Abstract

This chapter gives a general overview of the economic literature on tort law. It discusses the legal definitions of tort law, the development of tort law, the fundamental economic rationale of tort law and the scope of tort liability. A brief overview of the main topics of the economic analysis of tort law is given.

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1. What is Tort Law?

Tort law defines the conditions under which a person is entitled to damage compensation if her claim is not based on a contractual obligation. Damages result from the loss or impairment of property, health, life or limb, from the infringement of rights or from pure financial or non-financial losses. Economically speaking every reduction of an individual’s utility level caused by a tortious act can be regarded as a damage. Tort law rules aim at drawing a just and fair line between those noxious events that should lead to damage compensation and others for which the damage should lie where it falls. In Common Law countries tort law has developed from a large body of formerly unrelated doctrines such as conversion, trespass, nuisance, defamation, negligence, deceit and rules from case law. On the European continent a more systematic and rationalistic approach resulted in the formulation of some basic concepts of tort law. This made it possible to formulate abstract and flexible principles and integrate them into the codifications, as in the French Code Civil.

Art. 1382: Tout fait quelconque de l’homme, qui cause à autrui un dommage, oblige celui par la faute duquel il est arrivé, à le réparer.
Art. 1383: Chacun est responsable du dommage qu’il a causé non seulement par son fait, mais encore par sa négligence ou par son imprudence.
Similar general rules were laid down in the civil codes of other continental countries. They tried to systematise and condense the large body of cases and materials to an abstract system of rules. Many important questions, however, are left open in such solemn statements, such as the precise meaning of a damage, of negligence, the concept of causation or compensation for pure financial damages. They have to be decided by the judiciary. It is therefore not surprising that modern tort law on the European continent is more or less judge-made law (Zweigert and Koetz, 1996).

2. Development of Tort Law

The scope and significance of tort law has risen significantly over the last 200 years. Before the industrial revolution tort law was a rather unimportant field with shying horses as an important cause of damages. With steam engines, modern traffic (locomotive, motor vehicles) and hazardous products the number and severity of accidents rose dramatically. This gave rise to the development of modern tort law, especially the negligence doctrine and the slow expansion of strict liability for risks caused by very dangerous activities. However many of the resulting problems faced by accident victims were not solved - and may be not solvable - by the development of tort law rules alone. In many European countries tort law plays a rather insignificant role for workplace accidents. Insurance of victims as well as deterrence is organized by quite different and hybrid institutions between public and civil law. The twentieth century brought a further expansion of tort law like product liability, liability for medical malpractice, environmental liability, liability for torts in the marketplace, extended liability of the corporation. Some of the modern developments in tort law were made possible by improvements of information technology which facilitated the attribution of a damage to a tortfeasor even over long distance and time. With traditional information technology such damages had to be regarded as arising from the general risk of life and were consequently not shifted from a victim to a tortfeasor.

3. The Economic Rationale of Tort Law

The welfare implications of tort law rules have been discussed by many authors, economists and lawyers over the last 200 years, especially by Victor Mataja (1888). Also Bentham, Holmes and Jhering taught that tort law rules should be based on utilitarian principles. But a coherent body of literature has existed only since the 1960s, starting with the pathbreaking works of Coase, Calabresi and Posner. Coase showed that with high transaction costs (the costs of using the market) tort law matters with respect to allocative efficiency (Coase, 1960). Posner investigated in a series of articles and books
the most important legal doctrines of tort law with respect to their effect on the society’s wealth (Posner, 1972, 1986). Brown (1973) gave a now classical analysis of the economic effects of tort law rules. Calabresi (1970) showed that accident law has the capacity of reducing three different types of costs: primary, secondary and tertiary. Primary accident costs are the victims’ losses. The costs of avoiding damages (by increasing the care level and reducing the activity level of a dangerous activity) should be balanced against the victims’s losses and ideally the sum of these costs should be minimized. Secondary costs of accidents result, if those who bear the primary accident costs are risk-averse. In such a case any kind of risk spreading and even of shifting the primary costs to the least risk-averse party leads to a social gain. Tertiary costs include all administrative costs of putting the case through the legal system. Obviously there are trade-offs between reducing primary accident costs, comprehensive insurance coverage and reducing the costs of the legal system. Each system of accident law has to compromise on these goals. The optimal nature of these compromises might be different across time and legal orders. It depends on the level of development of private insurance markets and on the capacity of courts to process information in an unbiased way. From this point of view Posner’s observation is interesting that primitive societies often prefer(red) strict liability over negligence, because they lack legal experts, who can determine whether the injurer’s behaviour was faulty, and because strict liability can serve as a rudimentary form of insurance, if the tortfeasor in general is wealthier than the victim.

