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Labeling

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Synonyms

Certification Labeling; Marking

Definition

Labeling is the affixing of a mark and symbol or identifying word or phrase to a product or process for the purpose of providing information about an undetectable attribute. The attribute could be a product ingredient, a manufacturing process, or an aspect of the production process anywhere along the supply chain.

Labeling

The economic study of *labeling* generally refers to the research regarding the welfare impacts of descriptions, marks, or symbols affixed to a product for the purpose of providing consumer information, typically concerning a credence attribute. A credence attribute (Darby and Karni 1973) exists when consumers cannot detect the attribute even after consuming the product and must rely upon provided labeling information. Examples of labeled attributes are nutritional labels, organic labels, eco-labels, or safety information. Such attribute labels concern either the final-stage manufacturing of the product or some aspect of the production process itself. Further examples include wine appellations, production methods such as "sustainably grown" or "bird friendly," the inclusion or exclusion of genetically modified ingredients, "fair trade," "country of origin," or even more well-known labels such as single malt or Champagne, which refer to processes or regions that imbue the product with a demand-shifting attribute. Along with being credible, labels, to be successful, must overcome coordination and free-riding problems, and as such, many fall under governmental regulations. In the United States, marketing orders and checkoff programs allow growers to jointly market a product using a producer association label (e.g., "Certified Angus Beef"), while other nations use similar regional and product appellations. Some labels are quite broad, encompassing large classes of products such as France's "Label Rouge" program to indicate quality. Labels may be for attributes desirable by all consumers as in the case of food safety or nutrition (e.g., vertical differentiation) or desirable to some consumers, while other consumers show relative indifference as in the case of organics and genetically modified ingredients (e.g., horizontal differentiation). The label can be either positive, indicating the presence of the

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attribute, or negative, indicating the attribute's absence. Most economic research on labeling has examined descriptions on food products.

In its broadest sense, a label could encompass branding and other private-party signaling although more often research on labeling focuses on governmental or producer association labels not directly affiliated with any one manufacturer where truth in labeling statutes might be difficult to apply (Giannakas 2002). For example, while consumers might trust a winery's claim that the grapes used are 100% cabernet, the consumer may be less inclined to trust the winery on whether its workers were paid a fair wage or whether the grapes were organically produced. Conversely, such a winery may wish to build a reputation for incorporating such attributes in its manufacturing, and seeking out a third-party certifier could be a smart business decision.

The economic research often takes as a datum that consumers would not trust the manufacturer to correctly self-report a credence attribute. There are practical reasons for this. It may be impossible to detect through chemical testing, for example, whether a firm's ingredients are organic, and it would be arduous for consumers to detect whether a firm's suppliers follow environmental safeguards. Certification agents (public or private) who specialize in such detection are seen as necessary in cases where the labels signal the production methods, regional sourcing, environmental impacts, and safety or quality of a good. The absence of the label for a desirable attribute creates a so-called lemon problem (Akerlof 1970) where consumers who have a higher willingness to pay for a good with some attribute (e.g., free of antibiotics or genetically modified ingredients) or produced using a preferred production method (e.g., kosher or dolphin safe) have no way of discerning the quality in the absence of the label. If other firms could make the claim without adhering to the labels' standards, consumers would learn to distrust any labeled good resulting in a crowding out of the desired attribute despite the presence of consumers who would purchase it.

Numerous studies have examined consumers' willingness to pay for or avoid paying for particular credence attributes (see Caswell and Mojduszka 1996 and the extensive discussions of studies in Krarup and Russell 2005). Research on the upstream environmental benefits of labeling consumer products is also an area of much research (Krarup and Russell 2005). Along with the welfare implications in general, research on policy effectiveness have incorporated models of product differentiation and market structure to examine the impacts of labeling on vertical coordination, market power, and international trade (Bonroy and Constantatos 2015; Lapan and Moschini 2007; Roe and Sheldon 2007), reducing costly searches (Teisl and Roe 1998), and whether eco-labeling in particular might be counterproductive to environmentalists' desires (Matoo and Singh 1994). Research also delves into label proliferation, which arises when products contain multiple, sometimes competing labeled, attributes (Kiesel and Villas-Boas 2013; Marette 2014); behavioral economics through framing (how the wording of a label impacts welfare; Levin and Gaeth 1988; Crespi and Marette. 2003a, b); comparing label policies with other policies (Bonroy and Constantatos 2015; Marette and Roosen 2011); voluntary versus mandatory labeling (Roe et al. 2014); and the impact of labels on brain functions (Bruce et al. 2014).

Cross-References

- ▶ Food Safety
- ▶ Horizontal Product Differentiation

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Laffer Curve

► Laffer Effect

Laffer Effect

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Abstract

The Laffer effect, that takes its name from Arthur Laffer, the economist who presented it in discussions to support tax cuts by US President Ford (1974-1977), consists of the increase of the tax revenue caused by reductions of tax burdens. This principle had already presented in the past by Suetonius (119/122), Pufendorf (1672), Hume (1742), Montesquieu (1748), in various contexts, either for the maximization of tax revenues or for that of national wealth and welfare. In contemporary economics, the tax cuts to increase tax revenue and GDP have been theorized in a supply side and public choice approach by James Buchanan and others, either as mere tax policies or in broader supply side-policy frame, as that of deregulation. The Laffer effect may be misunderstood through fiscal illusions. Is has often been muddled with Keynesian demand-side approaches.

Definition

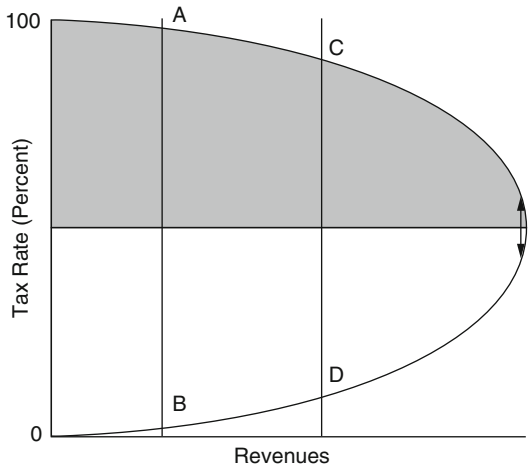
Effect of tax rate reduction which does not reduce the tax revenue but may even increase it.

Synonyms

Laffer curve

Laffer curve takes its name from Arthur Laffer. Wanniski (1978) writes that this economist and professor of Business Economics at the University of Southern California – and adviser of the president of the USA Gerard Ford in 1974–1977 – presented it in a discussion, to support a tax cut, drawing the curve of Fig. 1 and telling that "There are always two tax rates that yield the same revenues."

The tax rate is on the vertical axis, while the revenues are on the horizontal axis. The revenue depends from the size of the taxable basis (which does not appear in the graph) and from the level of the rate. The tax rate affects the revenues through its relation with the public expenditure and through its effect on the behavior of the taxpayers. Initially an increased revenue devoted to public expenditure gives benefits greater than the cost of



Laffer Effect, Fig. 1 The Laffer curve

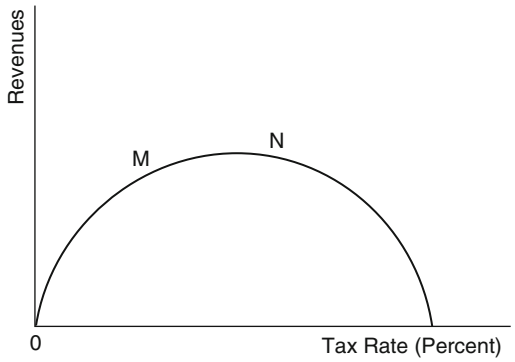
the taxes in terms of loss of wealth and incentives. Therefore, the revenue increases both because the rate increases and because the taxable basis increases. Subsequently the benefits of the cost of the tax for the taxpayers overcome the benefits of public expenditure, and the negative effects of the tax increase reduce the taxable basis at an increasingly rate. Therefore, the revenue increases at a reduced rate because the reduction of the taxable basis reduces the revenue effect of the increase of the tax rate. After a point, the taxable basis diminishes in a proportion greater than the increase due to the rate increase and the revenue diminishes. Thus, any amounts of revenue except the point of maximum revenue may be achieved with two alternative tax rates as those indicated with A = B and, respectively, C = D. Wanniski, however, appears to give *a wrong supply-side* explanation of the Laffer curve because for him the maximum rate seems the best not only from the point of view of revenue maximization but also from the point of view of production maximization. This is not true because the maximum revenue does not imply a maximization of the economic activity taxed as shown clearly by Monissen (1985, 1999). The situation, indeed, is similar to that of a monopolist, as pointed out by Brennan and Buchanan (1980), dealing with a "Leviathan state." Wanniski, as Laffer's predecessor, quotes Montesquieu and Hume. But while in Montesquieu the principle of the optimal tax rate seems to be in relation to the maximization of the budget revenue (Montesquieu (1748), Book 13, Chapter VII, writes that the free government maximizes its revenue when the revenues of taxpayers are maximized and, in Chapter XV quoted by Wanniski, adds that the free government that increases too much its taxes shall lose the power in favor of a despotic state with lower taxes.), in Hume (According to Hume (1742), VIII § 8, increases of taxes may induce taxpayers to increase their efforts, but, after a point, the opposite taxes place.), it appears to be in relation to the maximization of the production taxed, which may imply the maximization of the national wealth (The same is true for Adam Smith (1776) fourth maxim of taxation, as for taxes that obstruct the industry of the people or discourage them.). With this ambiguity, the Lafferian principle goes back to Suetonius (Suetonius (119/122), Chapter III, The life of Tiberius, § 32) – who refers that the emperor Tiberius "to governors who recommended burdensome taxes for his provinces, wrote in answer that it was the part of a good shepherd to clear his flock, not skin it."

Thus, the Laffer curve presents two ambiguities: it may be conceived for a partial equilibrium, with GDP as given, or for a general equilibrium. While in the short run the GDP may be given, in the longer term it may change, through the effect of taxation and of exogenous factors, and this may imply that the tax revenue Laffer effect differs from the tax revenue/GDP effect. Therefore, many fiscal illusions may arise (Fedeli and Forte 2014a, b). Pufendorf (1672, Book VIII, Ch. I §5) mentioned by Gerloff (1948) (see Gerloff (1948) pp. 2010–2014 on the Gestez der Verringerung der Steuerfälle in Blankart (1991)) presents a partial equilibrium case of the revenue of an excise tax in a scenario of international or interregional tax competition, where a government may get a gain of revenue, by reducing its tax to the level of that of competing governments.

