or in combination.

3.2.1 Workers' compensation

Workers' compensation models vary a great deal, but they have two key characteristics. First, they provide compensation on a no-fault basis. The claimant is not required to prove negligence or breach of a legal duty on the part of the employer, and fault on his or her own part is usually irrelevant except, perhaps, in the case of willful misconduct or self-inflicted injuries. Second, workers' compensation systems rarely, if ever, provide "full" compensation for injuries. They aim only to provide reasonable redress for economic losses. Non-economic losses (such as pain and suffering) are rarely compensated, although exceptions are found in the workers' compensation systems of Switzerland and Sweden.[6] Core benefits include the cost of medical care and rehabilitation, replacement of lost earnings (usually limited to around 70 per cent of income and often subject to a maximum figure) plus funeral costs and benefits for surviving dependants in fatal cases (e.g. 30 to 40 per cent of the deceased's previous earnings for a surviving spouse in Germany).

3.2.2 Employers' liability

Employers' liability models, or tort-based systems, are schemes where the injured employee must establish legal responsibility on the part of the employer if he or she is to secure compensation. The obligation to pay compensation then falls on the latter although, of course, the risk may be transferred to a liability insurer. In most cases tort law requires the employee to prove negligence or fault. However, in some cases the burden of proof is reversed,

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[5] See note 14 below and accompanying text.

[6] Swiss workers' compensation insurance includes "integrity compensation" and the Swedish law on workers' compensation allows an element of compensation for non-economic loss.

and in other cases liability may be strict, although strict employers' liability is somewhat anomalous in a system where no-fault workers' compensation benefits are also available.[7] In contrast to workers' compensation models, tort-based systems purport to provide full compensation. The successful claimant is entitled to redress for all losses, both economic and non-economic. This may include, amongst other things, full replacement of lost income, medical costs, and compensation for non-economic losses such as pain, suffering and loss of amenities (loss of faculty).

3.3 The relationship between employers' liability and workers' compensation

Since employers' liability and workers' compensation systems can operate exclusively or in combination, three types of regime are possible:

(a) A regime where employers' liability is the exclusive remedy for industrial injuries;
(b) A regime where workers' compensation is the exclusive remedy for industrial injuries;
(c) A regime which combines employers' liability and workers' compensation.

As we shall see, (a) is unknown in Europe, (b) is quite common, and (c) is the most common of all. Each is considered in turn.

3.3.1 Employers' liability as an exclusive remedy

In theory, a state might decide that its injured workers should receive no compensation of any sort in the absence of fault or breach of a legal duty on the part of the employer. There would be an absence of "no-fault" benefits for injured employees and, taking the model to its extreme, no social insurance benefits at all, either general or specific. In fact, no European country has gone nearly this far. All have retained some form of workers' compensation scheme[8] and, indeed, there is hardly a country in the world where no such programme exists.[9] In fact, the U.K. Government has recently contemplated the abolition of its own no-fault workers' compensation regime (the state Industrial Injuries Scheme) but it cannot be supposed that injured employees would be denied all social insurance benefits if the state workers' compensation scheme were to be abolished. They would still be entitled to general disability benefits, albeit at a lower level. In any case, replacement of the state workers' compensation scheme with a privately insured alternative would probably be the most favoured option.[10]

3.3.2 Workers' compensation as an exclusive remedy

Employers' liability systems, which rely upon tort remedies, are often criticised for their inefficiency, with high transaction costs and slow claim settlements. Furthermore, the adversarial character of tort-based compensation systems makes them potentially damaging

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[7] Reversal of the burden of proof is uncommon in English law, but strict liability exists in a number of areas of employers' liability – for example, under various sets of regulations made under the Health and Safety at Work Act 1974.

[8] Apart from those countries mentioned earlier, where integration is total and the system does not in any case distinguish between employment accidents and other sorts of injury.

[9] In a handful of underdeveloped countries workers' compensation exists as the *only* social insurance benefit.

[10] For a general discussion of options for reforming the U.K. systems see Parsons, C., 1999, "Industrial injuries and employers' liability – a search for the cure" monograph, *Chartered Insurance Institute*, London.

to industrial relations. For these reasons many countries, including a number in Europe, have abolished the employee's right to sue in tort, allowing only a claim for defined workers' compensation benefits.[11] For the worker, the loss of tort rights against the employer and of "full" tort compensation is balanced by the right to no-fault benefits that are easier to claim. Of course, when workers' compensation is substituted for the tort remedy in this way the position of the injured employee may appear anomalous, in relation to that of other accident victims. A number of countries have therefore extended the "no-fault/limited compensation" principle to other groups, such as road accident victims. As we have seen, the ultimate result may be a fully integrated no-fault accident compensation scheme such as that of New Zealand.

Within Europe, Germany provides a prime example of what is virtually a pure workers' compensation system.[12] Introduced in 1884, the German scheme was the first workers' compensation programme of any nation. It has been imitated worldwide. Other European nations in this category are France, Austria and Switzerland. Outside Europe we find similar systems in most U.S. states.

Although workers' compensation systems abolish or heavily restrict tort claims against *employers*, it does not follow that injured workers lose all their rights to bring a tort action. On the contrary, rights against persons *other than the employer* are often preserved, giving the injured employee alternative targets for legal action. These may include architects, builders or engineers responsible for the design, construction or layout of the workplace, safety consultants and, perhaps, directors of the injured employee's firm. However, the most obvious targets are manufacturers or suppliers of defective machinery or equipment used at work and suppliers of hazardous substances used in the workplace. This phenomenon – the displacement or transformation of work injury claims into product liability claims – is clearly evident in the U.S. and is one of the reasons for the extraordinary prominence of the product liability risk in North America.[13] The incentive for legal arbitrage of this sort is a weakness of exclusive remedy workers' compensation systems.

3.3.3 Regimes that combine employers' liability and workers' compensation

In many European countries compensation for industrial injuries is provided partly through an employers' liability system and partly through a workers' compensation scheme.

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[11] Although Williams (1991) reported that workers' compensation was an exclusive remedy in only 30 per cent of the countries surveyed many of the large industrialized nations were found in this 30 per cent, including the U.S. and Germany (Williams Jr, C.A., *An International Comparison of Workers' Compensation*, 1991).

[12] In fact, even in Germany the tort remedy has not quite disappeared. See notes 15 and 16 and accompanying text.

[13] Research suggest that about 14 per cent of product liability claims in the U.S. arise from workplace injuries: see Moore, M. J. and Viscusi, W. Kip, 1990, *Compensation Mechanisms for Job Risks*, Princeton University Press, chapter 10. The trend is particularly strong with regard to occupational disease, where modest benefits and short limitation periods made workers' compensation remedies particularly unsatisfactory in the U.S. Thus, victims of occupational asbestos-related diseases, debarred from suing their employers in tort, have increasingly sought to sue manufacturers and suppliers of asbestos products. Machinery manufacturers are another common target and there have been increasing instances of class actions being taken against computer manufacturers for repetitive strain injuries (RSI). Munich Re suggest that claims by soldiers for dioxin poisoning from "Agent Orange", the second largest series of product liability claims after asbestos, may also be regarded as work-related. They note that "The principle of shifting liability like a political hot potato is characteristic of US liability law. US employers have long since passed on this hot potato and attempts to return it to them have failed. The losers are the manufacturers", Munich Re, *Employers' Liability*, 1993, pp. 27–28.