It is also not obvious whether the reduction of these costs can be best organized by the system of tort law (general deterrence) in combination with private or social insurance, by regulatory law (special deterrence) or by other social mechanisms aimed at ensuring victims and providing deterrence effects to tortfeasors and/or victims.

4. Main Topics of the Economic Analysis of Tort Law

Economic analysis of tort law is mostly efficiency analysis, both positive and normative. A large body of work is related to the analysis of existing legal concepts (Diamond, 1974a) such as negligence or strict liability, and to possible legal innovations such as compensation for future damages or probabilistic compensation criteria. The standard method is to analyse the efficient solution first and then ask whether or not a particular rule gives incentives to reach it. An important starting point of the economic analysis of tort law was the insight that the entitlement to compensation and imposed cost shifting is only a substitute for voluntary transactions of property rights. Any legal position can be protected either by a property rule or by a liability rule (Calabresi and Melamed, 1972). In principle a property rule is superior
to a liability rule because it guarantees that a particular entitlement is given up only against a price which is higher than the value of that position for its owner. Thus a property rule guarantees that a right is transferred to a higher valued use. Liability rules cannot guarantee this, as damage compensation is subject to a somewhat arbitrary calculation of an outside observer (judge). Moreover some damages are not compensated (for instance sentimental values). Damage compensation is not as precise as the price for the voluntary transfer of an entitlement and might therefore lead to a wrong price and consequently to wrong decisions of those who pay this price. Therefore liability rules cannot guarantee in the same way as property rules the efficient use of resources. From this perspective tort law is a stopgap if special conditions (hold-up positions, high costs of contracting) impede voluntary transactions.

For analysis of tort law rules it proved fruitful to differentiate between various categories of damages, for which the economic analysis has to be different. An important difference exists between the effects of harmful behaviour which lead to the destruction of a resource and those which lead to market imperfections. If a house burns down, the value of the capital stock of the society is diminished by the value of the destroyed house. Therefore, the damage of the victim is equal to the damage of the society and full compensation would impose a cost on the tortfeasor equal to the losses of the society. This equality of the victim’s damage, the loss of the society at large and the amount of damage compensation, however, no longer exists in some cases of pure financial loss (Bishop, 1980; Banakas 1996; Gilead, 1997). Here the harmful act often results in a redistribution of wealth if, for instance, wrong information is disclosed to the public leading to a financial loss for the shareholders (and to some gain for the other shareholders). The social dead weight loss is then different and usually smaller than the losses of victims. This leads to a different analysis of liability rules.

Another important economic distinction resulting in two analytically different damage categories is between torts among strangers without any market relation (like pedestrians vis-à-vis car drivers) and torts involving parties linked to each other by a contract or a contractual chain such as where a manufacturer or seller of a defective product is sued by the buyer (Shavell, 1980, 1987). In the latter case, which is typical for consumer protection rules, the victim has to pay the expected liability costs as part of the product price, if the rules of tort law entitle him to damage compensation. This again makes the analysis different. Should it be based on contract or on tort doctrines? The economic analysis is again different, when victims as well as injurers suffer losses (Arlen, 1992) or when differences exist between individuals. Among the most important topics in this literature are the following:

- Negligence versus strict liability
- Unilateral and bilateral damages and contributory vs. comparative negligence
- Different rules of causation
- Different rules for multiple tortfeasors and victims
- Vicarious and corporate liability
- Liability for pure financial damages
- Liability for irreplaceable goods
- Valuation of life, limb and health
- Mass tort litigation, catastrophic accidents and class action
- Liability if courts have coarse information on causation and on the value of damages
- Civil procedure, costs of litigation and the incentive to litigate
- Civil liability compared with other institutions like regulation of safety, taxation of tortfeasors, and hybrid institutions between civil liability and regulatory law
- evolution of efficient civil liability norms
- efficiency, distributive justice and corrective justice in tort law.