In Forte, Bondonio, and Jona (1980), p. 48, I presented the (partial equilibrium) curve of Fig. 2 similar to that of Laffer, with inverted axes, where the tax rate and the taxable basis are considered *under a given GDP.* The taxable basis is negatively influenced by the tax

avoidance – done by evasion, elusion, and outflow of the taxable matter – caused by rate increases. A reduction of the rate may increase the tax revenue, at any level of GDP, but then also GDP may change and the elasticity of the taxable basis to GDP may change.

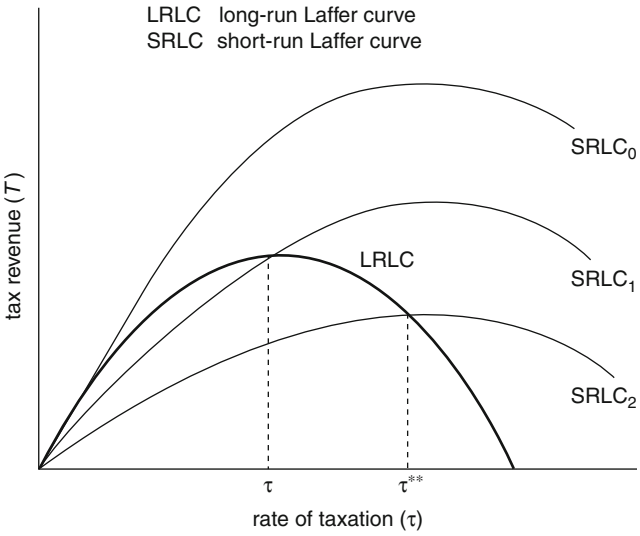
A similar Lafferian curve is given by Gutman (1981) and by Frey and Weck (1983) as presented in Blankart (1991) Chapter 11, § 5), considering the effects of the level of the tax rate on shadow economy. In these cases the tax revenue/GDP ratio in the subsequent years is influenced both by the effect of tax burden on the shadow economy and by the way in which it is assessed in GDP. Buchanan and Lee (1982a, b) argue that reduction of taxes with balanced budget, in medium term, may give increased GDP and additional revenues, thus allowing an increased public spending, with a balanced budget and a smaller government size as in Fig. 3 presented in Frey and Weck (1985), p. 103, which is valid also for the tax revenues/GDP ratio.



Laffer Effect, Fig. 2 Forte (1982)'s Laffer curve

Later on J. Buchanan connected these Laffer effects to increasing returns and work ethics (Forte 2008).

A dangerous ambiguity of the Laffer curve, in the short and longer term, derives from its extension to the Keynesian tax reduction from a demand-side point of view, approved by Laffer (2004) (The ambiguity of Laffer's own view is increased by the fact that he considered Kennedy's tax cut, inspired by the Keynesian doctrine, as an application of his principle. Canto, Joines, and Laffer (1982), however, put the Laffer curve only in a supply-side context.), quoting Keynes (1933) who argues that a reduction of taxes *in deficit* may increase the national income by increasing the demand, thus bringing back a balanced budget at a higher level of income (Keynes (1933), p. 338, "taxation may be so high as to defeat its object, and that, given sufficient time to gather the fruits, a reduction of taxation will run a better chance than an increase of balancing the budget"). The deficit-tax cut theorized by Keynes and many neo-Keynesians introduces a fiscal policy "Trojan horse" that may lead



Laffer Effect, Fig. 3 The long- and the short-run Laffer curves

to a "democracy in deficit" Buchanan and Wagner (1977). Hypothetical future Laffer effects may be invoked to justify a popular budget unbalance and redistributions of taxation from consumptions to savings and from poor to rich. But while in a Keynesian world this can increase GDP by increasing consumption, the opposite may happen untrue in a supply-side approach.

Tax illusions are very relevant as for the Laffer effect. Forte (1987) shows that a fiscal bureaucracy pursuing the gross revenue maximization may not maximize the net revenue because the marginal costs of collection may exceed the marginal increase of revenue.

Laffer effects are also conditioned by the institutional scenario. Tax cuts joint with a reduction of regulations have caused Laffer effects as shown by Fedeli and Forte (2008) and Fedeli, Forte, and Zangari (2008) for reductions of social security contribution accompanied by deregulation of the labor market. Trabandt and Uhlig (2009), within a neoclassical model of growth, assessed how much the USA and EU may still increase taxes without a negative Laffer effect. Fedeli and Forte (2014a) demonstrate by empirical research on OECD countries that high deficits and high taxes may reduce GDP with implications for long-run Laffer effect. Tanzi (2014) defines the Laffer curve as a muddle. Nevertheless, in this muddle, one carefully looking may find gold nuggets.

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► Fiscal System

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Language of Economics

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Abstract

The aim of this contribution is to discuss the characteristic features of economic discourse. Moreover, the language of economics is studied through the prism of domains, approaches, and perspectives used to investigate the complexity of economic communication. In addition, different methods of researching the language of economics are presented and discussed, including interdisciplinary methodologies.

Introduction

Modern economics, as other domains in life, can be characterized by different features of the twenty-first century. One of the key factors shaping modern economic reality is globalization, represented in, among other things, relatively easier access to different resources, of material and nonmaterial character, that have been previously limited because of, among other things, geographical or technological barriers. The power of technology (in terms of transport and communication possibilities), represented in its influence on the global market, has led to the growing importance of linguistic skills, indispensable to meet the needs of stakeholders coming from different parts of the world. Since the modern economic emporium has shrunk as far as geographical or technological distance is concerned, companies may operate simultaneously in various countries by communicating via telephone, emails, or social networking tools with the representatives of markets that could not have been reached in the past. Communication itself also varies in comparison with the type of interactions popular in the past century. In the area of Tofflerian prosumers, customers are not only passive receivers of goods and services but they are also active creators of merchandise and organizational culture. They do not only design products themselves but they also construct the dialogic sphere in which they participate as proper members, together with producers, users, and the nonhuman entities, such as goods and the broadly understood technological environment of economic reality. The interactional approach is also highlighted by Klamer (2007, p. 15), who states that *economics is a conversation, or better, a bunch of conversations, and economists are economists because they are in conversation with other economists*. The development of economic discourse takes place in various domains, leading to the appearance of new subdomains and methodological coexistence with other academic disciplines. The burgeoning research encompassing the representatives of different disciplines makes the language of economics a complex and multidimensional phenomenon. As far as scientific studies are concerned, the article by William Warrand Carlile (1909) was one of the first works on the language of economics. Nowadays, the role of economic communication is studied by both researchers and businesspeople in order to make this type of language for special purposes even closer to speakers representing different levels of economic knowledge. At the individual level, the popularity of the language of economics is also connected with the growing role of goods in the life of individuals and the importance of material possession for some people. Taking the organizational dimension into account, effective communication exercised both internally and externally is one of

the key determinants of company effective performance on competitive markets.

The Language of Economics: A Definition

The language of economics can be understood in at least two ways. The first method is to treat language in the broad sense, analyzing both verbal and nonverbal (e.g., pictorial or olfactory) communication. The language of economics investigated in this way can be observed from a more holistic perspective, drawing one's attention not only to the linguistic layer of economic discourse but also to other senses that shape the rhetoric of economics. Taking marketing as an example, verbal communication stimulates purchasing behaviors of customers, together with other types of experience that determine the way reactions and behaviors are shaped. For example, smells and sounds used in shops may intensify the perception of words aimed at making buyers interested in products. Thus, the approach to language is synesthetic, showing how verbal, pictorial, olfactory, and audio dimensions create the way a given phenomenon is encoded and decoded. Another perspective is to concentrate exclusively on the linguistic level of economic communication, focusing only on words and their role in this type of language for special purposes.

The next field of analysis is the dichotomy of inner and outer dimensions of economic discourse. At the internal (mainly organizational) level, the language of economics plays the following functions. First, it facilitates internal communication between specialists representing different areas of economics, offering them the common ground for specialized interactions. Secondly, organizational discourse offers the possibility of "closed and exclusive communication," relying on selected terms understood only by the members of a given organizational community. This results in a creation of a corporate code and, consequently, a strengthening of organizational identity. Analyzing the language of economics from a more external perspective, it stimulates effective communication between economists and laymen, often coming from different linguistic and professional backgrounds. For example, the dominance of English terms in economic discourse makes it easier for specialists speaking different languages to communicate by relying on international concepts understood by different users, regardless of their mother tongues.

The Language of Economics: General Characteristics

The language of economics does not exist in a vacuum; it shapes and, at the same time, is shaped by other domains of life, such as politics, culture, geography, technology, and economics. The multidimensionality characterizing the language of economics can also be observed at the level of stakeholders. The participants in economic dialogue can be categorized by taking into account their level of knowledge on economic matters and their professional involvement in organizational matters (employees vs. nonemployees). The language of economics should also take into account users with special needs, visible in, e.g., adjusting product information for the blind. Thus, the studies on economics discourse should also encompass communication types and tools tailored to the needs and expectations of a diversified audience. Apart from the mentioned external determinants, the language of economics is a complex phenomenon within itself. One of its key characteristics is the high number of borrowings and loans in its lexicon. In many languages of economics, loanwords constitute a large part of economic dictionaries. Taking the example of English, many economic concepts come originally from French, making it the most powerful language donor, contributing about 40–60% of all terms, depending on subdomains, such as law, accounting, or general business. An example can be coupon used in finance, entrepreneur used in management, or force majeure used in business law. Another key donor language is Latin, with terms such as *moneta*, *pondus*, and *centus* representing the monetary dimension of economics. Another important foreign language that influenced the current state of English economic lexicon is Japanese. One of