The balance between these two sources of compensation varies considerably, but in most European countries employers' liability is of marginal importance only, the contribution of tort claims against the employer to the totality of industrial injuries' compensation being very small. There are a number of reasons why, in an apparently "mixed" system, employers' liability may be relatively insignificant:

- Workers' compensation benefits may be so generous that few people consider a tort claim worthwhile;[14]
- Tort claims by employers may be limited to cases where there is more than "ordinary" negligence – for example, proof of intent or gross negligence may be necessary;[15]
- Tort claims by employees may be restricted to particular types of accident;[16]
- Claims against employers may be limited to recoveries by workers' compensation insurers – direct claims by employees being barred or severely restricted;[17]
- Employees may be entitled to extra compensation under collective industrial agreements with their employers.[18]

The U.K., where employers' liability is highly developed, and total employers' liability claim payments actually exceed those under the Industrial Injuries Scheme (the state workers' compensation component of the system), is very much the exception. Thus, if we were to rank European countries according to the degree of penetration of employers' liability within the industrial injuries compensation system we would find the U.K. (together with Ireland) at the far end of the scale. At the other extreme would be Germany, Austria and France, where employers' liability is of little or no importance. In between we would find countries where workers' compensation is the main source of compensation, but employers' liability plays a rather more significant role, such as Italy and Spain. Unfortunately, it would be virtually impossible to locate most European countries accurately on the scale because, apart from exceptions such as the U.K., separate figures for employers' liability claim payments are rarely available.[19]

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[14] The Netherlands, where welfare benefits have traditionally been generous, are an example. However, the U.K. Pearson Commission reported some increase in tort claims against employers as early as 1978 and recent cuts in state welfare programmes appear to have accelerated the process. See Faure, M. and Hatlief, T., 2000, "Social security versus tort law as instruments to compensate personal injuries: a Dutch Law and Economics perspective", working paper, Maastricht University Faculty of Law.

[15] In Germany claims are limited to cases of intent. In France and Switzerland intent or gross negligence is required (for most types of claim).

[16] In Germany direct claims by employees (apart from cases of intent) are restricted to "participation in general traffic" – e.g. accidents during travel to or from work caused by the employer or fellow employee but which are not attributable to the sphere of work (e.g. car-sharing schemes amongst employees).

[17] In a number of European countries (including Germany, France, Switzerland) most claims against employers are actions for recovery brought by the workers' compensation insurer, and even these are infrequent. Direct claims by employees are subject to yet greater restrictions, and are very uncommon.

[18] For example, in Sweden tort claims against employers are permitted in theory but most employees belong to schemes under which they forego the right to sue the employer in exchange for a "topping up" of the benefits provided under the state workers' compensation scheme. This is achieved through "employers' no-fault liability insurance" which employers purchase in the private insurance market.

[19] Employers' liability is rarely a separate line of insurance business in Europe and claims are usually included in the figures for general (public) liability.

3.4 Is there a trend towards employers' liability models?

Some writers suggest that there is a general trend away from workers' compensation systems towards employers' liability models. The main reason given is the funding problems that demographic trends have produced in welfare and social security systems throughout the world. This has led, in some countries, to cuts in public spending that have reduced the benefits available to injured workers and have increased the incentive to seek tort compensation.[20]

In the U.K. this trend has been very marked. In the early 1970s employers' liability was still relatively insignificant when compared with the state workers' compensation system (the Industrial Injuries Scheme or "IIS"). Employers' liability payments accounted for only about 34 per cent of the total as against 66 per cent for the IIS. The position is now very different, with total employers' liability insurance payments[21] actually exceeding those under the state scheme,[22] accounting for about 52 per cent of the total as against 48 per cent for the IIS.

The U.K. trend can be partly explained by reductions in public spending. There have been a number of cuts in the Industrial Injuries Scheme since 1972, most of which took place in the 1980s. As a result, the total cost of the scheme is lower in real terms than it was in the late 1970s. However, equally significant is the expansion of tort liability that we have seen over this period. Judicial and legislative developments have generated damages claims by employees in circumstances where hitherto either state benefits only, or no compensation at all, would be available. The expansion has been particularly marked in a number of key areas, such as claims for disease and psychiatric injury.[23] Harmonization of health and safety law at European level has contributed to the trend of expanding tort liability in the U.K. This point is developed later. In fact, the scope of the state workers' compensation scheme has also expanded somewhat through the prescription of new diseases, but the pace of its development has been less rapid.[24]

Besides this broadening of the reach of tort rules there have steep rises in the size of damages awards in the U.K. These rises far exceed increases in the state workers' compensation scheme benefits, which are raised annually, but only in line with price inflation. Tort damages for personal injury, and hence employers' liability claim payments, have risen at a much higher rate than either prices or earnings.[25] Finally, the U.K. Government, along with European governments generally, has shown a determination to use private insurance as a

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[20] Munich Re note: "One development that is common to many countries . . . is the growing prominence of the various liability models due to the general crisis in welfare systems and the consequent return to liberal economic models", Note 13 above, at p. 7.

[21] £738 million in 1995.

[22] £731 million in 1995.

[23] See Parsons, C., 2001, "Compensating psychiatric illness: issues of liability and insurance", *Journal of Insurance Research and Practice*, 16, Part 1, pp.14–33.

[24] For example, Raynaud's Phenomenon (Vibration White Finger or "VWF"), the second most common source of occupational disease claims against U.K. employers' liability insurers, was not prescribed under the state workers' compensation scheme until 1985, by which time there had been no fewer than four reports of the Industrial Injuries Advisory Council on the subject.

[25] According to a 1997 U.K. study the cost per unit of exposure to insurers from serious injuries rose at an annual rate of approximately 13 per cent between 1986 and 1995 – 6 per cent faster than average earnings (*LIRMA UK Bodily Injury Study*, London International Insurance and Reinsurance Association (1997)). The trend was confirmed in a recent follow-up to the study. Recent judicial decisions have also pushed up damages awards: e.g. *Wells* v *Wells, Thomas* v *Brighton Health Authority, Page* v *Sheerness Steel Co. plc* [1998] 3 All ER, which reduced the discount rate for calculating multipliers for future loss, and *Heil* v *Rankin* [2000] 3 All ER 138, which raised the size of damages awards for non-economic loss in cases of serious injury.

means of extending the social security system. Thus, a recoupment scheme introduced by Social Security Act 1989,[26] and progressively tightened since,[27] enables the Compensation Recovery Unit (a government agency within the Department of Social Security) to recover from private employers' liability insurers a substantial portion of the benefits paid to those who are injured at work. This has further shifted the balance of responsibility for industrial injuries away from the state and towards the employer and his insurers.[28] In the future it is likely that publicly funded hospitals will be given a similar right of recovery against employers' liability insurers, in cases where work accident victims have been treated at public expense.[29] No doubt this principle could be extended to cover accident costs incurred by other public agencies.[30]

