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# **EVIDENCE: GENERAL ECONOMIC ANALYSIS**

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## EVIDENCE

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### Abstract

The economic analysis of evidence law is relatively less developed than other areas of the law and economics literature, notwithstanding this subject's close relationship to other well-developed areas, most notably the economic analysis of procedural rules. This chapter first will develop some of the general issues raised by the economic analysis of evidence within the Anglo-American tradition of adversarial presentation. We will then proceed to consider the existing literature on specific topics in the law of evidence and related problems of pre-trial discovery and trial error.

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### 1. Introduction

The economic analysis of evidence law is relatively less developed than other areas of the law and economics literature, notwithstanding this subject's close relationship to other well-developed areas, most notably the economic analysis of procedural rules (see Friedman, 1998). This state of affairs may be due to the inherent complexity of the subject, as combining the economics of procedural rules with the economics of information, as well as to the diversity of legal approaches to the problems of evidence across different legal traditions and across different jurisdictions within the same legal tradition.

Accordingly, this chapter first will develop some of the general issues raised by the economic analysis of evidence within the Anglo-American tradition of adversarial presentation (Section 2), starting from the analysis of our companion chapter on Civil Procedure: General (Chapter 7000). We will then proceed to consider the existing literature on specific topics in the law

of evidence (Section 3) and related problems of pre-trial discovery and trial error (Section 4).

Related topics are treated elsewhere in this volume by the companion chapter on civil procedure: general (7000), and by the chapters on fee shifting (7300), the litigation/settlement decision (7400), and class actions (7600); the organization of the courts, including jurisdictional issues (7100-7200); criminal procedure (7700); the economics of crime and punishment (8000-8600); arbitration and the private enforcement of law (7500); bankruptcy proceedings (7800); legal error, rules versus standards, and accuracy in adjudication (7900), punitive damages (Volume III, 3700), the computing of damages, including the allocations of damages via contribution and indemnity rules (Volume III, 3500); and the production of legal rules and precedent (9000-9900).

### A. General Considerations

In this part, we first survey evidence law doctrine as evolved within the Anglo-American tradition of adversarial presentation, and then develop the basic economic analysis of evidence law within such a tradition, as an outgrowth of the general concern of procedural rules with minimizing the sum of direct costs and error costs, as supplemented by a more extensive consideration of the effects of evidence rules on the production, supply and use of information both within the litigation process and externally.

## 2. Anglo-American Evidence Law Doctrine

Within the Anglo-American legal tradition, evidence law doctrine evolved initially through common-law development. However, in the United States at the present time, evidence law largely has been codified through the vehicle of the Federal Rules of Evidence (FRE), which were adopted in 1975 for use in the US federal courts and, through their adoption in the Uniform Rules of Evidence, now also are substantially in force in the court systems of some 35 of the 50 States, with some variations. (See *Uniform Laws Annotated* for a list of adopting jurisdictions and treatment of variations.) This provides a degree of uniformity within US evidence law, though some important state court systems continue to follow the common-law approach (as in New York) or have their own distinctive evidence codes (as in California). In this chapter, we will relate evidence law doctrine primarily to the provisions of the FRE.

Anglo-American evidence law doctrine concerns itself primarily with questions of *admissibility* (that is, whether a given item of evidence will be

admitted to or excluded from consideration by the trier of facts, be it judge or jury), and secondarily with questions of *proof and presumptions* (determining which litigant will bear the burdens of producing evidence and persuading the finder of fact on a particular issue).

*Admissibility* rules comprise three categories:

- (1) rules of relevancy, which measure the relationship between offered evidence and the legal issues involved in the litigation (FRE art. 4);
- (2) rules of 'reliability', which regulate the mechanisms and forms by which evidence may be presented, both through witnesses (FRE arts. 6 and 7) and documents (FRE arts. 9 and 10), and include the general rule against hearsay evidence and the exceptions to that rule (FRE art. 8). This usage of the term 'reliability' in reference to this family of rules is not uniform in legal sources, but follows the US Supreme Court's usage in *Daubert v. Merrell Dow Pharmaceuticals*. Other authorities may refer to these rules simply as 'admissibility' rules, or in some cases as 'competency' or 'foundational' rules;
- (3) so-called 'extrinsic' policies of exclusion, most notably the evidentiary privileges for confidential or proprietary information (left by FRE art. 5 to common-law development but codified in most state counterparts).

