

BOOK REVIEWS

Foundations of Economic Analysis of Law, by Steven Shavell, 2004, The Belknap Press of Harvard University Press, 737 pages.

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Steven Shavell has contributed to the foundations of economic analysis of law in different manners. According to Posner (2006), he is a member of the third generation of economic analysts of law—Coase, Becker, and Calabresi being the first group, with Posner himself, Landes, and Ehrlich forming the second. Shavell has published several books and more than 100 articles on economics and on the economics of law. He has contributed to the principal-agent theory (Shavell, 1979b) and, more particularly, to the moral hazard literature (Shavell, 1979a). This book proposes an overview of the fields in the economics of law to which the author has contributed. It also covers in detail other fields and many contributions to the literature. The emphasis is on theory, but some empirical facts are mentioned.

The book has twenty-nine chapters in seven parts or sections, a comprehensive list of references (786 references in the References section of the book), and two indexes (authors and subjects). It covers many subjects related to the economic analysis of basic law. Particular attention is devoted to the positive analysis of law, although the normative aspect is also well covered. The book is addressed to two broad audiences: economists and individuals interested in law with no formal background in economics. There is no formal economic analysis in the text (but formal models are sometimes sketched in footnotes) and no detailed discussion of legal doctrine. The subjects covered are important for any legal system: laws related to property, accidents, contracts, crimes, and their litigation process. Specialized subjects such as labor, bankruptcy, or environmental law are not covered. However, for the readers of the *Journal of Risk and Insurance*, accident law is discussed in detail (one section including five chapters that will be analyzed below).

Chapter 1, the introduction to the book, presents the author's basic philosophy with regard to the economics of law. He first distinguishes the positive analysis of the economics of law from its normative analysis. Using his example for automobile accidents, the positive analysis is concerned with how a liability system affects accidents and litigation expenses, whereas the normative analysis looks at the social desirability of a liability system. Two standard and important assumptions are made for the normative analysis. First, the normative analysis does not take any of the distributive aspects into account; this is left to the income tax system and other transfer

mechanisms. Second, the notions of fairness and morality are not integrated in the analysis, although a significant effort is made to do so in part seven of the book.

The first four parts of the book treat areas related to private law: property law, liability for accidents, contract law, and civil litigation. They are called private because they are enforced by the activities or suits of private parties. The first of the four parts is devoted to property law. Chapter 2 covers the rationale of ownership and the emergence of property rights. The chapter defines concepts that are not often discussed in the standard economic literature. For example, the author treats property rights, their justification, and their emergence. Property rights are themselves divided into two types of rights: possessory rights and transfer rights. The justification of property rights is mainly related to incentives: incentives to work, incentives to maintain and improve things, and incentives to transfer things. Their emergence occurs when the advantages are greater than the costs of instituting and maintaining them.

Chapter 3 is devoted to the division of property rights while chapter 4 discusses, in detail, the acquisition and transfer of property rights, including transfer after death. Chapter 5 concerns the issues of conflict and cooperation associated with the use of property rights. These issues are directly related to the notion of externalities. One particular externality is the risk-creating behavior that may generate damages to other parties (Shavell, 1984; Boyer and Dionne, 1987). Negotiations between parties and private market institutions are often inefficient in resolving externalities, particularly when there are many players. Their resolution can be obtained by regulation or through the legal system. The author presents different types of legal rules for controlling externalities, with or without bargaining between players.

Many topics related to public property are discussed in chapter 6. This type of property exists when it is too costly to exclude nonpayers or when the revenues of the providers fall short of the value users are willing to pay. Chapter 7 is concerned with the difficult subject of property rights over information such as for patent, copyright, and trademark law. Other forms are also discussed. The chapter is divided into two parts: information of repetitive value such as the content of a book or the words of a song, and other various types of information. Labels are also discussed in the last part of the chapter. The problem with information is that any buyer can disseminate or resell the information himself. So, to encourage the development of information, its value must be protected by some property rights. The author discusses in detail the social value of information and the different mechanisms (including property rights and rewards) that may stimulate the production of the optimal social level of information.