An important result of the economic research on tort law is the finding that the large majority of common law rules leads to economic results, as if these rules had been designed to promote efficiency (Landes and Posner, 1981a, 1987). There seems to be a contrast between the economic effects of these rules and those of regulatory law. For the latter it is often easy to see that they reflect vested interests. This finding is supported by comparative legal research. Even though national legal orders have old traditions and legal concepts which are often as different across countries as can be, the differences of the actual solutions of tort law problems are often insignificant (Zweigert and Kötz, 1996). It is an open question whether such findings reflect a utilitarian or wealth-maximizing ethic of high court judges across countries, or whether an evolutionary force drives the civil law system towards more efficiency (Rubin, 1977) wiping out cross-county differences. In countries on the same stage of economic development, facing the same economic and social problems, some evolutionary pressure to eliminate inefficient rules and thus to reach similar solutions is likely to exist. This holds especially for the civil law system in which the decision makers are decentralized and independent and therefore not easy to capture by interest groups.

An interesting feature of the analytical literature is the discovery that often first-best solutions cannot be reached by any rule of tort liability. For example: if accidents are bilateral both with respect to the care level and the activity level, no efficient liability rule exists (Shavell, 1987).

If damages result from a combination of different harmful causes, full damage compensation might in principle be unsuited to provide incentives for efficient deterrence. If damages from pain and suffering form part of the
compensation awarded by tort judgments this serves as a deterrent but leads to an inefficiently high insurance level (Friedman, 1982) as insurance against pain decreases the expected utility of the insured. In this sense absence from pain is an irreplaceable good.

An important part of the scientific work on tort law is empirical. Which factors explain the shift of property rights, for example from negligence to strict liability or from caveat emptor to caveat fabricator? What are the distortion effects of incentives of insurance coverage, especially of particular insurance schemes like no-fault insurance for automobile accidents? What are the comparative merits of different institutions to deter and insure risks of different categories? What is the ‘value’ of non-financial losses such as the loss of health, limb or life? This empirical research is particularly important and has corrected some abstract theorizing based on empirical assumptions about the way the system works, without actually investigating the accuracy of these assumptions. A comprehensive survey of these studies can be found in Dewees, Duff and Trebilcock (1996).

5. The Scope of Tort Liability

Even after a long debate on the economic effects of tort law there is still much disagreement as to the legitimate place of tort law in modern society. Should tort law be a comprehensive and expanding deterrence system, regulating securities’ and other markets, old and new hazards and then be open to all kinds of legal innovations necessary for optimal deterrence? Or should its domain be more restricted to the classical cases and leave complicated risks and hazards to other social institutions? This depends to a great extent on two factors, the availability of private insurance against hazards and the capacity of civil courts to obtain and process information. If private insurance is easily obtainable for both victims and tortfeasors, secondary costs are independent from where the loss eventually falls. Consequently accident law can then focus on deterrence and on the reduction of administrative costs. Societies in which insurance markets are underdeveloped, however, might develop a tendency to shift the costs of accidents to the deepest pocket, which is often a large company. Some demands to shift the risk to the deep pocket may make sense as long as first-party insurance coverage is not obtainable for victims. The rise of public compulsory social insurance in nineteenth-century Germany especially with respect to workplace accidents is another way of dealing with problems caused by undeveloped private insurance markets. In modern market systems, however, it is argued that both first-party insurance and third-party insurance are in most cases easily obtainable and that tort law can concentrate on optimal deterrence.

It is however debated whether - even with highly-developed insurance markets - tort law is well suited for this job and whether a comprehensive
tort law system will not cause excessive costs for the legal system as well as insufficient deterrence. If courts lack information they might be unable to develop rules that give proper incentives to victims and tortfeasors to balance at the margin damage prevention costs and costs of accidents. It is sometimes asserted in the Hayekian tradition (De Alessi and Staaf, 1987; Schmidtcnchen, 1993) that these costs are subjective to victims and tortfeasors and cannot be properly assessed by any outside observer like a judge. Over- and underestimation must then result and liability rules would lead to inefficiently high or low damages. One could then argue that the domain of tort law should be limited to cases of obvious negligence, easy valuation of damages and obvious causation. Tort law should at least keep out of those categories of damages for which efficient liability rules require much information. This recommendation would reduce the domain of tort law considerably and with it the costs of the judicial system (tertiary costs). According to this view no solid statement can be made about whether the resulting distortions of incentives are higher or lower than in a comprehensive system of tort law, whose rules are necessarily based on inadequate information. This would lead to a small domain of tort law and of state interference in general.

Similar arguments with respect to the legitimate domain of tort law arise if one assumes that sufficient information to balance costs and benefits and provide proper incentives are possible in principle, but that civil law courts in particular lack the capacity to collect and process the necessary information because of strict rules of civil procedure, and because judges are technical laymen unable to assess the risks and benefits of modern technologies and not well-equipped to discover the scientific truth (Huber, 1988). This argument leads to a preference of safety regulation over general deterrence by tort law. Regulatory agencies can process safety information much better than legal procedure and use experts for the setting and enforcement of safety standards. This would lead to a comparatively small domain of tort laws but to an active state regulation (Rose-Ackerman, 1991).