The basic rule of relevancy is a minimal requirement satisfied by a logical argument that a given item of evidence has non-zero probative value, in the Bayesian sense that its admission will affect the probability of a fact of consequence to the litigation (FRE 401). Relevant evidence is presumptively admissible, unless excluded by another rule (FRE 402). Within the doctrine of relevance, minimally relevant evidence may be excluded if its probative value is outweighed by one or more costs, including delay or waste of time, confusion of jurors, or unfairly prejudicial effect. In addition to a general power in the court to exclude relevant evidence on such grounds (FRE 403), the law gives specific treatment to several categories of evidence ordinarily so excluded, including evidence of 'character', meaning an individual's propensity to act in certain ways (FRE 404-406, 412; but see FRE 413-15 (reversing the traditional rule for allegations of sexual assault or child molestation in both civil and criminal cases), evidence of subsequent changes to an injury-causing condition (FRE 407), and evidence of settlement or plea negotiations, liability insurance coverage, and the like (FRE 408-411).

Reliability rules also can exclude minimally relevant evidence that fails to conform to requirements of admissible form or source. This category includes two basic types of rules, the first being 'threshold' showings - sometimes referred to as 'competency' or 'foundational' requirements - that the evidence stems from a 'reliable' source, which in the case of witnesses

requires that testimony be limited to personal sense impressions ('first-hand' or 'personal' knowledge) and generally excludes non-expert opinion (FRE 602, 701), and in the case of documents requires 'authentication' of the document (FRE art. 9) and prefers original documents to secondary evidence of their contents (FRE art. 10, the 'Best Evidence' rule). The second type of rule in this category is the general rule against hearsay, defined as an out-of-court statement offered to prove the truth of the matter asserted by the statement (FRE 801-802) and its many exceptions (see FRE 803-807) that admit statements made under conditions thought to provide 'circumstantial guarantees of trustworthiness' (FRE 807, stating the open-ended 'residual' exception to the hearsay rule). Both types of reliability rules, and especially the hearsay rule, are rationalized and developed in legal authority by reference to the value of in-court (or some instances, pre-trial) adversarial testing of the credibility of evidentiary sources.

Extrinsic policies of exclusion - paradigmatically, the evidentiary privileges - may exclude otherwise relevant and reliable evidence in order to encourage or protect some relationship or activity 'extrinsic' to the issues in litigation, such as certain governmental functions, the provision of confidential legal, medical, or personal advice, or the productive use of private or commercial information. In this instance, the rule of exclusion explicitly recognizes a tradeoff between the accuracy of litigation fact-finding and a perceived external benefit, or in some instances an offsetting internal benefit, such as improving the quality of legal representation. In addition to the evidentiary privileges, some of the special rules of relevancy excluding evidence of subsequent remedial measures, insurance, compromise negotiations, or the like, are sometimes rationalized by reference to an extrinsic policy of encouraging safety, insurance against risk, settlement, and so on.

*Proof and presumption* rules (see FRE art. 3) are concerned with the allocation and procedural effect of burdens and standards of proof. Generally speaking, the substantive law casts the burden of proof for every element of a claim upon the complaining party (the plaintiff in civil cases and the government in criminal cases) in both of two senses: (1) the burden of production or 'going forward', which allocates the burden of adducing some evidence on the point in question (though this burden can be shifted by operation of a 'presumption'); and (2) the burden of persuasion, or 'risk of non-persuasion', which specifies the party who will lose in the event that the quality of evidence falls beneath the pertinent standard of proof. Aside from specifying the verbal formulae to be used in instructing the trier of fact, and the procedural effects of legally deficient failures of proof, the Anglo-American law of evidence (and procedure) has virtually nothing to say on the subject of proof as distinguished from admissibility. Unless the issue is resolved as a matter of law, determinations of fact by juries are

formally unreviewable by either trial or appellate judges in the United States, and determinations of fact by trial court judges are reviewed under a highly deferential standard on appeal. The concept of the rules is sharply to distinguish determinations of fact from determinations of law.