The second part of the book covers accident law. Accident law concerns the rules that govern the rights of accident victims to sue and to collect compensation from those who have injured them. In the first three chapters (8, 9, and 10) of this section of the book, the author discusses how legal rules of liability influence parties' incentives to reduce accident risks. Negligence and strict liability rules are analyzed in detail. Under strict liability, injurers must pay for all losses they cause. Under the negligence rule, injurers pay only when they are negligent or only when their level of prevention is lower than the due care specified by the courts. In the simple case of unilateral accidents, both types of liability rules provide the same optimal incentives for care

but their application differs significantly for the courts. Under strict liability, a court is concerned only with the magnitude of the loss, while under the negligence rule, a court must also evaluate the negligence (or evaluate whether the level of care taken is lower than the socially optimal level of due care). Matters are more complicated when it comes to bilateral or even multilateral accidents. In these cases, both victims and injurers are called on to take care to reduce accident risks. So the rule must create incentives for all parties. It is obvious that strict liability does not achieve this goal because it fails to introduce the appropriate incentives for the victims. Different forms of negligence rules can result in producing the socially optimal level of care.

The level of activity (or risk exposure in many applications) must also be considered in the analysis. Liability rules affect not only the level of care but also the level of activity. For example, if we come back to the simple case of unilateral accidents, it can be shown that both strict liability and the negligence rule continue to implement the social level of care, but the negligence rule induces injurers to inflate their level of activity (miles driven, for example) since they know they will not pay for what the accident costs (they are not considered negligent when they meet the social level of care). Other more complicated cases are discussed in the remainder of the chapter.

Chapter 9 reconsiders liability rules when injurers are firms that maximize profits instead of individuals that maximize utility. Two situations are considered: victims are strangers, and victims are clients of firms. In the second case, the firm's behavior is influenced by the clients' perception of the product risk. The total price of the product contains the perceived losses due to accidents that liability payments will not cover. Of course the clients' risk perception can be biased. In that case, it may become very difficult for the courts to determine both the cost of the accident and the degree of negligence. Since, under strict liability, there is no assessment of negligence, it seems that strict liability is preferable when the clients are not well informed. In other words, the strict liability rule would seem to be more relevant as an incentive in the design of noncommercial products but, as clearly indicated by the author, matters are not so simple in reality. Product warranties also affect the choice of liability rules and this effect is a function of customers' perception of risk.

Chapter 10 extends the previous analysis to consider, among other things, the problem of proving negligence, the judgment-proof problem, and vicarious liability. It is clear that the anticipated difficulty of proving negligence in court will affect the level of care taken by potential injurers. The judgment-proof problem is complicated by the fact that potential victims know little or nothing about the financial situation of the injurers. Such a problem is particularly important in cases of environmental risks which are far less likely to be fully insured (Beard, 1990; Lipowsky-Posey, 1993; Boyer and Laffont, 1997; Dionne and Speater, 2003). Airline accidents are also problematic in countries with inadequate safety regulations, because it is well documented that the accident-prevention programs of airlines are significantly affected by their financial conditions (Dionne et al., 1997). The judgment-proof problem arises when the injurer does not have sufficient assets to pay for the losses caused. One solution to the problem posed by the dilution of incentives is to apply vicarious or extended liability to environmental risks, where banks would assume responsibility for their clients' damages. Vicarious liability is discussed in detail in part four of the book. The regulation of liability insurance coverage, as for airline accidents, is another response to the

judgment-proof problem and it is discussed in chapter 11 which deals with liability insurance. Regulations can be applied to the level of care itself, as for airline safety or for the transportation of hazardous materials. Criminal liability is another way of introducing incentives; this is discussed in chapters 21 and 24 of the book.