Although the trend toward employers' liability is especially strong in the U.K. and Ireland there is evidence of a similar movement in some other European countries, including the Netherlands[31] and Spain. Italy provides a further example. There the public workers' compensation insurer "INAIL"[32] provides compensation on a no-fault basis for financial losses (*danno patrimoniale*) attributable to work accidents. Compensation for financial loss in excess of that available from INAIL and for pain and suffering (*danno morale*) is recoverable from the employer, but only when the latter (or a fellow employee) has committed a grave criminal offence and there has been a breach of regulations on safety at work. In this case the employer deducts benefits paid by INAIL from the claim and refunds INAIL. However, the liability of employers increased markedly when, in the 1970s, Italian courts began to recognize the right of an employee to claim against his employer for temporary or permanent impairment of physical or mental integrity (*danno biologico*) on the basis of ordinary negligence.[33] Awards can be substantial: for example, a sum of lire 1,125 million was awarded to a 27-year-old with 75 per cent disability by a Milan court in 1981.

3.5 Insurance arrangements for employers' liability and workers' compensation

3.5.1 Employers' liability insurance

Because it is often of marginal importance only, employers' liability insurance is rarely written as a separate line of insurance business in Europe. In most European countries the risk, where it exists at all, is insured under public (general) liability policies, either tacitly or expressly. Separate employers' liability policies are found in only a few European countries, such as the U.K., Ireland and Cyprus. The U.K. is one of very few European countries where employers' liability insurance is compulsory for virtually all employees by law.[34] Carriers of

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[26] Now consolidated in the Social Security Administration Act 1992.

[27] Most recently in the Social Security (Recovery of Benefits) Act 1997 which extends the recovery rights to "small payments" of £2,500 or less, which were previously exempt.

[28] The CRU recovered £145 million in benefits in 1996/7 and £173 million in 1997/8.

[29] Public hospitals can already recover from motor insurers whose policyholders inflict injuries that result in hospitalization.

[30] Such as the police, fire crew and public bodies that are responsible for accident investigation.

[31] See note 14 above and accompanying text.

[32] Istituto Nazionale per l'Assicurazione contro gli Infortuni sui Lavoro.

[33] Under Articles 2043, 2087 and 2049 of the Italian Civil Code. Definitive recognition was given in Corte Costituzionale 88, 12 August 1979.

[34] Employers' liability insurance has recently become compulsory in Cyprus, which follows British practice in this and many other areas of insurance.

the employers' liability risk are invariably private rather than state insurers. In Europe employers' liability insurance is never combined with workers' compensation insurance, although the practice is common enough elsewhere.[35]

3.5.2 Workers' compensation insurance

Arrangements for workers' compensation insurance vary quite widely in Europe. Insurance can be voluntary or compulsory, although the latter is much more common. In some cases it is provided by the state as part of a fully integrated social insurance scheme, as in the Netherlands.[36] Alternatively, it may be a distinct component within a social insurance programme, such as the U.K. Industrial Injuries Scheme or the workers' compensation programme that forms part of the French national social security system (Sécurité Sociale). Again, it can be provided by recognized private insurers, as in the case of the "accident" element of the Belgian, Portuguese and Finnish schemes, which are discussed in the next section. Between the two extremes of state and private provision there is a variety of public and semi-public risk carriers. Examples include INAIL, the statutory public agency, mentioned above, which provides workers' compensation cover in Italy and the German Industrial Injuries Insurance Institutes – non-profit and largely autonomous corporations offering cover for member employers in particular industrial sectors (e.g. mining, gas and water, food, hotel and catering).

3.6 Treatment of accidents and diseases

Virtually all industrial injuries compensation systems in Europe make some distinctions between traumatic injuries ("accidents") and occupational diseases. Typically, workers' compensation cover operates in respect of all occupational accidents[37] but only some diseases. Cover for the latter is often restricted to "scheduled" or "prescribed" diseases, such diseases being added to the list or schedule only when a clear causal connection has been established between the illness and particular types of work.[38] However, each country works with its own list of diseases, and the lists vary in their formulation and detail. For example, there are currently 67 prescribed diseases under the U.K. Industrial Injuries Scheme compared with around 40 in Spain and over 80 in France. Of course, tort-based employers' liability claims, where a country's law permits them, may be brought in respect of any disease, provided the illness is real and was clearly sustained in the course of employment. Successful tort/employers' liability claims in respect of an unscheduled disease may eventually lead to its being prescribed under a country's workers' compensation system, but there is often a substantial time lag in this process.[39]

Three European countries, Belgium, Portugal and Finland, have different security systems for accidents and occupational diseases. In each case compensation for disease is provided exclusively under a state scheme with the "accident" risk being retained by the

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[35] E.g. in some U.S. states, Australia and Singapore.

[36] Although there has been quite extensive "privatization" since 1993.

[37] Although there is considerable variation in the treatment of accidents occurring in the course of travel to and from work, which may be included or excluded.

[38] In a number of countries, including Germany, Switzerland and Austria, compensation for a non-scheduled disease may be awarded when the illness is unequivocally connected with a particular claimant's work.

[39] See note 24 above.

employer, who is required to insure this liability under an occupational accident insurance policy underwritten by a recognized private insurer. In the view of the author, this is a good division of the risk. In particular, it offers a solution to the problem of occupational disease, which has been described as the "Achilles' heel" of industrial injuries compensation systems. Determining whether or not a disease is occupational in origin is all but impossible in many cases, making insurance settlements difficult and raising the likelihood of expensive disputes. Again, the long-tail nature of many disease claims impedes the proper working of the mechanisms of private insurance, preventing accurate pricing and reserving, and undermining the beneficial effects of experience rating systems. These problems are seen in their most acute form in the U.K. employers' liability market, where insurers have become locked into paying full compensation at current levels on causation-based contracts priced (or rather underpriced) and written many years ago. Problems of this sort are unlikely to arise where cover is restricted to industrial accidents only. Therefore, an argument for removing the "disease risk" from the private insurance market can be based on the fact that neither the tort system nor the liability insurance mechanism works effectively where disease is concerned. Equally, there is a good argument for confining the "disease" risk to the state. In particular, the state (unlike the private insurance market) is free to fund benefits for disease on a "pay as you go" basis, making periodic adjustments in benefits and in levels of contributions or taxes as circumstances require and resources permit.[40]

4. Liability rules, compensations systems and safety at work

4.1 The incidence of occupational accidents and diseases in Europe

The risk of injury at work, like the risk of injury on the road, is not uniform across Europe. Countries differ in terms of their industrial make-up and speed of development, so the proportion of workers in heavy and hazardous occupations will obviously vary. Even within the same industrial sector, workers in one country are likely to encounter hazards that differ from those faced by their European neighbours. Thus, for example, the risks faced by coal miners will vary from one country to another according to the type of coal extracted, the method of mining used, the mineral formation and depth of the mines, and presence of hazards such as water and fire-damp. Again, the risks faced by workers in the construction industry will vary internationally according to the materials and methods of construction traditionally used, the typical height of buildings, climatic conditions and the like. Furthermore, despite an increasing harmonization of legal safety standards – a topic that is pursued in section 5 – the safety "culture" continues to vary among different peoples. As a consequence of all this, it is not surprising to find quite marked differences in injury rates across Europe, both in overall terms and within particular industrial sectors. In fact, it is quite difficult to draw accurate comparisons between European countries, for a number of technical reasons. These include:

- Differences in the criteria used to define industrial accidents and diseases;
- Gaps and deficiencies in national statistics;

[40] The nearest that private insurers can come to "pay as you go" funding is to write liability policies on a "claims made" basis. However, there is a question mark over both the acceptability and legality of claims-made covers in respect of employers' liability and workers' compensation risks. See Parsons, C., "Industrial injuries and employers' liability – a search for the cure", Chartered Insurance Institute, London, 1999, pp. 38–42.