### 3. General Economic Analysis of Evidence Law

As a species of procedural rule, evidence rules can be approached initially through the economic framework postulated by Posner (1973) of minimizing the sum of error costs and direct costs, both public and private. As with procedural rules in general, the coercive and sequential aspects of the litigation process present potential strategic use of evidence rules by litigants to influence opposing litigants' costs or to degrade the accuracy of judicial determinations (see Friedman, 1992), perhaps resulting in excessive expenditures by both the litigants and the court (see Posner, 1992, p. 586), as well as inaccurate decisions (see Tullock, 1980).

However, evidence rules are distinguished from other procedural rules by being focused solely upon the fact-finding aspect of the litigation process. This characteristic has two major implications for the economic analysis of evidence rules that have been identified in the literature: (1) the internalization of most factual error costs; and (2) the effect of evidence rules on information supply, both within litigation and externally.

#### 3.1 Internalization of Error Costs

Aside from the precedential effect of evidentiary rulings themselves, error costs associated with inaccurate fact-finding in litigation tend to be internalized to the immediate parties, thus diminishing the social interest in the accuracy of any particular litigated outcome, unless such errors are systematically biased (see Kaplow, 1994; Kaplow and Shavell, 1994, 1996; Parker, 1995; Rasmusen, 1995). Furthermore, in the absence of external effects, and with the competitive provision of evidence to the court by adversarial parties motivated by symmetrical stakes, there is reason to doubt whether relying on information provided by interested parties systematically degrades the accuracy of factual determinations, even assuming strategic behaviors. Milgrom and Roberts (1986) demonstrate this result under the assumption of symmetrical and costless access to information by the parties. The same theoretical result is extended to symmetrical but costly access by Froeb and Kobayashi (1993, 1996) (see also McAfee and Reny, 1992; Shin, 1998; and Lewis and Poitevin, 1997), and is consistent with recent experimental findings comparing adversarial with non-adversarial presentation in terms of both revelation of hidden information and accuracy

of litigated outcomes (Block et al., 1998; Parker and Lewisch, 1998). However, these results are qualified by reference to the assumption of symmetrical access and verification of parties' reports, which highlights the potential importance of the pretrial discovery process as eliminating or diminishing the case of private asymmetrical information in one party (see, for example, Cooter and Rubinfeld, 1994; Hay, 1994; Jost, 1995; Sobel, 1989; and the discussion in the companion Chapter 7000 of this work). Subject to those qualifications, the economic analysis of evidence law has tended to focus on the functions of evidence rules in regulating either direct costs to the parties and the court, or a different class of error costs occasioned by systematic bias or other agency costs on the part of the public decision-maker. From this perspective, many aspects of both proof and the admissibility rules of relevancy and reliability have been explained (or criticized) in terms of their operation on the marginal product of parties' and courts' expenditures (see Posner, 1973, 1992, § 21.8; Gibbons and Hutchinson, 1982; Rubinfeld and Sappington, 1987; Miceli, 1990; Friedman, 1992; Davis, 1994; Hay and Spier, 1997), as reinforcing the institutional specialization implied by the division of decision-making authority within tribunals, including the internalization of fact-finding error by design (Parker, 1995), or as controlling bias on the part of decision makers (Posner, 1992, p. 521; Shrag and Scotchmer, 1994).