the areas rich in Japanese terms is management philosophy, with such terms as *genba shugi*, *keiretsu*, and *zaibatsu*. Another field that relies on Japanese words is technical analysis, with such names describing candles as *Harami*, *Marubozu*, or *Doji*. The next linguistic donor is Greek, with such terms as kappa, rho, or phi used to describe options. Other foreign concepts in the English language of economics come from Italian (e.g., agio and mezzanine), Spanish (e.g., cargo and gambit), as well as the North Germanic languages and German (e.g., *blitzkrieg tender offer*) as discussed by Bielenia-Grajewska (2009a). The linguistic dimension of economic discourse is also connected with literal and figurative economic communication. *Literal economic communication* can be investigated through the way certain linguistic tools are selected and used, such as verbs, nouns, and adjectives, and the way their direct meaning influences communication. *Figurative economic communication* encompasses such notions as metaphor, metonymy, idiom, personification, and simile. Since not only verbal communication constitutes the language of economics, rituals, rites of passage, and the arrangement of furniture or office space constitute the identity of modern companies. Focusing on the verbal dimension of economic discourse, McCloskey (1995, p. 218) states that *economists are poets but they do not know about it.* When one observes the language of economics, it is noticed that there are many metaphors used to denote economic reality. They serve different functions. On the individual level, they are used by economists to construct their own idiolect that can be viewed as an important element of their identity. In addition, metaphors make economists or businessmen outstanding and remembered by others. The same can be observed in the case of economic journalists, who rely on figurative metaphors to make their content more interesting and intriguing. This feature is important in the case of covers and headlines that are to attract potential readers to the articles themselves. On the social level, they stimulate effective communication between people of different knowledge levels on economic topics. A metaphor, relying on a well-known domain, is more easily perceived and understood than a complicated economic term. The application of metaphors to describe economic environments can be observed at different levels of economic discourse. Taking the microsphere into account, metaphors are used to denote products or strategies. The examples include such terms as *porcupine defense* or *black knight*, used to describe the world of mergers and acquisitions (Bielenia-Grajewska 2009b). The meso level encompasses organizations; in that case, metaphors are used to create the image of a company in the eyes of stakeholders. The following examples come from the food industry: organization as a teacher, organization as a network, organization as a protector, organization as a traditionalist, organization as a travel guide, and organization as a family (Bielenia-Grajewska 2014). Company linguistic identity can be studied through the prism of the 3Ps model of company linguistic identity and its metaphorical dimension. The application of three angles, such as personnel, purchasers, and products, stresses how metaphors determine corporate communication and how they shape the selection of products by attracting stakeholders to companies and their offers (Bielenia-Grajewska 2015). The examples to support the discussed phenomenon can come from different domains. One of them is the animal world; animals, having distinctive features and being widely known, constitute an important metaphorical donor. Another one is weather, being a varied phenomenon, offering both positive and negative notions. In addition, the unpredictability of weather conditions is used to denote economic phenomena that cannot be foreseen and controlled. Another domain is literature, with metaphorical names originating from tragedies (e.g., Lady Macbeth Strategy) or myths (Sisyphean struggle). The next domain is medicine, with such metaphors as pills or heal used to describe how economic conditions can be improved.

The Language of Economics: Approach Perspectives

Another way to study the growing interest in the language of economics is to investigate it through

the prism of approaches and theories determining modern reality. Different assumptions originating from social studies and the humanities can be used to research the language of economics as a scientific phenomenon since they often stress the changeability and complexity of economic discourse.

The Language of Economics as a Re-enchanted and Fluid Reality

The interest in the language of economics can be viewed from the perspective of re-enchanted reality. As Reed (2002, p. 35) discusses, *re-enchantment refers to a symbolic or discursive, rather than material or structural, reworking of the ways in which organizations discipline and control their members. It shifts the focus of attention away from material technologies and organizational structures to the cultural and linguistic forms through which members represent and communicate their organizational identities*. Thus, modern business can be studied as an example of re-enchanted entities, with language showing how people create the economic reality, exercise power, and become competitive. An example is the symbolic layer of economic communication, with metaphors, fairytales, and myths used to denote organizational culture.

Applying a broader theory, such as postmodernism, allows researchers to study the language of economics as a dynamic phenomenon that escapes easy categorization. For example, the Baumanian concept of liquid modernity offers the opportunity to investigate language without posing any rigid boundaries between language, economics, politics, and private life, but by treating language as an element of fluid reality that can merge with other entities and influence them.

The Language of Economics as a Systemic Entity

A similar perspective is connected with looking at the language of economics as an open system. In this approach, attention is drawn to the language of economics as an element of a more complex system and, at the same time, to economic communication as an entity constituted of smaller elements. This line of investigation stresses the multilayered and interdependent character of economic discourse. The mentioned systemic perspective exemplifies different subsystems within the language of economics itself (such as the language of accounting, the language of banking, and the language of management) as well as highlighting that the language of economics is an element of a more compound phenomenon, such as the domain of languages for special purposes. At the text level, the traces of systemic approaches are visible in the notion of a paratext by Gerard Genette (1997). Paratextual materials accompany the main text in different ways. In the case of economic books, such notions as reviews, cover layout, or interviews with authors can be examples of paratexts. Another textual approach is intertextuality as discussed by Julia Kristeva (1980), stressing the role of other texts or their elements in creating subsequent works. The systemic character of economic communication is also represented by network approaches. For example, Actor-Network Theory (ANT) stresses that both living and nonliving elements shape the performance of a given entity. Taking the language of economics into consideration, not only human beings determine the way language is created and used. For example, technological tools, such as the Internet and telephone, and standard modes of information creation and distribution, including books or magazines, shape and maintain economic discourse. Another network theory is social network analysis (SNA) that offers discussion on grids, lattices, and relations between those creating and using organizational networks. The next concept that stresses the interrelation of linguistic phenomena is heteroglossia. This term, originating from the Greek words hetero (different) and glossa (language), was introduced by the Russian linguist Mikhail Bakhtin (1986) to discuss, e.g., different parts of speech in literary works. Nowadays the term heteroglossia is implied to stress the plurality and complexity of modern communication, visible in the concept called *heteroglossic linguistic identity of modern companies* (Bielenia-Grajewska 2013). Applying this notion to the discussion on the language of economics facilitates the study on the

multivocality of economic discourse, observed at micro, meso, and macro levels. The micro perspective is dominated by hybridity at a word level, represented in terms originating from different domains of life. The meso level, on the other hand, can be viewed through the prism of textual representation, studying different types of texts used in economic discourse. The macro approach, on the other hand, is connected with different voices shaping the language of economics, represented in the way different experts and laymen communicate. The application of hybrid approaches to the studies on the language of economics can be observed in the concept of *hybrid linguistic identity* (Bielenia-Grajewska 2010); the exposure to different linguistic codes leads to the creation of a new linguistic representation that possesses unique features. It is not only the fusion of different languages or dialects but it also results in an exclusive communication style, being a novel linguistic strategy that offers new possibilities of usage and research. The hybridism of economic communication is represented at different levels, starting from the word level and finishing with the language of economics as a complex phenomenon.

The Language of Economics: Technological Perspectives

The language of economics is a dynamic phenomenon. The mentioned dynamism has different reasons, with technology being an important determinant shaping economic discourse. Technological determinism is visible not only in the way the language of economics is created but also in the way it is stored and offered. As far as the creation of economic discourse is concerned, technological advancements have resulted in a language of economics that is efficient and economical. Technology has also created new places where the language of economics can be stored. In addition, new economic terms and expressions are coined and used to denote novel technological and economic reality. The language of economics can also be studied from the perspective of written and spoken forms of interaction. As far as the written types are concerned, they involve both standard and novel modes of communication, such as letters, emails, offers, websites, social media communication tools, and leaflets. The mentioned channels of economic communication can also be subcategorized through the perspective of synchronicity and possibilities of alternation. For example, websites can be updated very quickly, whereas new catalogues and leaflets have to be prepared, printed, and distributed. The spoken side of economic discourse encompasses business talks, negotiations, speeches, as well as telephone or online conversations. Both written and spoken channels of economic communication undergo technological changes. The growing popularity of online communication tools, such as electronic billboards, social media, and communicators, has enriched the spectrum of communication possibilities.

The Language of Economics: Discipline Perspectives

The Language of Economics: Linguistic Perspectives

In scientific literature on economic discourse, one can also come across such terms as *economese* or *econospeak* and *dialogical economics*. Although they vary as far as the field of interest is concerned, they draw attention to the linguistic side of economics. Linguistic perspectives focus, as their name suggests, on the language-related aspects of economic communication. Detailed characteristics of this approach are presented in the section devoted to the main features of economic discourse.

The Language of Economics: Educational Perspectives

The discussion on the language of economics from educational perspectives is connected with investigating how the language of economics can be taught and learnt. It focuses on the studies devoted to languages for special/specific purposes and their relation to general language. Using English as an example, the language of economics is often researched and taught as English for Business. This line of teaching provides a type of instruction that meets the needs of economists.

Apart from the general focus on the language of business as such, teachers also offer more tailored courses, such as English for Marketing, English for Accounting, and English for Management, to meet the expectations of accountants, marketers, and managers. Educational perspectives also encompass necessary books and other sources to study the language of economics. Thus, the educational dimension also includes printed and online dictionaries, coursebooks, CDs, and supplementary materials.

The Language of Economics: Economic Perspectives

The relations between language and economics can be studied by investigating how certain linguistic policies and behaviors increase or decrease economic performance. One aspect is the connection between knowledge flows and economic efficiency. For example, providing proper translation increases the chances of companies to be successful on foreign markets. Apart from translation, the notion of localization becomes more and more popular since online content does not only have to be translated but also localized, taking into account the needs and expectations of the target market. For example, George Akerlof (1970) discusses the notion of *adverse selection*. This concept denotes situations when the asymmetry of information leads to less favorable positions of products or services on the market and lower selection rates among customers, in comparison with products that benefit from efficient informational coverage. Another notion that can be studied is trust. It is also language dependent since effective communication between interlocutors determines their cooperation. The economic perspective of language can be exemplified at different levels. One of them is the supranational perspective, examining the role of a lingua franca in creating global economy. The national perspective may concern the place of a given language in creating a national economy and its role in international business. The national perspective may also concern how national linguistic policies determine the usage of national language in organizational settings. This dimension encompasses the attitude to national languages used in international companies and the place of minority languages and dialects within national economies. An individual perspective can also be analyzed by looking at the predicted possible gains related to learning a given foreign language.

Apart from the language of economics, there are other concepts that sound similar but carry a slightly different meaning. One of them is the *economics of language* that focuses on how language determines the economic side of individual or organizational performance, showing, e.g., the relation between language and employment income, the economic dimension of second-language acquisition, language and immigration, or language and rational choice theory (e.g., Grin 1994). The topics include the following spheres of investigation: the economics of the multilingual workplace (Grin et al. 2010) or the relation between languages and economic advantage (Ginsburgh and Weber 2011).