- Differences in methods of reporting injuries and collecting data;
- Differences in the level of under-reporting of accidents.

The last three points are linked. In some countries the main source of statistics is claims made through insurance and social security systems,[41] whereas in others they are a by-product of reports made by employers and others, usually to national labour inspectorates.[42] Levels of underclaiming are quite low in insurance and social security systems, so statistics drawn from these sources will usually be almost complete. By contrast, reporting levels are much lower in countries where declarations are made to labour inspectorates. For example, the average reporting level in the U.K. is estimated at only 47 per cent, varying from 21 per cent in the finance and business sector to 95 per cent in extraction and utility supply. In Denmark the average reporting level is estimated at 56 per cent, and in Ireland it may be as low as 36 per cent.[43] We must therefore be careful not to confuse a rise in the level of reporting with a rise in the level of accidents. For example, publicity surrounding the introduction of a new regulatory mechanism may increase the level of accident declarations as employers become more aware of their reporting obligations. However, in terms of the impact of the regulations on work injury rates, real improvements in safety may be hidden by this rise in the propensity to report.[44] For reasons that are obvious, levels of under-reporting are likely to be low in the case of fatal accidents, whatever system is used. With these reservations in mind, we can now look at some accident figures for Europe.

According to International Labour Office (ILO) statistics, overall injury rates[45] in industrialized European countries range from 0.57 per cent (in the U.K.) to 6.04 per cent (in Germany). Rates of fatal injury quoted by the ILO range from 0.010‰ (again in the U.K.) to 0.102‰ (in Spain). Figures for these and other selected European countries are given in Table 1 below.

Table 1:
Rates for work injuries and fatalities in selected European countries

Country	**Fatality rate (‰)**	**Injury rate (%)**
UK	0.010	0.57
Netherlands	not given	0.80
Belgium	0.054	2.69
France	0.050	2.97
Italy	0.070	3.19
Portugal	0.600	4.60
Spain	0.102	5.29
Germany	0.080	6.04

Source: ILO Yearbook of Labour Statistics, 1998.

[41] E.g. Belgium, Germany, Greece, Spain, France, Italy, Luxembourg, Portugal and Finland.
[42] E.g. Denmark, Ireland, U.K. and Sweden.
[43] Didier Dupré, note 1 above.
[44] Davies, R. and Elias, P., 2000, *An Analysis of Temporal and National Variations in Reported Workplace Injury Rates*, *UK Health and Safety Executive*, pp. 23–24. In some U.K. sectors reporting levels are rising quickly, e.g. in the finance and business sector from 7 per cent in 1989/90 to 21 per cent in 1997/98.
[45] Including fatalities and occupational diseases.

Figures produced by EUROSTAT (the statistical office of the European Commission), based on accidents occurring in the year 1996 and published recently, present a rather different picture, as we can see from Tables 2 and 3 below.

Although there are quite large variations in these sets of figures, the general pattern is reasonably consistent. It is interesting to note that overall rates of injury and fatality in the U.K. are considerably lower than other comparable E.U. Member States. Obviously, the low

Table 2:
Rates of fatal and of over 3 day injuries in Europe and the U.S. (1996)

Country	Fatality rate (‰)	Over three-day injury rate (%)	Persons covered
Finland	0.017	3.4	employees
UK	0.019	1.6	workers
Sweden	0.021	1.2	workers
Netherlands	0.027	4.3	employees
USA	0.027	3.0	workers
Denmark	0.030	2.7	workers
Ireland	0.033	1.5	workers
Germany	0.035	5.1	workers
EU average	**0.036**	**4.2**	
France	0.036	5.0	workers
Greece	0.037	3.8	workers
Italy	0.041	4.2	workers
Austria	0.054	3.6	employees
Belgium	0.055	5.1	employees
Spain	0.059	6.7	employees
Portugal	0.096	6.9	employees
Luxembourg	—	4.7	workers

Source: EUROSTAT, "Accidents at work in the EU in 1996 – Statistics in FOCUS, Theme 3 – 4/2000" (except for Netherlands and U.S. – source U.K. Health and Safety Executive).

Table 3:
Rates of fatal injury (per 1,000 employees) in six industry sectors in large EU states (1996)

Industry	Germany	U.K.	France	Italy	Spain
Agriculture	0.154	0.108	0.121	0.144	0.042
Manufacturing	0.032	0.014	0.041	0.062	0.084
Construction	0.086	0.056	0.208	0.176	0.289
Transport	0.156	0.012	0.183	0.145	0.213
Wholesale, retail and repair	0.025	0.004	0.042	0.024	0.038
Hotels and restaurants	0.010	0.003	0.003	0.015	0.019

Source: EUROSTAT and U.K. Health and Safety Commission (for U.K.).

overall injury rates quoted for the U.K. partly reflect its service-based economy, and the high injury rates quoted for Germany are not surprising given that a relatively large percentage of the country's workforce is engaged in manufacturing.[46] However, the U.K.'s safety record in comparable sectors, such as agriculture, the construction industry, manufacturing and transport, still looks rather better than that of other large European countries.

At this point it is worth entering a further caution. We should understand that a low injury rate is not necessarily "better" than a high one in anything but the most simplistic and popular sense. Economists will be far more interested in finding the optimal injury rate for a given country or industrial sector. This is never likely to be zero, because safety is costly and absolute safety will be prohibitively so. There will inevitably be a trade-off between safety and the goods and services that people must forego in order to buy it.[47] A state that demanded absolute safety at work would, in effect, have to de-industrialize and accept what would be, at least outwardly, a reduced quality of life. The total population that such a country could sustain would also be much lower. This raises fundamental questions about the value of life: is a large population in which many are at risk better or worse than a tiny population where all are secure? Clearly, the optimal level of safety will vary between industrial sectors and also vary from one country to another. It may well be in the best interests of developing countries, for example, to give safety a relatively low priority and accept a higher rate of accidents than would be tolerable amongst developed nations.