Chapter 11 is devoted to the presence of insurance: accident insurance for victims and liability insurance for injurers. As is well documented in the moral hazard literature, liability insurance does have its effect on the incentive to reduce risks. A complementary issue concerns the social desirability of such insurance and the extent to which it should be regulated. Introducing insurance implies considering risk aversion since it is well known that risk-neutral customers will not buy nonactuarial insurance policies. The author treats the subject in great detail, distinguishing between the values contributed by liability and insurance: optimal insurance in the absence of liability; liability with risk aversion when insurance is not available; and the optimal outcome combining liability and insurance. Nonpecuniary losses and the judgment-proof problem in the presence of insurance are also discussed in this chapter. Suppose victims are risk averse and lean toward strict liability. In the absence of insurance, injurers will be motivated to reduce the risk of accident and victims will be compensated. But injurers will still be exposed to liability risk. If they are risk neutral, as in the previous chapters, the outcome is socially optimal. If they are risk averse, the outcome is not socially optimal because risk-averse agents have to bear some risk. They may also take too much care or reduce their level of activity to avoid exposure to the liability risk. Under the negligence rule, nonoptimality is explained by the fact that risk-averse victims will bear their loss. In both cases, the presence of insurance can improve welfare: under strict liability, injurers would buy liability insurance, whereas, under the negligence rule, victims would buy accident insurance. Though the net social benefits of insurance decline somewhat in the presence of asymmetric information and actuarially unfair insurance pricing, they should remain positive when optimal incentive contracts are offered by the insurance industry. It must be emphasized that the market does not always implement optimal allocation for liability insurance, particularly when the injurer is judgment-proof. The author discusses two cases where regulation of liability insurance is desirable. The first case is when the injurer must buy liability insurance, as in airline transportation. In that case, because of moral hazard, liability insurance may not be socially optimal if there is no regulation of airline safety. The opposite situation, where liability insurance is prohibited, may induce risk-averse injurers to be overcautious and reduce their level of activity.

Liability implies administrative costs that may reduce the social benefits of liability systems. This resource allocation dimension is discussed in chapter 12 of the book. Administrative costs are the expenses incurred by the parties in resolving disputes. They are usually substantial; they may turn out to be higher than the compensation received by the victims. The level of such expenses has justified the introduction of no-fault regimes for automobile accidents in many states or countries, seeing that a very costly liability system did not prove to be particularly efficient in reducing accidents. As the author emphasizes, the level of litigation and its costs may well not be optimal, since the private incentive to litigate is generally different from the social. Moreover, it is not clear that strict liability is more costly than the negligence rule, being that there

are usually more claims under strict liability, but that each claim under the negligence rule is more costly to process. So, to evaluate the benefits of a liability system, we must compare its benefits in reducing accidents to its administrative costs.

The third part of the book is devoted to contract law or laws governing the enforcement of private contracts. Chapter 13 is of particular interest to those who want a rigorous introduction to the subject. The other three chapters are more specialized and cover contract formation, production contracts, and other types of contracts, such as contracts for transfer of possession and donative contracts.

Part IV gets into litigation and the legal process. Litigation procedures and their costs put other limits on the legal system's capacity to come up with the appropriate incentives and compensations, since potential injurers are well acquainted with these limits. In some cases, it may become so costly for the victims to achieve settlement or judgment that the average expenses may outweigh the average benefits received. In chapter 17, the author describes in detail the basic theory of litigation. He also shows that the private incentives for litigation may diverge from the social ones. In chapter 18, he discusses the influence of insurers on litigation. Chapter 19 is allocated to the other general aspects of the legal process, such as the appeals process and the role of legal advice.

Why should insurers be motivated to influence litigation? First, because their insured victims may go to court seeking compensation from the injurers and the insurers may win the right to receive the insurance compensation already paid to the victims. Moreover, defendants may own liability insurance policies and insurers may have incentives to defeat plaintiffs. There may be conflicts of interest between the insurers and their clients. For example, the plaintiff's insurer may be more willing to settle than the plaintiff, and the defendant's insurer may be less willing to settle than the defendant. As claimed by the author, "insurance generally reduces incentives to spend at trial" (p. 440) because insurers bear legal costs and often make litigation decisions. But this is not necessarily inefficient. Some forms of insurance contracts may be jointly beneficial in terms of litigation. The author proposes that insurers should continue to bear the legal costs (because their clients are more risk averse and have less opportunity to diversify the litigation risk) and control the litigation decision (because they have more experience) even if in some cases the joint benefits of litigation do not go in the same direction. The insured can always go to court against his insurer when he feels the latter did not work in the spirit of the insurance contract.