The Language of Economics: Political, Social, and Historical Perspectives

The link between politics and economic discourse is visible in the creation of terms related to a given economic system in a country. Politics is represented in different regulations on national languages as well as the political system and its influence on the economy. Language also offers information on socioeconomic conditions. There are studies in literature stating how one's selection of semantic and syntactical choices is connected with one's upbringing, education, and profession. In the language of economics, the selection of words may mirror one's knowledge of a given economic domain. The historical perspective can be studied by looking at how loanwords entered the economic lexicon of a given language or how foreign syntax was adopted in economic communication.

The Language of Economics: Biological Perspectives

The dynamic perspective of economic communication can also be discussed from the perspective of memetics. Originating from genetics and studied by such scholars as Richard Dawkins or Susan Blackmore, memetics focuses on replication in

culture; it can be used to discuss how new economic terms "replicate" in a new economic reality. For example, new economic terms that appeared in Poland accompanying the change of the system in the 1990s first spread among economists and journalists and later became known also among laymen. A concept called *viral meme* that transmits because of its emotional connotations is also applicable to economic memes. Such economic phenomena as market crashes, mergers and acquisitions, or failures of financial institutions, together with terms denoting them, can be treated through the perspective of viral memes. Examples constitute metaphorical names describing M&A, such as *white knight* or *black knight*, with the "color of armor" showing the intentions of acquiring companies. Moreover, the success or failure of "infecting" the public with a new term depends on how the translation of a given term is accepted by the target audience. For example, some economists prefer the English term *futures* instead of long and descriptive versions in their mother tongues. The analogy to genes is also visible in the case of viral economic terms that gain popularity very quickly (Bielenia-Grajewska 2008). The memetic approach to economics can be noticed in the contribution by Mérő (2009), and the concept of *Mom* that can be defined as the piece of information that describes a company and together with other *Moms* creates economic entities.

The Language of Economics: Neuroscientific Perspectives

As has already been mentioned in the introductory part of this chapter, modern economics does not exist in a vacuum but it is shaped by other disciplines that were not directly linked with economic phenomena in the past. Neuroscience is an example of the domain that is more and more popular in different types of economic research. It has led to the creation of the discipline called neuroeconomics and other economic-related neuroscientific fields of investigation. For example, such subdisciplines as international neurobusiness, international neurostrategy, neuromarketing, neuroentrepreneurship, and neuroethics belong to international neuromanagement. *International neurobusiness* can be perceived as the neuroscientific dimension of activities, hierarchies, and decisions related to multinational enterprises. Similarly, *international neurostrategy* can be defined as the neuroscientific level of organizational focus on reaching a competitive advantage on international markets. *Neuromarketing*, on the other hand, refers to the neuro side of marketing, represented in using neuroscientific developments and tools in advertising products and services. The more research-oriented perspective of studying the link between marketing and neuroscience is *consumer neuroscience*. *Neuroentrepreneurship*, on the other hand, helps understand the types of entrepreneurs and entrepreneurship and the way biological and cognitive factors determine leadership styles as well as individual and social entrepreneurial activities. *Neuroethics* involves moral approaches to studies in neuroeconomics (Bielenia-Grajewska 2013). Taking the linguistic aspect of neuromanagement into account, the mentioned popularity of neuroscience has led to the emergence of new terms within the economic lexicon that denote the newly created scientific field of neuroeconomics. Thus, such terms as fMRI or galvanic skin response, previously associated exclusively with neuroscience, have been incorporated into the economic discourse of the twenty-first century. Analyzing the rise of interest in the way the brain and the nervous system are influenced by economic stimuli, it can be expected that the economic lexicon will be further enriched with the appearance of even more sophisticated neuroscientific vocabulary.

The Language of Economics and Its Functions

Among its different functions, economic discourse offers successful tools for gaining economic advantage. This phenomenon can be understood in various ways. One of them is to focus on marketing and the way marketing communication shapes customers' behaviors and organizational identity. The linguistic sphere of marketing is visible in, among other things, the creation of brand names and marketing slogans. Moreover, language

is a tool fostering innovation and entrepreneurship, stimulating information flows between disciplines as well as knowledge creation and knowledge communication. In addition, language exhibits the level of knowledge in disciplines (Bielenia-Grajewska et al. 2013). The language of economics serves the communicative function on the inner and outer level of organizations, showing employees how tasks should be done and stimulating effective communication with the broadly understood stakeholders. The language of economics also mirrors the legal dimension of investigated entities. Linguistic policies can be studied by taking into account the micro level, that is, the organization as such, as well as more macro dimensions, such as national linguistic policies or the supranational ones, such as the EU regulations.

The Language of Economics and Methods of Investigation

The language of economics can be investigated by taking into account the methods and tool characteristic of linguistics. Thus, such domains as sociolinguistics, psycholinguistics, neurolinguistics, pragmatics, semantics, and syntax or corpus studies can be used in the discussion on economic communication. The selection of methods applicable to study the language of economics depends on research perspectives. Applying the micro (word) scope, cognitive linguistics may be used to observe the way words are created and understood. Moreover, corpus linguistics facilitates the studies on concordance or collocations. A more macro perspective on the language of economics is offered by discursive approaches, such as critical discourse analysis (CDA). CDA approaches language as a social practice, investigating how language creates social relations and how these relations are perceived by using a selected communicative repertoire. Moreover, critical discourse analysis does not only concentrate on the purely linguistic elements but it also studies nonlinguistic notions to show how both verbal and nonverbal tools determine the interest in the perception, comprehension, and influence of a given economic text. Since CDA is an approach that is used to investigate such notions as social problems and issues (e.g., dominance or inequality), this method of analysis is used to discuss texts related to economic imbalance, crisis, and corporate changes. Taking into account the growing role of neuroscience in different fields of life, it can be predicted that neuroscientific tools will become even more popular for checking how people create, use, and understand words. Thus, the noninvasive techniques popular in neuroscience, such as fMRI and galvanic skin response (GSR), provide information how an economic term is understood and how the mentioned comprehension facilitates decision-making processes. The language of economics can be investigated by using both qualitative and quantitative studies. Qualitative approaches offer the focus on tendencies and decision-making processes underlying modern economic discourse, such as the use of borrowings or the influence of technology on the way words are created and used. Quantitative studies provide, among other things, statistical data on economic discourse. Researchers investigating the language of economics may rely on methods and tools widely used in the humanities and social studies, such as interviews, questionnaires, expert panels, and case studies.

Conclusion

The multidimensionality of economic communication results in different linguistic and nonlinguistic layers of the phenomenon itself as well as the plethora of approaches that can be used to investigate it. Taking into account the coexistence of economics with other domains of life, it can be predicted that new disciplines will appear that will also focus on the language of economics, at least to some extent. For example, neuroeconomics and neurolinguistics separately and together provide new and complex ways of analyzing how economists speak.

Cross-References

▶ Entrepreneurship
▶ Financial Education
▶ Knowledge

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Lapse of the Contract Basis

▶ Impracticability

Law and Economics

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Synonyms

Economic Analysis of Law

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Definition

Law and Economics is economics applied to the analysis of statutory law systems or subsystems or to legal policy proposals.

Historical Remarks

To talk about Law and Economics or, equally, of the Economic Analysis of Law is to refer to the application of economic science tools to national and international systems of statutory law, as well as to legal policy proposals.

Positive analysis is to be distinguished from normative analysis. Within the framework of positive analysis, economic science is employed within a system of statutory law to explain and predict the consequences of the application of one or more sets of judicial system rules in questions concerning human conduct. It consists, therefore, in elucidating the manner in which people react to the enactment, enforcement, abolition, or reformation of such rules of law. In this sense, the Economic Analysis of Law is a system of theories regarding human behavior. The key question regarding positive analysis is to understand the law as a system of incentives.

Within the framework of normative analysis, on the other hand, economics is applied to the evaluation of rules of law in accordance with the degree to which they contribute to bettering the economic efficiency of the analyzed conduct: given two alternative regulations, the economic normative analysis would give preference to the one whose application, according to predictions based on its own analysis, would generate the most efficient results.

The application of economic tools to the analysis of law is as old as economics itself (Smith 1776). The first systematic applications were focused, understandably, on criminal law (Bentham 1789) – one of the earliest fields in which national legal systems received scientific analysis being that of crime investigation (see the entry ▶ forensic science). However, the emergence of the positive-normative movement called Law and Economics took place much later, during the second half of the twentieth century in the United States of America, driven fundamentally by the influence of academics from the Chicago School. Thus, economists Ronald Coase (1960) and Gary Becker (1968) or jurist Richard Posner (1973) started to massively apply neoclassical microeconomics to law in both analytical and normative terms. In a synthesis reminiscent to European academics of Georg Wilhelm Friedrich Hegel's philosophy, the first Economic Analysis of Law came close to claiming that reality is rational and that rationality must be turned into reality. In Posner's well-known formulation, North American common law is essentially efficient; thus, in the measure in which it has not yet achieved that status, it will end up being so.

Nonetheless, liberally oriented lawyers and economists, such as Guido Calabresi (1961) in the United States or Pietro Trimarchi (1961) and Hans-Bernd Schäfer and Claus Ott (1986) in Europe, were also pillars of the birth of the Law and Economics model.

In the 1970s and 1980s, the Law and Economics movement, as it was defined, was advocated by the best US law schools; however, although the program was also accepted in continental European culture, its penetration in European law faculties was less intense than that which took place on the other side of the Atlantic. See, for instance, Boudewijn Bouckaert and Gerrit De Geest (2000), Peter Cane and Herbert Kritzer (2010), or Régis Lanneau (2014).

The degree of influence of the Economic Analysis of Law program has stabilized since the last decade of the twentieth century; the evolution of Law and Economics has continued to be characterized by its increasing specialization in such a way that currently each legal area or subject possesses top-level economic applications with very rich empirical and econometrical contents. Nowadays, it is inconceivable that a top-level economic analyst specializing in Family Law would also be a specialist, in similar academic conditions, in US Law and the Market of Telecommunications, in the Law of Publicly Traded Companies, in Biopharmaceutical Law, in International Taxation, in Product Liability of Health Agencies, and in International Sales Contracts.

For each and every one of these specializations, readers should consult the corresponding entries of this encyclopedia.