Comparison of occupational disease rates in different European countries is particularly problematic. Again, there are different national practices for the monitoring, reporting and recording of occupational illness. Furthermore, each country works with its own list of "prescribed" diseases. Since like is not always being compared with like, comparative studies sometimes produce startling variations. For example, a 1990 OECD study[48] recorded rates of reported disease ranging from one case in 100 in Sweden to one case in 1,000 in France. Obviously, there cannot be such a huge difference in the relative health of these two countries' labour forces. Distortions also arise as a result of the long latency period for many diseases. Thus, the relative position of different European countries in the OECD report in respect of their mortality from occupational disease may mainly reflect the extent to which each participated in coal mining 20 or 30 years ago, and not the conditions that prevailed when the figures were gathered.[49] However, it seems that rates of *reported* occupational disease are rising in the European countries covered by the OECD study (with the exception of France and Spain), whilst rates of *compensated* occupational disease do not show a similar rise, again,

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[46] And given also the absorption by the German state of the old East Germany, with its heavy industries and poor safety standards.

[47] There is also be a trade-off between safety in one sphere of life and increased risk in another. This was illustrated graphically in the U.K. recently when, following a rail accident of a very rare type (derailment caused by a broken rail) in which four people died, speed restrictions across the whole rail network were imposed while all the rails were checked. This caused intolerable delays to passengers for several months. As a consequence, about 25 per cent of passengers deserted the railways and took to the road in their cars where, it is well understood, the risk of death and injury is very much greater. The individuals concerned obviously regarded the safety measures imposed on the railways as too costly in terms of their own inconvenience and chose to take the greater risk of road travel. Should people have been given this choice between slightly safer (but much slower) rail journeys and more risky road travel, or should trains have been allowed to run at their "normal" speed while safety checks were made in order to prevent the increase in the *total* number of road and rail injuries that almost certainly occurred?

[48] OECD, *Employment Outlook July 1990*, Paris, 1990.

[49] See *Occupational Ill-health in Britain*, Loss Prevention Council Report SHE 10 (1993) where the OECD report is summarized.

subject to some exceptions.[50] A possible explanation, offered by the OECD, is that whilst there is a greater propensity amongst European citizens to file claims, medical assessments of occupational disease have remained relatively rigid. Finally, a study by the European Foundation[51] of the workplace environment in Europe concluded that most of the northern European countries surveyed (represented by Belgium, Denmark, West Germany, Luxembourg, Netherlands and the U.K.) enjoyed a better physical work environment than southern European countries (represented by Greece, Spain and Portugal). A third group of countries (France, Italy, the old East Germany and Ireland) did not fit easily into either group, their working environments having both good and bad features.

4.2 General determinants of industrial injuries

There are many determinants of industrial injuries. They include, most obviously, the nature of the industry where a worker is engaged and the particular occupation that he or she follows within it – these will determine the hazards to which the worker is exposed. Economic theory supposes that even in the absence of any government intervention or regulatory control (discussed below) firms will have an incentive to mitigate these hazards and reduce the incidence of injuries. They will do so in order to reduce the costs of accidents to the firm. These costs will include, *inter alia*, the expense of hiring and training new workers to replace those who are injured, damage to plant and materials that accompanies some injuries, lost production, extra legal costs and higher wages that workers may demand in exchange for a greater exposure to risk. However, as safety improves and accidents decline, further improvements will become increasingly costly, so the firm will minimize accident costs by taking preventative measures only up to the point where the marginal cost of an accident is equal to the marginal cost of prevention. The level of accidents should then stabilize at an "optimal" rate which, as stated earlier, is unlikely to be zero and will vary between industries, because accident prevention costs will be greater in high-risk sectors.

Obviously, safety regulations and accident prevention measures imposed at government level will also influence the behaviour of both employers and employees. There will be provision for official safety inspections and accident investigations together with enforcement measures such as improvement or prohibition orders and fines (or even imprisonment) for non-compliance. All this will further affect the level of accidents and the costs incurred by firms in preventing them.

Many other factors account for variations in aggregate injury rates. For example, research suggests that injury rates move pro-cyclically over the economic cycle and are subject to marked seasonal variations. Relationships have also been established between

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[50] The U.K. is one such exception. In the U.K. occupational illness claims under the state Industrial Injuries Scheme, after falling steadily for many years, rose quite sharply from the mid-1980s, largely as a result of an expansion in the list of prescribed diseases, changes in the rules of entitlement for occupational deafness claimants and, especially, the addition of Raynaud's Phenomenon (Vibration White Finger or "VWF") in 1985. The number of disease claims submitted to private employers' liability insurers has also increased markedly in recent years. They increased by around 50 per cent between 1986 and 1993, accounting for 56.6 per cent of all claims in 1993. The level of disease claims dropped to 41.3 per cent in 1995 and may have dropped further since, but the contribution of disease claims to total employers' liability claims cost remains steady at around 25 per cent. Source: *ABI Statistics Bulletin*, December 1996.

[51] Paoli, P., *First European Survey on the Work Environment 1991–1992*, European Foundation for the Improvement of Living and Working Conditions (EF/92/11/EN), 1992.

injury rates and levels of educational attainment within the workforce, average age of those in employment, length of hours worked, size of the firm or unit where work is done, levels of temporary or "atypical" employment, systems of payment and reward, and the degree of influence of labour unions within the firm.[52]

4.3 Liability rules, compensation systems and safety

As distinct from the factors described above, how do liability rules affect industrial safety? We are concerned here with rules that generate obligations to compensate accident victims. Some of these rules are those of tort law. However, others are not "liability" rules in the strict sense, because a worker's right to compensation may not depend on the employer (or any person) being legally liable. Again, the obligation to pay compensation may not rest directly on the employer but, rather, on a public insurer. Most workers' compensation schemes work in this way. Therefore, for the purpose of the discussion we will focus on the safety effects of compensation payments in general, whether liability-based or otherwise. Of course, the vast majority of compensation payments to injured workers are made through insurance systems, the various types of which we have already examined. We can therefore disregard the (very few) cases where compensation payments are uninsured and assume that the employer will have chosen, or been obliged, to spread the risk via an insurance pool.

Some commentators suggest that the provision of compensation to injured employees may result in either more accidents, or an increase in the reporting of accidents, or both. According to this view, the provision of industrial accident benefits, or an increase in their generosity, reduces the cost to employees of lost earnings during the period when injury precludes work. This, in turn, reduces the incentive to avoid accidents and leads to more careless behaviour by employees. Also, because the cost of leisure (which is preferred to work) is reduced by an increase in compensation benefits, the demand for leisure will increase and the supply of working hours will decrease. Thus, employees will be encouraged to make fraudulent claims or report injuries that previously they would not have declared.