### *3.2 Effects on Information Supply*

The second major distinguishing feature of the economic analysis of evidence law concerns the effects of evidence rules (and related rules of pre-trial discovery) on the supply of information both within litigation and externally. This is most transparent in the case of evidentiary privileges, which are based explicitly upon considerations of encouraging the generation of certain types of information by protecting against compelled disclosure, and as such define a class of intellectual property (Easterbrook, 1981; see also Gould, 1980; Kitch, 1980; and Stigler, 1980). While some evidentiary privilege rules may have entirely external effects on information production (as balanced against direct and error costs internally), both the attorney-client privilege and the related 'work product' doctrine (which protects against compelled disclosure of the fruits of litigation inputs by litigants and lawyers) appear to be endogenous to the litigation fact-finding process, and therefore may contribute either positively or negatively to direct costs and error costs. Existing literature expresses differing points of view on the social consequences of these effects (see Allen et al., 1994; Bundy and Elhauge, 1991; Kaplow and Shavell, 1989, 1990, 1992; Shavell, 1988).

However, the effect of evidence and discovery rules on information supply is more general than the rules of privilege. First, compelled disclosure of information in litigation can affect the incentives of both

parties and non-parties to produce information *ex ante*. Thus, rules compelling an interested party to disclose harmful information to the court or adversary (either by formal order or by default on a burden of proof) may reduce incentives to produce any information, or bias the production function (see Kobayashi, Parker and Ribstein, 1996; Shavell, 1989), and, by extension, one or both incentives may also affect even disinterested non-parties, essentially by imposing a 'tax' on information through its expropriation in the litigation process (see Parker, 1995). Second, even in the absence of compulsion, as in the case of compensated expert testimony, the rules of admissibility can affect the external supply of information available for use in litigation, by influencing the marginal incentives of prospective expert witnesses to produce certain forms of expert opinion (Parker, 1995; see also Elliott, 1989).

### **B. Specific Topics in the Economic Analysis of Evidence Law**

In this section, we will survey the existing law and economics literature by reference to the main problems addressed in Anglo-American evidence law doctrine, under the following divisions: (a) relevance and prejudice; (b) statistical evidence; (c) burdens of proof, presumptions, and accuracy; (d) knowledge, opinion, and expert testimony; (e) the hearsay rule; and (f) evidentiary privilege. As will be demonstrated by this survey, relatively few of the institutional details of the law of evidence have been analyzed by the law and economics literature to date.

#### **4. Relevance and Prejudice**

The doctrine of relevancy and its counterweights (discussed in section II.A above) appears designed to operate upon both error costs and direct costs to the parties and the court, by focusing all evidence on the matters of fact identified as decisive by the substantive law (FRE 401). Presumably, this improves the efficiency of law enforcement and contributes positively to the accuracy of adjudication (see generally Kaplow, 1994). In addition, relevancy standards may operate to reduce agency costs in the form of fact-finder bias, by depriving the fact-finder of access to information on non-relevant grounds of decision (see Posner, 1992, p. 521).

This same concept of controlling agency cost in the form of bias is carried over into the joint case of evidence that has both probative value and 'prejudicial' effect (conceived for this analysis as extrinsic grounds of decision), for which the law (FRE 403) requires the judge to make an explicit cost-benefit analysis (see Gibbons and Hutchinson, 1982, discussing



the British counterpart to FRE 403). In addition, more specific rules carry the same concept into identified types of evidence, most notably the general rule against 'character' (propensity) evidence (FRE 404) and the recent exception for sex crimes (FRE 412-415), which is analyzed within this framework by Schrag and Scotchmer (1994). Similar considerations may underlay the additional rules disfavoring the admission of evidence of remedial measures taken after an injury-producing event, settlement negotiations, and the like (FRE 407-411) (see Daughety and Reinganum, 1995; Rasmusen, 1998). Alternatively, those rules could be analyzed in whole or in part by analogy to rules of evidentiary privilege, as seeking to reduce the 'taxation' effect of admissibility on the conduct in question, which produces both information and other goods that may have external benefits, as in the case of remedial measures improving safety (FRE 407), or endogenous benefits to the litigation process, as in the case of settlement negotiations (FRE 408), for which both non-disclosure and inadmissibility may contribute positively to the quality of legal representation (see generally Allen et al., 1990).