Currently, the level of specialization of economics applied to law and the intensity of its econometric sophistication (see the papers presented at the 24th Annual Meeting of the American Law and Economics Association [ALEA], University of Chicago, 2014, http://www.amlecon.org/2014-Program.final.revised.pdf) allow us to state that Law and Economics is a victim of its own success. As it is true of the relationships between Criminal Law, Criminology, and Legal Medicine, or Patent Law and Engineering, along with generalists that hold a good background in economics and a primarily legal education, the different fields within the Economic Analysis of Law would be more ideally developed by multidisciplinary teams in which economists and lawyers collaborate. In the end, as we shall see in this same entry, the specific relationship between economics and law represents a specific instance between the different sciences and the law itself (Lawless et al. 2010).

In any case, and in the current academic environment, top-level North American or European law schools take into account the Economic Analysis of Law and legal institutions although in none of them is the economic and normative Analysis of Law the dominant paradigm.

Legal Assumptions of Economic Analysis

In general terms, economics studies the efficient assignment of scarce resources in specific markets and in the economic system as a whole. Furthermore, political and public sector economics analyze, in a manner independent of market functioning, the feasibility of political and legal proposals regarding wealth redistribution and the establishment of infrastructures or direct public service provisions by governments (Stiglitz 2000; Barr 2012).

In an advanced economy, the objective of economic analysis, i.e., the market, is exogenous to the analytical instruments themselves as well as to their applications, as every market requires some implicit economic assumptions in order to exist, consisting, at least, of the following two: a system of property rights which formally recognizes who is the owner and what are his or her faculties of use, disposition, and exclusion, and a system of law of contracts that permits owners to exchange goods and services in order to achieve more efficient allocations. In addition to the above, and given a minimally developed economic system, two additional legal systems will be required: Company Law, in particular for limited liability companies and, within these, for publicly traded ones, and, finally, a capital market subjected to one or more public regulations that coordinate, evaluate, and, when applicable, sanction the conducts of those who operate in it (Hadfield and Weingast 2013). These issues do not constitute specific study objectives in any standard economic or microeconomic textbook, but perhaps for this same reason, it is convenient to align economic analysis with the legal assumptions of its own traditional aim (Mankiw 2014; Krugman et al. 2013; Varian 2014; Mas-Colell et al. 1995).

The previous four legal subsystems shape the national or, when appropriate, international systems of private law and are the objective of economic analysis. But, in turn, they also presuppose a public system of legal, governmental, and judicial remedies given the violation of property rights, the breach of contracts, the dysfunction of limited liability companies, or the defective behavior of capital markets. Although it is a fact that the four subsystems have always been partially controlled by social norms, it is also true that, in general terms, private law subsystems depend on public law systems which, operate through coercively adopted central decisions independent of the economic markets.

Economic Assumptions of Legal Analysis

In turn, and in a symmetrical fashion, historical experience substantiates the thesis that a legal system has never been able to survive independently of capital markets or, in other words, the necessity to acknowledge the systematic assignment of economic resources in accordance with the economic analysis itself (von Mises 1920).

From a historical economic point of view, the final destiny of national legal systems depends on their economic successes. The main analytical question continues to reside in the causes of wealth and poverty of nations (Acemoglu and Robinson 2012; Cooter and Schäfer 2012).

Traditionally, as summarized by Polinsky and Shavell (2008), the Economic Analysis of Law has been the target of criticism by those who have pointed out its alleged shortcomings, especially regarding the following three considerations: First, it is at times insufficient and, at other times, inexact to presuppose, as the Economic Analysis of Law would have us do, that individuals and organizations are rational maximizers of well-being. Second, it implies limiting oneself to a positive and normative legal system analysis which takes exclusively into account economic efficiency considerations without regard to the legal consequences resulting from the initial assignment of property rights over production and consumption goods or to the distribution of income and wealth. Third, and lastly, such an analysis would be incomplete if, together with the objective of economic efficiency, it did not take into account criteria of fairness or of basic notions concerning corrective or distributive justice.

The limitations of the neoclassical analysis derived from the assumption of rational human behavior have been corrected, at least in part, by the incorporation of behavioral economics (Akerlof and Kranton 2010; Kahneman 2011; Sunstein 2000). It consists, basically, of enriching the legal analysis with a multidisciplinary treatment of the rules and principles that define it or, in other words, an analysis which is not only economic but also psychological, sociological, and political, as we shall soon see.

As for the criticisms derived from the justice theory or from the lack of attention to particular fairness aspects, it is worth pointing out that the former raise basic economic analysis and jurisprudence issues – jurisprudence being understood as a philosophy of ideas concerning the law without regard to an empirical analysis – while the second criticism often refers to the lack of specific considerations concerning the empirical consequences that any given regulation could exert on the real distribution of income and wealth in a given society at a specific moment.

The Economic Analysis of Law as an Instance of the Application of the Current State of Scientific and Technological Knowledge to Legal Systems

Economics recognizably forms a branch of scientific activities belonging specifically to that of the social sciences. Within this field, it is part of the formal, natural, and life sciences. Given, then, that law can be analyzed from the perspective of any of the formal, natural, life, or social sciences, as well as from the perspective of technology or the applied sciences to which it is related and not only from an economic standpoint, it is undeniable that to explain and predict the human conduct subject to legal rules, the Economic Analysis of Law is at the same time both necessary and insufficient. For this reason, it can be affirmed that presently the reduction of the analysis of human conduct to economics is no longer endorsed, in the same way that now no one holds the reduction of the analysis of nature to physics (see Schurz 2013).

Therefore, a basic question regarding the relationship between economics and a particular national or supranational legal system is the relevance of a specific social science, economics, in the legal system concerned. Regarding this topic, it is convenient to point out that different national legal systems take into consideration the current state of scientific and technological knowledge in distinct ways and with varying intensity.

To quote an example, the United States' federal law system has, since 1993, established a normative doctrine regarding the consideration an allegedly expert witnesses' testimony should merit to a judge or federal court. The expert is presented before the court itself as a scientist or a technologist, whose aim is to illustrate facts and natural or social issues that might be important to the court for a resolution in which the state of scientific or technological knowledge could be relevant. In

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993), a product liability lawsuit, the issue at stake was whether a particular drug had caused or not the damages suffered by the plaintiffs. Given that this matter had a fundamentally scientific basis, the debate was later centered on another issue regarding the reliability, scientific in this case, of the expert witnesses presented by the parties. In this regard, the US Supreme Court established that judges, when faced with scientifically relevant issues and, thus, not subject to the interpretation of the law itself – in other words, out of the realm of their own expertise – should carry out the function of gatekeepers and distinguish between good and junk science. That is, they should exclude a priori witnesses which are purely partial and elaborated with disregard to accepted scientific methods. To that effect, the judge should carry out a preliminary evaluation to determine if the reasoning or the underlying methodologies emanating from the testimony were valid and supported by facts. Firstly, the hypothesis, formulated and presented, should be empirically contrastable – falsifiable, as determined by a then Popperian court. Secondly, the theories or techniques presented to the court should have been subjected to peer review and should preferably have already been published and hence should be accessible to the scientific community. Additionally, the known or potential margin of error should be taken into consideration. And finally, the degree of acceptance of the formulated theories or hypothesis should also be taken into account in distinguishing between good and junk science. The standard established by *Daubert* was later incorporated by the Rule 702 of the Federal Rules of Evidence and has been followed by subsequent cases.

However, not all national legal systems include rules that establish control filters or demarcation operational standards concerning the testimonies of expert witnesses and their scientific or technological reliability. Nor do all national legal systems foresee that before the enactment of a certain statute or regulation, a scientific or technological – and, when applicable, also economical – assessment should necessarily take place regarding the consequences that the rule would have if it were to be enacted and enforced. Ultimately, the relevance of the Economic Analysis of Law depends on the law itself. To sum up, not everything that is efficient is necessarily fair, but if everything is inefficient, nothing can be fair.

Cross-References

- ▶ Behavioral Law and Economics
- ▶ Coase, Ronald
- ▶ Coase Theorem
- ▶ Economic Growth
- ▶ Efficiency
- ▶ Empirical Analysis
- ▶ Forensic Science
- ▶ Incomplete Contracts
- ▶ Legal Disputes
- ▶ Market Definition
- ▶ Rationality
- ▶ Smith, Adam

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Law and Economics, History of

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Abstract

The roots of law & economics lie in late 19th century Continental Europe. However, this early movement did not persist and was essentially cut short cut short in the 1930s. After World War II, modern law & economics was (re-)invented in the United States and subsequently grew into a major field of research at U.S. law schools. In Continental Europe, law & economics was re-imported as a discipline within economics, driven by economists interested in legal issues rather than by legal scholars. Hence, the European discourse was more strongly influenced by formal analysis, using mathematical models. Today, research in the U.S., Europe, and in other countries around the world, including Latin America and Asia, uses formal, empirical, and intuitive methods. New subfields, such as behavioral law & economics and experimental law & economics, have grown in the U.S. and in Europe during the past two decades.

Definition

A survey of the development of law and economics from the late nineteenth century until today.

Historical Antecedents

Precursors to modern law and economics can be identified as early as the nineteenth century, particularly in German-speaking Europe (Gelter and Grechenig 2007; Grechenig and Gelter 2008 referring to work by Kleinwächter 1883, Mataja 1889, Menger 1890, and Steinitzer 1908). Perhaps the defining piece for this period was the monograph on tort law by Victor Mataja (1888) titled "*Das Recht des Schadensersatzes vom Standpunkte der Nationalökonomie"* (*The law of civil liability from the point of view of political economy*), in which Mataja anticipated central ideas of the American law and economics movement, developed almost a century later. Prefiguring modern law and economics, Mataja focused on the incentive effects of tort law. While the book did not go unnoticed among legal scholars and influenced policy debates, including the drafting of the German Civil Code (Mataja 1889), it had no lasting influence on legal analysis (Englard 1990; Winkler 2004). While the University of Vienna, where Mataja held a position, integrated law and economics into one faculty, and economists in academia were typically trained in law, no law and economics movement developed (Grechenig and Gelter 2008; Litschka and Grechenig 2010).