Of course, the cost of compensation payments is normally translated into insurance premiums or contributions that employers pay to shift the risk. If these premiums are risk-related and, especially, if they reflect the firm's own claims experience (experience rating), then an increase in premiums resulting from a rise in the number of accidents may encourage employers to devote more resources to health and safety, countering the employee responses described above. However, it is commonly observed that insurance premiums may not accurately reflect the safety record of individual firms because experience rating is impractical in all but the largest employers. Furthermore, "long tail" claims in respect of disease undermine the effectiveness of experience rating systems, because the pattern of claims in recent years may reflect the risk as it was many years ago and reveal nothing about the quality of the risk as it is now. The employer will have little incentive to improve safety if current premiums are based on what the firm did in the past, rather than what it is doing at present.[53] It is also argued that insurance premiums are low in relation to the other variable costs of a firm and are therefore unlikely to exert a strong influence on employer behaviour. On this basis, employee responses may well dominate employer responses. Empirical research in the field supports this contention, several researchers reporting a significant positive

[52] See Davies and Elias, note 44 above.
[53] See Parsons, note 40 above, p 37.

relationship between levels of benefit (as a percentage of wages) received by disabled workers and industry injury rates.[54]

However, the research described above largely concerns benefits payable under workers' compensation systems that do not depend on fault. Where benefits, or a significant proportion of them, are delivered under an employers' liability system such as that of the U.K., the effect may well be different. The point here is that carelessness on the part of an employee will actually *reduce* the benefits to which he or she is entitled (under the doctrine of contributory negligence) or extinguish them altogether where an accident is entirely attributable to the employee's own fault. Equally, the employer who takes extra care under an employers' liability system will reap greater dividends because, unlike the employer under a workers' compensation system, he will not usually be required to pay compensation in the absence of fault.[55] Furthermore, under a tort-based liability system, the award of damages against an employer who is found to be negligent may have a deterrent effect that is greater than payments under a workers' compensation system, where the question of blame may not be aired at all.[56]

Therefore, it is suggested that under an employer's liability system, employees' responses to the prospect of receiving compensation are less likely to outweigh employers' responses to the prospect of having to pay it, and the availability of such compensation is therefore less likely to increase accident rates.

5. The impact of EU health and safety legislation on work injury compensation schemes

Much new law on health and safety at work is now set at European level. The volume of such legislation is increasing: in fact, over 50 per cent of the new safety regulations introduced in the U.K. in the last ten years have their origins in Europe. The current proportion is nearer 70 per cent and this may increase still further in the years to come. In this section we examine the legal basis of European legislation on health and safety and consider its impact on work injury compensation systems.

5.1 Sources of European health and safety legislation

Prior to 1987 there was little European law on health and safety at work. Only six Directives had been issued under Article 100 of the Treaty of Rome (the EEC Treaty), which required unanimous approval of the Member States, together with a few Directives deriving from Articles 31 and 32 of the European Atomic Energy Community ("EURATOM") Treaty.

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[54] See, for example, Lanoie, P., 1992, "The impact of occupational safety and health regulation on the risk of workplace accidents", *The Journal of Human Resources* 27(4), pp. 643–660 and Wooden, M., 1989, "Workers' compensation, unemployment and industrial accidents: an inter-temporal analysis", *Australian Economics Papers* 28 (December), pp. 219–235. The findings of these authors on the safety effects of accident compensation are summarized by Davies and Elias, note 44 above, pp. 30–31.

[55] Especially if experience rating is employed: but note the previous reservations about the feasibility of applying experience rating where there is a pattern of long-tail disease claims.

[56] Since U.K. law requires payments to be insured the award of tort damages against an employer is largely symbolic. However, the threat of litigation and potential stigma of a finding in negligence can still have a powerful deterrent effect on the employer, a point made forcibly by Owen Tudor, former Legal Services Officer for the U.K. Trades Union Congress (TUC), in correspondence with the author.

The pace quickened when the Member States signed the 1986 Single European Act, which came into effect in 1987. This Act amended the Treaty of Rome (which now became the EC Treaty) by inserting a new Article 118A, permitting the Community to introduce minimum health and safety standards by a qualified majority vote. Article 118A has provided the legal basis for all subsequent European health and safety legislation.[57] It states that:

1) Member States shall pay particular attention to encouraging improvements, especially in the working environment, as regards the health and safety of workers, and shall set as their objective the harmonisation of conditions in this area, while maintaining the improvements made.
2) In order to help achieve the objective laid down in the first paragraph. The Council, acting in accordance with the procedure referred to in Article 189C and after consulting the Economic and Social Committee, shall adopt by means of Directives, minimum requirements for gradual implementation, having regard to the conditions and rules obtaining in each of the Member States.

The Article goes on to state that Member States may, if they wish, introduce measures that are more stringent than those which such Directives require.

Apart from obvious humanitarian purposes, the object is to create a "level playing field" and prevent "social dumping" by unscrupulous employers – undercutting of competitors by skimping on safety standards. To give effect to this policy the European Commission proposed a Third Health and Safety Action Programme which included 15 new Directives, which were approved by the Council of Ministers in December 1987. The main emphasis of the more recent Fourth Programme (approved in mid-1995) is consolidation rather than fresh legislation.

The first of the post-1987 Directives was the Framework Directive 89/391/EC.[58] The Directive imposes on employers a strategy for industrial health and safety that also forms the basis for subsequent Directives and the Regulations that implement them. Employers are given a range of duties, including:

- Avoiding risks to safety and health;
- Evaluating risks which cannot be avoided;
- Combating risks at source;
- Adapting the work to the individual;
- Adapting to technical progress;
- Replacing the dangerous by the non-dangerous or the less dangerous;
- Developing a coherent overall prevention policy;
- Giving collective protective measures priority over individual measures;
- Giving appropriate instructions and sufficient information to workers;

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[57] There has been some controversy about the relationship between Article 118A and the Social Policy Protocol accompanying the Maastricht Treaty (the "Social Chapter"), from which the U.K. has "opted out". For example, the U.K. has argued that the Working Time Directive (93/104/EC), introduced by qualified majority voting under Article 118A, is a social measure which is outside the scope of the Article and that such measures should properly be introduced under the Social Chapter – in which case they would not apply in the U.K. Again, the European Commission has not ruled out the possibility of introducing health and safety legislation under the Social Chapter (which, once more, would not apply to the U.K.), although its present intention is to continue to use Article 118A only to promote health and safety laws.

[58] Implemented in the U.K. by the Management of Health and Safety at Work Regulations, SI 1992/2051.

- Consulting workers on all health and safety questions;
- Training workers adequately in relation to workstations used and jobs performed, both at the time of recruitment and on transfer to new work, new equipment or new technology.

The Framework Directive was followed by six numbered "daughter" (or "individual") Directives covering workplaces, work equipment, personal protective equipment, work with VDUs, manual handling of heavy loads and exposure to carcinogens at work. The Regulations implementing the Framework Directive and the first five of the "daughters" acquired the title of the "six pack" in the U.K.[59] These Directives, which had to be implemented by 1 January 1993, were followed by six further Directives with later implementation dates. These cover protection of workers' exposure to biological agents, temporary or mobile construction sites, health and safety signs at work, health measures for pregnant workers, drilling operations and mining operations. Yet further Directives, passed or in draft, cover chemical agents, dangerous substances, explosive atmospheres, ionising radiation, major hazards, physical agents, transport and work equipment.

Although the U.K. has a good record in implementing Directives on health and safety, there is some controversy concerning the way in which the U.K. has implemented some European safety legislation. A number of the Regulations which translate the Directives into English law stipulate that the employer must carry out the duties in question "so far as is reasonably practicable", a standard limitation on an employer's statutory duties in the U.K. which is not generally found in the Directives themselves. The European Commission has not accepted the case for such a limitation and doubt therefore exists as to whether all the Directives have been properly implemented in the U.K. There is also some doubt as to how a U.K. court would interpret the term "reasonably practicable" if the regulation in question appeared to conflict with an underlying Directive. This point is touched on below.