Relevancy rules may also operate on direct costs as constraining strategic behaviors by litigants that could result in excessive trial expenditures (see Posner, 1992, pp. 564-566; Tullock, 1980), or as one of several mechanisms for rationing access to trial time. Under the traditional Anglo-American system, parties can present evidence at trial without general limit, except through the rules of relevance, under which the judge may exclude even relevant evidence as cumulative or a 'waste of time' (FRE 403). In more recent years, this function has been supplemented by more extensive case 'management' by American trial judges, both before and at trial (see the companion Chapter 7000 of this work).

## **5. Statistical Evidence**

There is a large body of interdisciplinary literature, mostly outside the law and economics field, discussing the use of probabilistic reasoning and statistical methods in assessing both admissibility and proof (for example, Cohen, 1981; Fairley, 1973; Fienberg, 1989; Finkelstein and Fairley, 1970; Kaye, 1979, 1981; Kornstein, 1975; Lempert, 1977; Nesson, 1985; Schum, 1986; Shaviro, 1989; Tillers and Schum, 1988; Tribe, 1971; see generally Anderson and Twining, 1991; Schum, 1994). As part of this literature, there is debate concerning whether and to what extent statistical findings should be admitted into evidence, especially in criminal cases of disputed identification.

In American law, this problem has been addressed through the standards applicable to expert testimony (see Part D, below) and as an application of the relevancy-prejudice balancing analysis of FRE 403. The relatively hostile

attitude of American courts toward admissibility may reflect the bias inherent in the selection of disputes for litigation, and for trial versus settlement (see generally Gould, 1973; Priest and Klein, 1984). Statistical methods generally assume random events, while litigation selects unique events non-randomly, and substantive law generally attaches significance to unique events rather than mean outcomes, though it has been argued that this may be inefficient in some settings (see Kaplow and Shavell, 1996). However, where the substantive law effectively requires all events to be random as to some variable (as perhaps in alleged discrimination in jury selection, employment, or the like), or states a standard related to mean outcomes rather than unique non-random events, then the case for admission of statistical findings is stronger.

## **6. Burdens of Proof, Presumptions, and Accuracy**

The debate noted in the previous subsection also embraces questions concerning the evaluation whether a body of evidence meets specified standards of proof, which tend to be stated in terms suggesting probabilistic analysis, as in 'more probable than not' (the 'preponderance' standard applicable in most civil cases), 'clear and convincing evidence' (a higher standard for certain civil cases such as fraud that may have external effects on reputation), and 'beyond a reasonable doubt' (the highest standard, applied in criminal cases). (See the sources cited above and Lombardero (1996), which considers joint probability determinations.) Strictly speaking, this debate has limited significance to the law of evidence or the law of procedure, especially in jury cases, because the sufficiency of evidence to meet a particular standard is evaluated legally through the rule of 'substantial evidence', which essentially asks whether a jury rationally could accept the evidence as sufficient - a highly deferential rule that insulates all but the most egregious factual errors from review by trial or appellate judges, thus minimizing the law's concern with factual accuracy in particular cases.

In contrast, the selection of standards of proof is considered a legal question, which from the economic perspective appears to rest upon whether error costs are symmetrical, with the higher standards predicated on the assumption that false positive errors are more costly than false negative errors in certain settings (see Kaplow, 1994; Kaplow and Shavell, 1994; Posner, 1992, p. 553). However, error costs may also depend upon factors other than the standard of proof (see Davis, 1994, arguing that both the parameters of the underlying population and characteristics of fact-finding technology may affect the optimal standard of proof).