Generally, one explanation for why the early law and economics movement left no lasting impression is the increasing specialization of the social sciences (Pearson 1997, pp. 43, 131). In the German-speaking countries in particular, legal scholarship remained strongly under the influence of a tradition that had grown out of the nineteenth-century "Historical School." While conceptual jurisprudence gave way to the more functional jurisprudence of interests, legal scholarship continued to be seen as a hermeneutic discipline focused on a coherent interpretation of the law based on an internal consistency of the system in terms of language and value judgments (e.g., Grimm 1982, p. 489; Wieacker 1967, p. 443). Policy arguments remained outside of the purview of legal scholarship. Moreover, nascent alternative views that may have led to more openness toward interdisciplinary work, such as the sociological jurisprudence pioneered by Eugen Ehrlich and Hermann Kantorowicz's "Free Law School," petered out in the 1930s and were finally cut short by the Nazi regime and World War II. Postwar jurists had no interest in portraying the law as an objective system in order to maintain the legitimacy of the legal profession (Grechenig and Gelter 2008; see also Curran 2001).

By contrast, when the modern economic analysis of law developed in the USA in the second half of the twentieth century, legal theory was far more conducive to integrating interdisciplinary and specifically economic approaches. The Langdellian orthodoxy of the late nineteenth century and the conceptual jurisprudence of the Lochner period up to the 1930s were thoroughly discredited by the legal realist movement. With "the great dissenter" Oliver Wendell Holmes on the Supreme Court as their role model, the legal realists criticized the formalism of the majoritarian jurisprudence, arguing that the law itself was to a large extent indeterminate. As for the rejection of its analogues in Germany, there is also a strong political component to the historical development in the USA: The Lochnerian judges on the Supreme Court defended the previous legal order against interventionist "New Deal" policies of the Roosevelt administration which they declared were unconstitutional. Only when Roosevelt threatened to "pack the court" with more compliant justices this jurisprudence changed, and the realists, who were generally New Deal progressives, won. Even if there was no agreement on the extent of indeterminacy, the insight that judges enjoyed great discretion in interpreting and shaping the law with policy took a strong foothold. The void left by the abandonment of formalism was filled with innovative jurisprudential movements in the second half of the twentieth century, including the legal process school, critical legal studies, and not least law and economics. After 1980, with the older generation of scholars having

left the scene, legal scholars could finally say that they were "all realists" now (Singer 1988, p. 467; Reimann 2014, p. 15). Another important issue was the prevalent role of utilitarian philosophy, on which welfare economics is based, in the US legal discourse compared to other countries (Grechenig and Gelter 2008,pp. 319–325). Finally, the maturation of economics as a discipline meant that it was better equipped for addressing legal issues than it was in the late nineteenth century (Litschka and Grechenig 2010).

The Development of Modern Law and Economics

The contemporary law and economics school is typically traced back to around 1960, specifically to the work of Ronald Coase and Guido Calabresi (e.g., Schanze 1993, pp. 2–3). However, from an institutional perspective, the basis was laid at the University of Chicago in the 1940s and 1950s, when economists first taught at the law school. Most prominently, Aaron Director began to teach at Chicago in 1946 and initiated interdisciplinary discussions both inside and outside of the classroom, most significantly in antitrust law (Duxbury 1995, pp. 342–345). He was the first editor of the *Journal of Law and Economics.*

The development of a "law and economics movement" can probably be credited to the publication of Ronald Coase's "Problem of Social Cost" in that particular journal in 1960 (Coase 1960). The article's core insight about the reciprocity of the relationship between the tortfeasor and the victim, and hence the significance of transaction cost, helped the economic method to expand into fields where the application of economic principles did not seem immediately obvious, such as contract or tort law. In this intellectual climate, other economists developed economic theories pertinent immediately to legal questions. Gary Becker of the Chicago economics department can be credited for applying economic principles to crime (Becker 1968), racial discrimination (Becker 1957), and family life (Becker 1981).

The prominence of the economic analysis of law in the USA today, however, probably must be attributed to its adoption by *legal* scholars, for whom the law is – other than for most economists – the primary field of research. Among these, Guido Calabresi, Henry Manne, and Richard Posner stand out as some of the pioneering law and economics scholars.

Yale professor (later federal judge) Calabresi, in 1960, apparently independently from Coase, began a research program that led him to publish a series of articles on tort law, in which he explained its structure on the basis of simple economic principles (Calabresi 1961, 1965, 1968, 1970, 1975a, b; Calabresi and Melamad 1972; Calabresi and Hirschoff 1972).

Henry Manne, who worked in corporate and securities law, critiqued the wisdom prevailing in these areas from the 1960s onwards (Manne 1962, 1965, 1967), attracting particular attention for his view that insider trading should be legal (Manne 1966a, b). He succeeded in transforming the George Mason University's fledgling law school into a law and economics powerhouse (see Manne 2005). He established intensive courses on microeconomics for judges and for law professors. The fact that about 40% of federal judges had taken such a course by 1990 helped the acceptance of law and economics in the courts (Butler 1999).

Richard Posner, as a young professor at the University of Chicago Law School, not only established the *Journal of Legal Studies* in 1972 but became a trailblazer within legal academia by publishing the first edition of his monograph *Economic Analysis of Law* (Posner 1973). This standard text was the first to subject almost the entire legal system in its full breadth to a systematic analysis from an economic perspective. Posner's publication output, both before and after joining the federal bench, is unparalleled, as he continued to influence the development of both the law and legal scholarship with his articles, books, and opinions. One of the most noted ideas was the theory, originally proposed in his textbook, that efficiency (largely defined as wealth maximization) could explain the structure of the common law across the legal system. Given that an inefficient precedent was likely to be questioned and subsequently overruled, in this view the common law tends to develop efficient solutions in the long run (Posner

1979, 1980). Obviously, the thesis has remained controversial, both as a descriptive account of the common law and as to whether wealth maximization should, normatively, be the objective of policy analysis in law (see Parisi (2005, pp. 44–48) for a summary of the debate).

Continental Europe has been described as lagging behind the USA by at least 15 years in terms of the development of law and economics (Mattei and Pardolesi 1991). While law and economics has been growing steadily in Continental Europe since the publication of Schäfer and Ott's textbook in 1986 (Schäfer and Ott 1986), important differences remain in both the methodological mainstream approach and the quantity of law and economics scholarship published in domestic law reviews. Scholars have attempted to explain the divergence by institutional factors at university level, such as publication incentives, hiring policies, and the legal curriculum (Gazal-Ayal 2007; Garoupa and Ulen 2008; Parisi 2009), on the one hand, and the institutional environment on a state level, including the separation of the legislature and the judiciary and legal positivism (Kirchner 1991; Weigel 1991; Dau-Schmidt and Brun 2006), on the other. Others have extended these approaches and focused on the legal discourse that was connected to the institutional setup. Since the Continental European concept of a separation of powers implies that a judge may only "interpret" the law, policy arguments such as those provided by law and economics were outside the scope of the legal discipline. To the extent that the legal discourse allowed for policy arguments, European legal doctrine was more strongly based on deontological philosophy than scholarship at US law schools (Grechenig and Gelter 2008).

Maturation into an Established Discipline

In the USA, economic analysis became one of the main methods of legal scholarship – both descriptive and normative – in legal academia. Other than in the early twentieth century, and in sharp contrast to Continental Europe, law is not recognized as an autonomous discipline but a field to be studied from various social science perspectives (Posner 1987). Leading law schools often hired economists to teach and research in the area of economic analysis of law, and in the course of the 1980s and 1990s, the number of faculty with an interdisciplinary background, e.g., with a J.D. *and* a Ph.D. in Economics, increased (e.g., Ellickson 1989). While some legal academics publish in economics journals or in specialized law and economics journals where formal modeling or econometric analysis is typically required, a lot of economic analysis of law takes the intuitive, non-formal/non-mathematical form that is acceptable in law reviews, and one does not necessarily need to be a trained economist to be able to follow the law and economics approach.

In contrast, European law and economics scholarship was more formal (both theoretical and empirical) and was primarily driven more by economists – a characterization that remains true today (Depoorter and Demot 2011), even though non-formal law and economics scholarship at law faculties continues to grow. Several universities (primarily in the Netherlands, Germany, and Italy) have established research centers for law and economics; there are also a number of public research institutes with a strong focus on law and economics, such as the Max Planck Institute for Research on Collective Goods in Bonn, which emphasizes experimental research, and private initiatives, e.g., the Center for European Law and Economics (CELEC). Several professorships for law and economics have been established, for example, at the Universities of Amsterdam, Bonn, Frankfurt, Hamburg, Lausanne, and St. Gallen as well as at the EBS. International programs for the study of law and economics (EMLE, EDLE), both at undergraduate and at graduate level, allow students to specialize at the intersection of the two fields. An increasing number of national programs complement the options students have today. From a historical perspective, the European Association of Law and Economics (EALE), founded in 1984, seven years before the formation of the American Association (ALEA), has played an important role in the emergence of law and economics. A significant number of national and

international associations for law and economics have been established since, including in Latin America (Latin American and Iberian Law and Economics Association – ALACDE), Asia (Asian Law and Economics Association – AsLEA), Israel (Israeli Association for Law and Economics – ILEA), and other non-European countries, as well as in several European countries. These associations typically hold annual conferences, facilitating the cooperation between law and economics scholars. Today's conferences and meetings are typically more formal in terms of research methods than they used to be, although some meetings, for example, in Latin America, focus on non-formal methodology (a verbal, law-review style). An increasing number of law and economics journals, textbooks, and treatises have become available as publication outlets. Since the beginning of law and economics scholarship, research has risen to a countless number of associations, conferences, articles, etc. As a consequence, some scholars have claimed that the divergence between European and American law and economics has become much smaller than often perceived (Depoorter and Demot 2011). However, it is certainly fair to say that the influence of law and economics on the mainstream legal discourse is still much larger in the USA than in Europe. Scholars continuously argue that courts outside the USA rarely take economic consequentialist arguments and empirical evidence into account (Grechenig and Gelter 2008; Petersen 2010).

New Developments in Law and Economics

Current law and economics incorporates much of the critique that has been brought forth throughout the past decades, for example, regarding the notion of efficiency. While the traditional rational-choice approach still plays an important role, there is a growing literature on behavioral and experimental law and economics (Jolls et al. 1998; Sunstein 2000; Gigerenzer and Engel 2006; Engel 2010, 2013; Towfigh and Petersen 2014). One of the most notable movements includes empirical legal studies. With the formation of a Society for Empirical Legal Studies (SELS), the launch of the *Journal of Empirical Legal Studies* (JELS), and an annual Conference on Empirical Legal Studies (CELS) (all between 2004 and 2006), this field became an important discipline closely connected to law and economics. Behavioral economics and empirical legal studies have helped the economic analysis of law broaden its scope by including studies with field data and experimental data, for example, experiments with judges (e.g., Guthrie et al. 2001) and laboratory experiments that demonstrate how humans behave under legally relevant circumstances (McAdams 2000; Arlen and Talley 2008; Engel 2010). Recently, a professorship for experimental law and economics, held by Christoph Engel, was established at Erasmus University in Rotterdam. The coming decades will show the way to a closer connection between the two disciplines and an enhanced use of economics in legal research, making use of whole spectrum of economic methods and possibly extending to new fields such as law and neuroeconomics.