5.2 Civil liability under the Directives

Broadly speaking, Community law leaves enforcement of the Directives to the individual Member States so long as the measures taken, including fines and other sanctions, are adequate. But what of civil liability? In the U.K. the position is governed by section 47(2) of the Health and Safety at Work Act 1974, which provides that a breach of regulations brought in to give effect to the European Directives is actionable in damages. Furthermore, an action for breach of the provisions of a Directive itself may also be available against "an emanation of the state". Case law has established that "emanations of the state" may include,

[59] The six Directives and their implementing UK Regulations are:
–Workplace (the First) Directive 89/654: Workplace (Health Safety and Welfare) Regulations (SI 1992/9004);
–Work Equipment (the Second) Directive 89/655: Provision and Use of Work Equipment Regulations (SI 1992/2932);
–Personal Protective Equipment (the Third) Directive 89/656: Personal Protective Equipment at Work Regulations (SI 1992/2966);
–Manual Handling of Heavy Loads (the Fourth) Directive 90/269: Manual Handling Operations Regulations (SI 1992/2793);
–Display Screen Equipment (the Fifth) Directive 90/270: Health and Safety (Display Screen Equipment) Regulations (SI 1992/2792);
–Carcinogens (the Sixth) Directive 90/394: Control of Substances Hazardous to Health Regulations (SI 1994/3246), Control of Asbestos at Work Regulations (SI 1992/3068).

inter alia, nationalized industries,[60] independent police authorities,[61] public health bodies[62] and privatized water companies.[63]

There can be no doubt that the civil liability of employers, at least under English law, has increased as a result of European health and safety legislation. Where specific duties are laid down in regulations which implement the Directives something close to strict liability may result, particularly when we bear in mind that an English court would probably be obliged to interpret the limitation on an employer's duty contained in the expression "reasonably practicable" very narrowly to comply with the Directive. Accordingly, an employer might be able to escape liability for failure to implement a European safety measure only if implementation was not practicable at all rather than not "reasonably" practicable. Sometimes the duties laid down by the Directives are broad rather than specific – such as duties to carry out risk assessments or to train staff – and in some cases the Regulations specifically exclude civil liability.[64] Although an action for breach of statutory duty may be barred in this case the standards laid down may still be regarded by the courts as establishing the standard of care of a reasonable employer when determining liability in negligence under the common law – and the standard is likely to be a high one.

5.3 What is the impact of E.U. health and safety legislation on injuries, and how does it affect compensation payments?

Usually it will not be possible to gauge the precise effect of a particular new law on the level of injuries, but we must assume that the *general* effect of new safety legislation is to reduce the number of injuries, given that this is likely to be its prime purpose. However, the impact of new European legislation on *compensation* payments may be less straightforward. The impact here will vary from one country to another, with the greatest variation between countries that have "pure" workers' compensation systems (like Germany) and those that have highly developed employers' liability systems (like the U.K.). New health and safety legislation is likely to reduce the total cost of compensation payments in the former countries, but may well increase it in the latter. The reason is as follows. Under a no-fault "exclusive remedy" workers' compensation system, such as that of Germany, every employee who is injured at work is entitled to claim benefits and nobody is allowed to sue the employer.[65] Therefore, new legislation cannot increase the civil liability of the employer simply because there is none to increase: the employer is immune. A fall in the number of injuries will therefore bring about a reduction in the number of compensation payments made unless, for some reason, the new legislation makes more people aware of their right to claim. The total claims cost should also reduce, unless benefits are increased along with the introduction of the new law. On the other hand, the introduction of new safety law may well increase total claims cost in systems where tort actions against the employer are still available. The new safety legislation should bring about a similar fall in the number of injuries but, at the same time, it may bring with it new responsibilities which increase the civil liability of the employer. This,

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[60] *Foster* v *British Gas plc* [1991] 2 AC 306.

[61] *Johnston* v *Chief Constable of the Royal Ulster Constabulary* [1987] ICR 83.

[62] *Marshall* v *South West Area Health Authority* [1986] QB 401, ECJ.

[63] *Griffin* v *South West Water Services Ltd* [1995] IRLR 15.

[64] For example, Reg. 15 of the Management Regulations which implement the Framework Directive specifically excludes civil liability, apart from in relation to pregnancy-associated risks.

[65] Subject to the very limited exceptions discussed earlier.

in turn, may allow some injured employees to bring claims against their employers in circumstances where previously only limited workers' compensation benefits, or no benefits at all, were available. Since employers' liability claims (which give "full" compensation) are more lucrative than workers' compensation claims (which give only partial compensation) the amount of compensation received by these particular employees will increase. Again, the *total* amount of compensation paid may also increase if extra compensation paid to "new" employers' liability claimants exceeds the amount "saved" by the reduction in the total number of claims. If we put all this in the context of the U.K., the effect of new E.U. legislation may be to shift claimants from the Industrial Injuries Scheme (the state "no-fault" part of the system) to the privately insured employers' liability regime.

A number of conclusions can be drawn from the above:

- New E.U. health and safety law is more likely to increase costs to employers in countries where employers' liability is highly developed, because costs of implementation (e.g. provision of new safety equipment) are less likely to be offset by lower compensation payments than in countries with pure workers' compensation systems;
- Under a pure workers' compensation system employers and insurers are more likely, on the whole, to welcome new health and safety legislation, whereas under a developed employers' liability system the attitude of employers and insurers is likely to be more ambivalent, with a greater inclination to oppose it;
- Alignment of the various interest groups (employers, employees, insurers, legislators, health and safety authorities and inspection agencies) is likely to be closer under pure workers' compensation systems;
- The shifting relationship between the two parts of the system in regimes that combine workers' compensation and employers' liability makes them more unstable than "exclusive remedy" workers' compensation schemes, particularly during periods of expanding legal liability.[66]

6. Is there a case for harmonization of European compensation systems?

We have seen that Article 118A of the Treaty of Rome sets harmonization of health and safety legislation as an objective of the Member States and that minimum legal standards of industrial safety have been achieved across Europe through a series of Directives, in a process that is continuing. However, there has been no real attempt to harmonize the diverse systems, including insurance measures, for *compensating* those who suffer industrial injuries. By contrast, there has been considerable harmonization of the insurance arrangements for the victims of road traffic accidents[67] and some harmonization of civil liability, if not insurance arrangements, in respect of product liability and environmental liability. Is there a case for harmonizing compensation systems for industrial injuries or, at least, for introducing minimum standards of insurance cover?

In fact, the International Labour Office (ILO) already lays down some minimum standards for industrial injuries compensation in Convention 121 (the Employment Injury Benefits Convention), which was adopted by the ILO General Conference in 1964 and came

[66] Although we should bear in mind the point made earlier about the possible displacement of employment-related claims into other fields, such as product liability. See note 13 above and accompanying text.