Part V is about public law enforcement and criminal law. Public law enforcement is usually done by enforcement agents such as the police. By definition, an act is socially undesirable when the expected benefit for the actor is larger than the expected cost caused by it. Many questions are discussed. What type of liability rule should be used for such acts, strict liability or fault-based? What type of sanction is more efficient for deterrence; monetary or nonmonetary, such as imprisonment? The severity of sanctions also affects deterrence. Insurance against sanctions is not permitted as it tends to dilute the deterrence effect of sanctions, although it may protect risk-averse individuals, particularly when the consequence of an act is random. Deterrence of such acts with monetary sanctions is discussed in chapter 20, while deterrence with other types of sanctions is exposed in chapter 21. Examples are given in chapter 22 and

other functions of sanctions apart from deterrence are covered in chapter 23. Finally, criminal law is introduced in chapter 24.

Part VI devotes one chapter to the general structure of legal systems. The theory on this subject is not yet well developed. It concerns the structure of optimal legal intervention: the timing of intervention, the optimal form of intervention, and the determinants of private and public enforcement. To illustrate, the author analyzes the tort law for automobile accidents. The basic question is: Why is it socially advantageous to use a method of legal intervention with a tort system imposing monetary sanctions for accidents? First, the use of monetary sanctions should increase road safety when the judgment-proof problem is not significant. Second, resorting to imprisonment may not be efficient for many types of accidents and will certainly be very costly. Society must also decide whether private parties should initiate legal intervention. Usually victims know or can learn the identity of their injurer and will be more efficient than the state in identifying them and suing them to obtain an indemnity, particularly when we consider the annual number of accidents in a country. The enforcement of safety regulations such as speed limits would be justified by the externalities of risk-taking activities, and this type of regulation is publicly enforced because individuals would not be efficient in doing so. Finally, criminal law may need to be applied for fatal accidents caused by alcohol or other intoxicants. So, the joint use of different methods of legal intervention may become socially desirable for many types of accidents.

The last part of the book covers welfare economics, morality, and the law. Chapter 26 discusses the foundations of welfare economics and morality (fair, just, correct . . .). An important question is: Should morality be considered in the normative analysis of law? Chapter 27 discusses the relationship observed between morality and the law, or the implications of morality issues for the legal system. Chapter 28 looks at separate issues regarding equitable distribution of income and the law. According to the author, the notions of morality are important and must be considered in the social-welfare analysis of legal systems. This consideration should be based on the functionality of the notions of morality and the individuals' taste for their satisfaction (individuals must derive utility for satisfying the notions of morality). Deontological arguments should not count. As a result, legal systems should be seen to reflect the notions of morality of particular societies. The evolution of legal systems over time should also reflect societal changes with respect to morality. But laws can also influence morality to a certain extent. The difficult question is how to take morality into account when setting up the socially optimal legal system. One example already discussed is the comparison between strict liability and the negligence rule. It was argued that, under certain circumstances, strict liability may be preferred because the negligence rule may, for example, induce excessive activity levels. This conclusion can be reversed by introducing morality into the analysis, because of individual tastes in activity levels. Individual tastes for corrective justice may also affect the size of compensations received by victims. Morality may even influence the type of insurance compensation system. Regarding income distribution, the author argues in chapter 28 that income-tax and transfer systems function are more suitable than legal rules in attaining a society's objectives of distributive justice.

Chapter 29 concludes the book by discussing the main issues regarding the economic analysis of law. Many of them have already been summarized above. However, the

author takes the time to fine-tune or qualify certain conclusions. Here is a potpourri of the main conclusions: Individuals are rational but they may err, make mistakes, and even lose control of themselves. Economic models are narrow but help to understand the basic issues of more complex societies. Theoretical predictions should be distinguished from empirical predictions. The major conclusions about the choice of legal rules are not affected by issues of risk allocation, but imperfections in insurance markets may make them relevant. Distributive equity is not the business of legal systems, but notions of morality should affect the choice of legal systems. Maximization of welfare, and not wealth, should be the right criteria. Some of the legal rules applied may not correspond to social optimality because morality or other aspects of real life may not yet have been given the attention they deserve in the economic analysis of law.

So, there is room for many other generations of economists motivated by the economic analysis of law. I very much enjoyed reading the book. It covers with great competence the relevant topics of positive and normative analyses of law. The book reflects the strong academic competence of the author. I recommend the book to academics and professionals. I also recommend its use for teaching the economics of law in law schools, economics departments, and business schools. The only important drawback is the absence of discussion of empirical studies related to the many issues discussed in the book. But this discussion in itself would probably provide enough material for another book!

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