Cross-References

- ▶ Austrian School of Economics
- ▶ Becker, Gary S.
- ▶ Coase, Ronald
- ▶ Consequentialism
- ▶ Empirical Analysis
- ▶ Experimental Law and Economics
- ▶ Posner, Richard
- ▶ Rationality

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Law and Finance

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Abstract

"Law and finance" is a rather new and evolving research topic, initiated by La Porta, Lopez-de Silanes, Shleifer, and Vishny (henceforth LLSV). They investigated the differences between legal origins and their impact on economic performance. Two seminal papers published by LLSV in 1997 and 1998 addressed an important question: Does law matter? Their main idea was to evaluate the impact of legal protection of investors (shareholders and creditors) on three key areas: corporate governance, structure of ownership, and control and orientation of financial system. Their work was extensively referred by other researchers and is now considered as a new finance theory. So as the reader is able to appreciate the nuances of the theory which was postulated by LLSV, we propose a two-step approach: first, a detailed description of the theory which would be followed by a summarized discussion of related works on law and finance.

Law and Finance Theory: Contribution by LLSV

Based on a sample of 49 countries, LLSV had investigated the differences between the four legal origins: common law, French civil law, German civil law, and the Scandinavian civil law.

The common law which originated in England provides great flexibility to its judges. They can administer a case according to their discretion, and the outcomes can vary on a case to case basis, as long as the judgments are fair and in conformity with the law of precedent. The civil law was pioneered in France and is replete with statutes and written codes. Herein, judges cannot act with full liberty to exercise their discretionary power. (French civil code is a derivative of the Napoleon Code of 1804. Its main objective was to standardize laws. However, the German civil law of 1896 differs from the civil code due to its different origins. Similarly, Scandinavian civil law differs from both the French civil law and common law. Most of the countries, according to La Porta et al. (1998), were categorized into one of the four aforementioned and dominant laws.)

Law and Finance, Table 1 "Rule of law" within common and civil law countries (The data was collected between 1994 and 1995)

Legal origin	Number Of countries	Shareholders' rights	Creditors' rights	Rule of law
Common law	18	4	3,11	7,11
French civil law	21	2,33	1,58	3,91
German civil law	6	2,33	2,33	4,66
Scandinavian civil law	4	3	2	5
International mean	49	3	2,3	5,30

The empirical comparative studies of LLSV (these papers were published in 1997, 1998, 1999, and 2000), used an indicator called "rule of law" (Table 1) which measures the legal protection of the minority investors and is an aggregated indicator of ten dummy variables: six of which describe the rights of shareholders and four describe the rights of the creditors. Each dummy variable has a value of 1 if the right is valid within a country and 0 if not. These rights represent many aspects of the law such as security exchange, bankruptcy, corporate law, and commercial code.

Their main results postulate the idea that common law countries generally provide better investor protection than civil law (French, German, and Scandinavian) countries whereas French civil law countries provide the least level of investor protection.

In order to evaluate the impact of law on financial and economic systems, LLSV used the legal investor protection variable for explaining the differences between all 49 countries of their sample with regard to (1) corporate governance, (2) structure of ownership of firms, and (3) structure and development of financial systems.

Law and Corporate Governance Models

LLSV proposed a new approach to corporate governance. If we consider corporate governance as a set of internal and external mechanisms which promote the efficiency of a corporation, then the legal system approach is a constituent of the external mechanisms. It is defined as a set of rules conceived to protect outside investors, in minority, against managers, the board of directors, and stakeholders. Hence, the need to integrate a sound legal structure and an effective form of corporate governance becomes imperative, even more amidst the wake of the failures of multinational firms such as Enron, Vivendi, Parmalat, etc. Similarly, bankruptcy laws are crucial in the prevention and resolution of financial distress of corporations.

Law and Finance, Table 2 Shareholders rights and structure of ownership and control

Shareholders rights index	Widely held firms	Families owned firms	State-controlled firms
High level	47,92%	24,58%	13,75%
The USA (5)	0,80	0,20	0,00
The UK (5)	1,00	0,00	0,00
Low level	27,33%	34,33%	22%
France (3)	0,60	0,20	0,15
Germany (1)	0.50	0,10	0,25
Finland (3)	0,35	0,10	0,35
Mean of the sample	36,48%	30%	18,33%

Law and Structure of Ownership and Control

From a list of 27 richest countries (LLSV chose 27 richest countries based on the income per head in 1993), LLSV (1998 and) used a sample of 20 large private and nonfinancial firms for their analysis (Table 2).

LLSV divided their sample of 27 countries into two groups: one group with high level of legal protection of shareholders and the second with low degree of protection.

They concluded that a high level of dispersion of ownership and control is observed within countries offering good shareholder protection (as the USA and UK). It was observed that the percentage of large companies which were characterized by a dispersed shareholding was 47.92% in the first group and 27.33% in the second group.

Legal Structures and Development of Financial Systems

LLSV established an empirical correlation between the share of external financing (bank debt and equity) in the total financing of firms and the structure of the legal system. They observed that the common law countries have higher levels of financing by market capitalization as compared to civil law countries, particularly the French civil law countries. They demonstrated that countries that offer better protection to the shareholders benefit from more developed financial markets and a greater number of stocks per capita. Similarly, an important legal protection of creditors involves a developed banking system. In general, the common law countries have market-based financial systems, and civil law countries have bank-based systems. At the same time, LLSV remark that French civil countries are financially less developed than common law countries (Table 3).

The seminal papers of LLSV have been the subject of many criticisms and extensions. We will first present the principal critics and then the proposition for an extension of this legal approach. We can safely concur that these works are encapsulated within the framework of law and finance literature and have in their own rights the capacity to be termed as a new financial theory.

Law and Finance, Table 3 Investor protection and structure and development financial system

Countries	Market capitalization/ GNP	Number of listed companies per capita	Bank[a]
Common law	0,60	35,45	0,83
French civil law	0,21	10,00	0,67
German civil law	0,46	16,79	0,92
Scandinavian civil law	0,30	27,26	0,90
Mean of the sample	0,46	21,59	0,83

[a]Bank = the ratio of bank loans compared to the sum of assets related to domestic credit of the central bank and bank lending (Levine 1998)

Scope of the Literature of "Law and Finance": A Critical Analysis

The work of LLSV, however, has also been the focus of much criticism. In particular, two groups of studies are worth a mention in our analysis and postulation. On the one hand, there is a group of several studies which presents the critical analysis of their methodologies and its deficiencies while offering alternative methodologies. These studies constitute the main core of "law and finance" literature. On the other hand, there is a second group of studies which offers critical insights into the theoretical aspects of the work of LLSV and tries to elaborate on their work. This kind of work is contributing to the growth and development of a "new political economy" theory.

A Critical Approach of LLSV's Methodology

These types of articles proposed that LLSV's seminal works have significant legal deficiencies of theoretical and empirical statures that are highlighted in several recent studies designed to challenge their main conclusions. We can segregate such papers into four categories:

1. *The legal indicators built by LLSV are composed of only ten rights of investors*: Many articles point out the fact that the postulated ten rights are not sufficient to effectively describe the national legal protection of investors and a legal system in entirety. Then several papers propose new legal indicators based on largely more than ten rights (e.g., Pistor et al. (2000)). Also, Holderness (2006) highlights that LLSV's use of aggregated data, in particular, the indicator of the degree of concentration of ownership. According to LLSV, the latter is explained only by the legal system (national factor) and is not influenced by other factors (firm size, age, etc.).
2. *LLSV's studies are cross-sectional studies*: This is also the case of many studies using legal indicators of LLSV, such as the "doing business" annual reports published by the World Bank. (WORLD BANK, DOING BUSINESS REPORTS (since 2004), available *at* http://www.doingbusiness.org.) Indeed, in

order to attribute scores of an annual growing sample of countries, the World Bank measures the "rule of law" with respect to a large number of countries all over the world. However, this method neglects the dynamic aspect of legal factors. Many studies have proposed more sophisticated legal indicators as compared to LLSV. Some of them focused on the time series data with respect to one particular country, while the others took multiple countries into account. For example, the research conducted by Hyytinen et al. (2003) about Finland shows the evolution of legislation over the period 1980–2000, particularly after the financial scandals. The authors find that the improvement of shareholder rights leads to restructuring of the financial market. Changes in investor protection are, therefore, a by-product of financial market development. And, similar conclusions are obtained by studies conducted on other countries, especially the ones with French civil law.

3. One of the criticisms of LLSV's works is that their idea was to prove the legal and financial superiority of common law countries as compared to civil law countries. In order to challenge this conclusion, Blazy, Boughanmi, Deffains, and Guigou conducted a study in 2011 and found that the legal protection of investors in France is not as bad as presented by the works of LLSV, especially when we consider the dynamics of the evolving law and financial structures and the ability of the French system to quickly adapt progressively to the changing reforms. The highlights of this study demonstrate that study of LLSV is a relatively descriptive work used in order to prove some normative hypothesis.
4. *The classification of countries according their legal origins*: Common law versus civil law is deeply criticized. Modigliani and Perotti (2002), contrary to LLSV, base their analysis not on the legal origin but on the quality of legal rules. They thus prove the superiority of civil law countries as compared to Scandinavian Anglo-Saxon countries with regard to their impact on the quality of law enforcement on financial development. From a general point of view, an international comparison of investor rights similar to those carried out by LLSV but on more recent data may not reach the same conclusions. This assumption is justified by the evolution of legislation in several countries, particularly following the recent financial scandals.