It seems that the expansion of tort law by new types of cases such as product liability, medical malpractice, punitive damages and class action has led to adverse effects in the USA. The so-called insurance crisis gave rise to such pessimistic views with respect to the problem-solving capacity of tort law. Insurance premiums increased rapidly in the 1980s; producers took dangerous products from the market, stopped product research, municipal districts stopped summer programmes for young persons and removed play structures for fear of liability and too high insurance costs. The reasons for this development are seen in compensation payments for pain and suffering, which are higher than the damages, and in the tendency of courts to disregard negligence on the side of the victim when granting damage compensation (Priest, 1987a, 1991). These reasons, however, do not necessarily support the view that civil courts are in principle unable to
administer rules leading to optimal safety. It seems that the jury system in the USA might lead to a deep pocket bias in tort law, which has little to do with the general incapacity of courts to process information and develop efficient rules. This argument is further enhanced since an insurance crisis as a result of overcompensation and overdeterrence can so far not be observed in European countries without jury systems, where the domain of tort law has also been extended by the introduction of new fields of tort law such as product liability and where the informational constraints of courts are basically the same.

Tort law has to play a predominant role in reducing primary accident costs if one takes the view that civil courts can handle most of the informational problems properly, and that regulatory agencies, even though better endowed to collect and process information, are often influenced by well-organized interest groups. This view has been proposed by different lines of arguments. (1) Judges might be able to make at least rough approximations with respect to optimal deterrence when they set standards of due care or develop doctrines which provide deterrence incentives. (2) Courts can learn over time and improve rules even if a single court lacks the knowledge of getting incentives right (Cooter, Kornhauser and Lane, 1979; Ott and Schäfer, 1990). (3) Evolutionary pressure leads tort law to efficiency, if inefficient rules are more often attacked by litigation than efficient rules. This rather optimistic view favours a more comprehensive system of tort law. It leads to an activist state in the form of an activist tort law judiciary whereas the domain of safety regulation remains comparatively less important.

Independent from informational constraints the tort system cannot be an efficient institution as long as reducing the scope of liability results in distortive incentive effects which are less costly than the resulting savings of costs of the judicial system and easier insurance coverage. As the costs per case filed are very high in the tort system, alternative institutions like no-fault insurance schemes for automobile accidents might be better suited to reduce the overall costs of accidents than tort liability. Only empirical research can then find out which system or which combination of systems is best suited to reduce accident costs (Dewees, Duff and Trebilcock, 1996).

The overall efficacy of tort law vis-à-vis regulation of safety depends on various other factors (Shavell, 1984). When harm is so diffused that individuals have little incentives to sue and cannot cheaply organize as a group, this rational apathy of victims leads to systematic undercompensation and consequently to underdeterrence. This effect is most detrimental if technologies exist to convert concentrated into diffused damages. In the early days of industrialization, pollution of residential areas close to polluting factories often resulted in damage compensation. This resulted in long chimneys spreading the toxic substances over wide areas making tort law ineffective.
The bankruptcy constraint of a firm or an individual is another weakness of tort law. If the damage exceeds the wealth of a tortfeasor, expected damage compensation is again lower than expected damages and underdeterrence results. This deficit can partly be cured for firms by piercing the corporate veil or even by shareholders’ liability (Kraakman, 1984a). But regulation with *ex-ante* fines based on the expected damage might then be a better way to deter harmful behaviour. Underdeterrence also results from weak causational chains and legal rules of causation designed to cope with simple accidents of the form ‘A hits B’. It is an open question whether this deficit can be cured with new doctrines of causation based on probability guesses of judges, or whether in fields of coarse causational information the problems should better be solved by regulatory statutes and specialised agencies better equipped than courts to collect and process such information (Rose-Ackerman, 1991). The nature of information might also influence the efficient domain of tort law versus safety regulation. If optimal safety standards are public goods, a more centralized system of public agencies might be better to ensure optimal safety than the decentralized court system.

All in all there is little doubt that tort law can play an important but limited role in deterring and insuring accidents. In the USA tort law counts for only 9 percent of all loss shifting (Abraham and Liebman, 1993). Private and public first party insurance, workers compensation schemes, no fault liability schemes, green taxes and other institutions compete with tort law in reducing the costs of torts.

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