Distinguishable from the standard or quality of proof is the selection of which party bears the burden of proof in terms of both ultimate persuasion and initial production of evidence (see Rubinfeld and Sappington, 1987; Miceli, 1990; Hay and Spier, 1997; Sanchirico, 1997b). The casting of the burden of proof may affect both error costs and direct costs. The general rule of casting the burdens of both production and persuasion upon plaintiffs may operate to reduce direct costs by providing an incentive to avoid litigation in the first instance (see Posner, 1992), and may operate within the litigation to reduce incentives for strategic behavior by forcing plaintiffs to internalize more of the direct cost of obtaining the transfer payment they seek, though the advent of compelled pre-trial discovery from the adversary tends to re-introduce both strategic behavior and moral hazard problems (see, for example, Cooter and Rubinfeld, 1994; Easterbrook, 1989). Even aside from discovery procedures, casting the burden of production on the party bearing relatively higher costs of production may increase both direct and error costs.

Presumptions, under the standard analysis (see FRE 301-302), operate to shift the burden of production rather than persuasion, usually by allowing the party bearing the burden to substitute proof of a different 'basic fact' for direct proof of the 'presumed fact' required by substantive law (see Epstein, 1973). From an economic perspective, presumptions would appear to be based upon both a high factual correlation between the basic and presumed facts, coupled with a disparity in the costs of producing evidence of the two facts, at least in some circumstances.

## **7. Knowledge, Opinion and Expert Testimony**

The 'reliability' rules of admissibility also can operate on both error costs and direct costs (see Gross, 1987), though they also may have effects on information supply and in some instances may be influenced by the interest in policing strategic behaviors by litigants. The basic reliability rules of 'competency' and 'authentication' require that witness testimony be confined to 'facts' based upon the witness's first-hand 'knowledge' (personal sense impression) as distinguished from 'opinion', and that documents be shown to be authentic before their contents may be considered. In both instances, the evidence is required to meet a threshold 'quality' standard before it is admitted to consideration. Thus, these rules can operate both on error costs (assuming that the legal standard of quality is positively related to accuracy) and on direct costs, by channeling the litigants' efforts away from lower quality evidence and toward higher quality evidence, thus increasing the productivity of the parties' expenditures at trial and reducing

strategic behaviors consisting of introducing 'low quality' evidence that imposes rebuttal costs on the adverse litigant (see Posner, 1992, pp. 564-566).

The most significant of these rules is the requirement that witness testimony be based upon first-hand knowledge (FRE 602) and its negative correlative in the rule generally excluding non-expert opinion (FRE 701). One economic explanation for these rules is that they embody the economic logic of specialization within the institutional setting of trial, by separating raw information inputs from the inferential function performed by the trier of fact (see Parker, 1995), thus arguably reducing both error costs (if juries and judges are more accurate in drawing conclusions than witnesses) and direct costs, to the extent that litigants are prevented from introducing the 'lower quality' second-hand information or witness conclusions.

The rules permitting expert testimony (see FRE 702-705), generally cast in the form of opinion, may be based upon the similar logic that experts, within their fields of professional specialization, may possess a comparative advantage over juries and judges in drawing conclusions from the available data (see Parker, 1995). However, the standards defining the permitted scope of expert testimony have been controversial. By the logic of permitting expert testimony, neither judges nor juries are well-equipped to evaluate when it actually provides a comparative advantage in fact-finding, and so there has been a tendency to look toward external standards of 'general acceptance' in the expert's field. These rules in turn have been criticized as permitting strategic behavior by parties within the litigation (see Elliott, 1989) and as encouraging rent-seeking behaviors by both litigants and testifying experts (Parker, 1995), and recently have been modified by the US Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals*, to place more emphasis on internalized admissibility standards and adversarial testing of scientific expert testimony.

An alternative to exclusive reliance upon adversarial presentation is provided by the court's authority to appoint its own 'neutral' expert (FRE 706). However, Froeb and Kobayashi (1993, 1996) have shown theoretically that the court-appointed expert does not reduce either direct or error costs from the alternative of competitive and selective presentation by adverse parties, even if the fact-finder is both naive and biased. Furthermore, their analysis suppresses considerations of public-choice problems or agency costs in the judge or expert, which would tend to strengthen their results in the direction of favoring adversarial presentation. Their assumption of symmetrical access in the parties does not appear to be a severe limitation in the context of expert opinion testimony, which by definition does not rest upon private factual information and is supplied in an explicit competitive labor market.