[67] See Parsons, C., "Employers' liability insurance – how secure is the system", 1999, *Industrial Law Journal*, Vol. 28, No. 2.

into force in July 1967. Convention 121 sets out minimum standards of coverage in respect of benefits, employees to be included and types of injury for which compensation should be provided, including a "core" of 15 or so occupational diseases. However, only 22 nations in total have ratified the Convention and Germany is the only large state among the few European countries to have done so.[68] Of course, it by no means follows that the compensation systems of non-ratifying nations fall below the ILO "benchmark". In the U.S. the National Commission on State Workmen's Compensation Laws plays a similar role, setting standards for state workers' compensation programmes, including 19 "essential" recommendations. However, these standards do not have the force of law.

Of course, from a practical point of view, there is no point in further harmonization in Europe, or attempts at it, purely for its own sake. Harmonizing legislation at European level can be justified only where it is necessary for furthering the objects of the European Communities and only when those objects cannot be sufficiently achieved by actions of the Member States themselves.[69] However, harmonization might be justified if, for example, differences in industrial injury compensation had the effect of distorting competition within the European Union, hindering economic integration or impinging upon the fundamental "freedoms" of the Union, such as the free movement of workers. In fact, none of these grounds provides a very strong case for unifying legislation. Businesses in countries that allowed poor compensation arrangements might, in theory, exploit this to make savings that enabled them to undercut their competitors, leading to "social dumping". However, distortion in competition from this source must be trivial compared with that which could result from other factors, such as differences in wage rates, levels of taxation or welfare benefits at large. For the same reasons, it is unlikely that variations in injury compensation systems have any real effect on the mobility of labour. On the other hand, a case for some harmonization might be put simply on humanitarian grounds, to ensure that victims of work accidents in Europe get roughly equal treatment.

Whatever view is taken on harmonization, there is no doubt that current differences in compensation arrangements within Europe create a need for careful co-ordination of national systems, particularly when workers from one country take up jobs in another – as they increasingly do. Obviously, migrant employees must not slip through the whole system and fail to have security under the laws of either the "home" or the "host" state. Equally, it would be wrong in principle for an employee to be covered by more than one nation's compensation regime and, perhaps, claim benefits *à la carte* under both.

In fact, the process of co-ordinating compensation arrangements for migrant workers has a long history. Bartrip notes that British labourers working on the Paris–Rouen railway line benefited from a French no-fault compensation regime dating from the early 19th century and that formal agreements with France (1909) and Sweden (1909) provided for equality of treatment for British workers injured while working in either of these countries and vice versa.[70] Impetus for more general co-ordination within Europe was provided by the Treaty of Rome (1957), Article 118 of which requires the European Commission to promote "close co-operation between member states in matters relating to social security". Article 51 proposed that the Council should, in the field of social security, promote measures necessary to ensure

[68] The European countries which have ratified Convention 121 are: Belgium, Bosnia and Herzegovina, Croatia, Cyprus, Finland, Germany, Ireland, Luxembourg, Netherlands, Slovenia, Sweden and Yugoslavia.

[69] The principle of "subsidiarity" (Maastricht Treaty, Article 3b).

[70] Bartrip, P.W.J., 1987, *Workmen's Compensation in Twentieth century Britain*, pp. 146–147.

the free movement of workers and regulations subsequently adopted by the Council generally ensure equality of treatment for migrant workers with national workers. Under these regulations, periods of (social) insurance relating to employment in more than one country are aggregated in calculating an individual's social security entitlement and long-term benefits are payable in any member country of the E.U.

Generally, under the E.U. regime an employee is subject to the social security legislation of the country in which he or she is employed. However, an employee may be transferred to another Member State by the employer and remain covered by social security legislation in his or her original state for short period of up to 12 months[71] provided that prior approval has been granted by the social insurance authority of the original state. Thus, for example, where a U.K. citizen is covered by the legislation of another E.U. country in which he or she is employed, industrial injury benefits will be payable in accordance with the legislation of that country. On the other hand, if the worker remains insured under the U.K. system, benefits under the U.K. Industrial Injuries Scheme could be paid in the "host" country. U.K. benefits would also be payable if injury occurred during travel between E.U. countries in connection with employment. Benefits for occupational disease depend on the nature and origin of the disease, but where the disease might be attributable to work in more than one E.U. country benefit entitlement will relate to the country of last entitlement.

These arrangements appear simple and straightforward.[72] However, they extend only to benefits that form part of a country's social security system and not, for example, to tort compensation recoverable by an injured employee and financed by the employer through private insurance. As we have seen, the availability of such tort compensation, and its relationship with public or semi-public workers' compensation schemes, varies widely in Europe. This could lead to complex problems. For example, determining the rights of an employee who contracted a gradually developing disease when working under different contracts of employment in several European countries, only some of which allowed a tort remedy, could be very difficult. Differences in the availability of tort remedies amongst European Member have certainly troubled the courts from time to time. For example, in *Johnson* v *Coventry Churchill International Ltd*[73] an English court had to determine whether a U.K. employment agency, which arranged work for the claimant, a carpenter, was liable for the grave personal injuries that he sustained on a building site in Stuttgart, where he had been sent to work for a German firm. In this case the problem was that English law allows such claims but German law denies them, other than in cases of intent on the part of the employer.[74] More recently, in *Caisse de Pension des Employés Privés* v *Kordel and Others*[75] the European Court had to decide whether a Luxembourg social insurance carrier, having paid a pension to a Luxembourg national, could exercise subrogation rights against a German national who had inflicted injuries upon him and against the liability insurers of the latter. This essential issue in this case was the applicability of German or Luxembourg law.[76] Generally, the labour laws, tort laws and social security laws of one jurisdiction only will be applied in cases such as these,

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[71] Which in some cases may be extended for a further 12 months.

[72] Although there are still problems in co-ordinating some matters, such as the diverse invalidity insurance schemes of the Member States.

[73] [1992] 3 All ER 14.

[74] Pursuant to section 636 of the Reichsversicherungsordnung (the German Social Security Act).

[75] Court of Justice of the European Communities, Case C–397/96, 21 September 1999.

[76] In fact, the case concerned fatal injury inflicted by a motor vehicle, but the same issue could easily arise in the context of a work injury.

so the only problem will be to determine which law is applicable. However, the application of labour laws, social laws and tort laws of different jurisdictions cannot be completely ruled out.[77] A situation could arise where a claimant gained both tort compensation and the generous benefits of an "exclusive remedy" workers' compensation scheme. Conversely, there might be circumstances where a victim of negligence received only the modest workers' compensation benefits of a country where the tort remedy was available but failed to obtain any tort compensation himself. Despite these potential complications the case for harmonization remains fairly thin, given the limited advantages that would accrue. Harmonization of work injury compensation schemes would be difficult to achieve given their diversity within Europe, the extent to which many are embedded in the Member States' general social security systems, and the added complications of different tort and labour laws. Close harmonization would probably require very big changes in the U.K. system, which, as we have seen, is certainly not typical of the rest of Europe.

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[77] A point made by Munich Re, note 13 above, p. 35.