## **8. The Hearsay Rule**

Like the other ‘reliability’ rules, the rule against hearsay evidence (an out-of-court statement offered to prove the truth of the matter asserted by the statement) (see FRE 801-802) appears designed to reduce by direct and error costs by preferring in-court testimony (presumably of higher quality, see Tribe, 1974, for a legal treatment of quality issues) to the secondary ‘hearsay’ evidence, and by requiring the proponent of the evidence to bear the higher cost of producing the higher quality of evidence. The status of the hearsay rule as a rule of preference rather than a rule of absolute exclusion is indicated by the many exceptions to the general rule (FRE 803-807) and important categories of defined non-hearsay statements (FRE 801(d)), notably including statements by adverse litigants, former testimony, business or governmental records, and spontaneous declarations, among others.

However, the rationale of the basic rule has been criticized by Friedman (1992), who argues that the cost of producing the higher-quality non-hearsay evidence should be placed upon the opposing party, in order to reduce strategic uses of hearsay objections to exclude evidence having some net probative value (see also Kaplow, 1980). This analysis assumes that hearsay evidence passing the relevancy balancing test of FRE 403 will contribute positively to accuracy, and that the proponent is not uniquely advantaged over the opponent in the cost of producing the non-hearsay evidence, and does not address strategic behaviors by proponents under this alternative regime, or consider possible effects on external supply.

## **9. Evidentiary Privileges**

The law of evidentiary privileges explicitly incurs some measure of direct and error costs within litigation fact-finding in order to achieve the ‘extrinsic’ benefit of encouraging information production by securing property rights against compelled disclosure of information generated in the course of specified relationships or activities. The protected activities traditionally included confidential communications between attorney and client, physician or psychotherapist and patient, priest and penitent, law enforcement officers and informants, and between spouses, as well as trade secrets and government secrets. Recent legislation in some US jurisdictions has extended such protection to news reports and their sources and a wide of counseling relationships. More broadly conceived, this category of rules might be thought to include the constitutional privilege against self-incrimination and the exclusionary rule applied to evidence obtained

through illegal search and seizure by the government, though those topics conventionally are treated as part of the law of criminal procedure (see Chapter 7500 of this volume).

Within the law and economics literature, only the attorney-client privilege and the related 'work product' doctrine (protecting against compelled disclosure of litigation inputs by lawyers and litigants) have received extensive consideration. These rules may have differing and more complex characteristics than the other types of privilege, which are most conceived as having only negative influences on the cost and accuracy of litigation fact-finding, to be balanced against positive external benefits widely diffused throughout the society. In contrast with that simpler analysis, both the attorney-client privilege and the work product doctrine may operate to improve the quality of legal representation, and in that way reduce both error costs and direct costs within litigation, in addition to whatever external benefits (or costs) ensue (see Allen et al., 1990; Bundy and Elhauge, 1991; Kobayashi, Parker and Ribstein, 1996).

Suppressing these possible internal benefits to the litigation process itself, a series of papers by Shavell (1988) and Kaplow and Shavell (1989, 1990) questions the social desirability of protecting the confidentiality of legal advice in a variety of settings. The Kaplow-Shavell analysis is criticized by Allen et al. (1990), on the ground that it overlooks the constructive role of confidential client communications in assisting lawyers' development of alternative legal grounds for the litigant's case, which might not be discovered and developed in the absence of the privilege. They advance a similar analysis of the work product doctrine as enabling lawyers to overcome a 'joint production' problem (that is, that lawyers' investment may produce both positive and negative information regarding the client), extending the previous work by Easterbrook (1981) treating the work product doctrine as a species of intellectual property protection.

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