Ultimately, the LLSV vision is based on a "shareholder value" whose objective is to maximize shareholder value of the company. In these conditions, the superiority of common law countries with those of codified law is justified only by the higher level of legal protection of shareholders in the former than in the latter. Their results can be mitigated if we consider the "stakeholder value." In this model, the objective is to maximize the total value of the company. The interests of all stakeholders are taken into account. Shareholders are set to the same status as other stakeholders (employees, customers, suppliers, etc.). An empirical study conducted by the OECD (1999) in fact shows the existence of two groups of countries. On the one hand are countries of continental Europe and Japan that are characterized by high protection of employees and low investor protection, while on the other hand are the USA and Great Britain where the reverse situation is observed (Pagano and Volpin 2001).

Theoretical Critic Research: The Political Theory

Some authors believe that political theory is more compelling to explain financial and economic development than the law and finance theory. Also, we can decide to classify these works as taking part of the "law and finance" theory.

Thus, the main idea of these critics' articles is that financial development cannot be exclusively explained by legal origin theory, because the financial systems are evolving rapidly, while the legal origin remains stable and evolves languidly. In addition, the structure of the financial system has evolved over the last century. This change has been effected more by political lobbing, than by legal reforms (Rajan and Zingales 2001). Thus, the political theory raises the following questions: Why and how can the political process influence

financial systems? Is the effect of the political process on financial development more remarkable than the legal system? LLSV neglects the political aspect in their explanation of the superiority of common law as compared to civil law. They do not consider that the judges of common law countries may want to serve political interests. The political aspect is an important factor in the analysis of financial development and economic performance. Several studies are based on the proposition that political factors influence corporate governance, not only through the law but also through other channels of transmission. LLSV approve the idea but argue that the law remains the principal transmission channel through which politics affects corporate governance. The political theory is built around two axes. The first is represented by an economic approach called the "New Political Economy." The second axis is constituted by an ideological inspiration "the 'ideological' political theory."

The New Political Economy

This approach aims to provide some answers to two main questions. First, it seeks to understand why the regulations of financial systems are often imperfect and reduce the development of financial markets. On the other hand, it seeks to determine as to why some countries are characterized by inefficient financial institutions or by low-quality implementations of financial regulations. This new theory of political economy, initiated by Pagano and Volpin (2001), addresses these questions using the economic analysis methods. Originally, political economy focused on the interconnection of politics and macroeconomics. The New Political Economy, however, aims to analyze the political interference in the financial market. History bears testimony to the fact that political intervention in the financial market is not confined to periods of crisis and economic depression. Indeed, political pressure from special interest groups and politicians' concerns about the progress of their careers lead to specific policy interventions in financial markets such as nationalization, privatization, etc. (Pagano and Volpin 2001). This raises the question of how interest groups can influence the rules of law through the political process. The LLSV's legal argument is based on the idea that law is an exogenous factor of financial development. The policy approach outlined by Pagano and Volpin (2001) however requires that the degree of protection of investors and the quality of enforcement of the law cannot be considered as exogenous variables. In fact, the political process has an impact on the development of legal rules and on their applications. Thus, in order to maximize their economic performance, voters (individuals or firms) form interest groups. These groups influence politicians who will therefore introduce the legal reforms required and suggested by the interest group voters. These reforms will therefore influence the economic results in favor of interest groups. (We can hold the same reasoning within corporations: stakeholders can prefer a low level of legal protection of minority investors; actually they can expropriate them easier. Then, they can appeal to the help of employees in order to require a weak protection to minority shareholders. This can work only when employees are not shareholders of the firm (Pagano and Volpin 2001).) On the other hand, holding a significant stake in the firm by the directors may constitute a solution to the problem of expropriation of minority shareholders by the stakeholders (LLSV 1999). When the manager is himself a shareholder, conflict of interest between shareholders and the manager is reduced.

An empirical study conducted on some OECD's countries classifies the sample into two groups: a group of "corporatist" countries and another composed of non-corporatist countries. In the former, the level of protection of employees is high to the detriment of investors. In contrast, the latter giving more importance to investors. Pagano and Volpin noticed that this classification is the result of the political process influences that determine the orientation of a country toward better protection in favor of employees or in favor of shareholders. The potential cost of corporatism may be a low level of external funding and underinvestment. Therefore, the arrangement creates a social inefficiency ex ante. Indeed, minority shareholders (with no control rights) do not want to take the risk of being expropriated of their funds by insiders. This rationing of capital

can be very expensive for new companies looking for funding (Pagano and Volpin 2000). The differences in terms of corporate governance, between continental Europe and the USA, can be explained by the fact that in the latter there are no shareholders holding control blocks. In contrast, in continental Europe, they, as employees and firms' mangers, are insiders. Accordingly, the managers of American firms have more influence on politicians so they can better safeguard their revenues. This may explain the different waves of regulations in the USA to restrict the power of bloc-blocks of ownership and control of firms (Roe 1994 and Roe and Bebchuk 1999). It follows that the political forces influencing the structure of control rights and corporate finance. The balance of power between different stakeholders (the majority shareholders, minority shareholders, managers, and employees) determines the relative weight given by the firms in terms of the profits to shareholders and well-being of employees. The political factor also affects the development of banks. Policy reforms intended to increase the legal protection of creditors may induce a reduction in the work of selecting borrowers. A reform that aims to increase the efficiency of the legal system may encourage banks to reduce the frequency of verification of the results of borrowing.

The "Ideological" Political Theory

Initiated in 1999 by Roe, this approach assumes that policy choices that determine the protection of investors and the quality of its implementation are driven by ideological factors. Indeed, Roe (1999) emphasizes that the different models of corporate governance between the USA and the countries of continental Europe are the result of an incompatibility of the American ideology with specific social democracy European countries. According to Roe, European states must maintain a social pact between all classes. The question that arises is why this thesis based on the ideological factor paves a prominent place for the political process. Given the fact that ownership is concentrated in the most developed countries, Roe (2001) assumes that the political factor has an impact on the ownership structure. The governments affect the concentration of ownership of firms in countries of continental Europe. In contrast, in the USA, the low level of government's intervention has eased the development of the managerial firm. According to Roe, in a social democracy, the social factor is clearly present. Indeed, politicians encourage the directors of firms to ignore the interests of shareholders in order to preserve those of employees and not dismiss them. In these circumstances, the directors submit easily to political interference and pressure. However, this intervention does not lead to the same result when capital is concentrated. Indeed, majority shareholders do not yield so easily to the pressures of politicians because of their financial goals tied to their firms. By influencing corporate governance, political leaders of socially democratic countries induce more agency costs (compared to control costs incurred by minority shareholders of the managerial firms). As a result, minorities opt for the concentration of ownership in order to be blockholders of control. To test these predictions, Roe undergoes an empirical study based on 16 countries of different political outlooks. The main conclusions are the influence of political positioning is confirmed, and countries with "left" politically position have corporations with high level of ownership concentration. In the USA, a low level of concentration of ownership is a striking characteristic of the firms.

The results of the ideological approach of the political theory demonstrate that the continental European countries, characterized by a social democracy, seem less effective than the USA in terms of dispersion of ownership. The governments of socially democratic countries may create gaps between shareholders and managers and employees, and consequently managerial firms find raising external capital relatively cumbersome in these countries. It is noteworthy that empirical studies found out that until the early twentieth century, a capital market more developed than the US capital market characterized France. However, this trend was reversed in the 1980s. In recent years, the differences between the two countries are not clearly evident. Hence, the discrepancies that may exist between these two

countries may not necessarily determine the superiority of one over the other.

Roe notes that in the socially democratic countries, stability may compensates the loss in efficiency caused by the weak protection of shareholders and that over a long period these countries have a high level of productivity. The author explains the specificity of social democracies using an analysis in terms of "path dependence." He believes that continental European countries cannot neglect the social factor because of the influence of past wars and encourages them to opt for social stability. The ideological approach is focused on the fact that the solution to problems, caused by the opening of capital of firms and the willingness to develop market economy, can provide stability to their political and social structure. Solving these problems is not only limited to setting up a legal environment. Legal reforms must also be accompanied by political reforms to further develop the financial markets and foster economic growth.

The ideological approach of the political theory differs from that of the New Political Economy. According to the latter, the degree of legal protection of investors is the result of the economic interests, as it assumes that political decisions are influenced by economic interests and not by ideological and social factors. However, it is difficult to distinguish those ideological political choices from economic political choices.

Conclusion

The "law and finance" literature integrates the legal factors into the analysis and thus provides answers for three basic questions: the explanation of the differences between (i) the structures of ownership and control, (ii) modes of corporate governance, (iii) and the development and organization of financial systems. The several empirical studies conclude the existence of two types of legal origins (civil law and common law). Based on the idea of the superiority of common law, the seminal papers (LLSV) deduce a number of results on corporate governance and the development of financial systems. First, they challenge the widely held model described by Berle and Means (1932) by showing that it is only representative of few number of countries. Indeed, they highlight the existence of a strong propensity of companies with a concentrated family shareholding. Second, the proponents of the "law and finance" theory note that the dispersion of ownership and control is a proof of the strong protection of minority shareholders.

Third, this legal approach shows that common law countries are characterized by a model of corporate governance that is exercised primarily through the control of external shareholders. In civil law countries, the companies are controlled internally by its main shareholders.

Fourth, the legal approach empirically verifies the hypothesis of a relationship between the legal system and financial development. It highlights that those countries that provide better protection to shareholders (common law countries) as compared to those who do not (civil law countries) enjoy a better-developed market economy.

Fifth, the legal approach leads to the conclusion that legal protection of investors must be represented by not only the content of legal rules but also the efficiency and quality of their enforcement.

Finally, the legal approach of LLSV is the subject of several theoretical and empirical critics. The main one is the political theory. The political theory is built around two axes. The first is represented by an economic approach called the "New Political Economy." The second axis is constituted by an ideological inspiration "the 'ideological' political theory." The main argument of the first is that the degree of investor protection and the quality of enforcement of the law cannot be considered as exogenous variables in the functioning of the financial system. The second approach excludes the legal factor and explains the legal differences between countries in terms of financial development, by ideological factors.

We note also that the framework of law and finance theory is extended around many other axes. Indeed, many studies are based on "stakeholder" perspective that extends the analysis to

include the legal protection of employees and bondholders and not only shareholders. In addition, we include within the "law and finance" literature many studies that provide a more comprehensive view of distressed firms and bankruptcy. These studies are based on new methodology that provides several legal indexes used to describe bankruptcy law. Thus, they provide a more comprehensive view of bankruptcy than that proposed by LLSV, who were built upon four legal indexes that mainly focused on secured creditors' rights and studied only the reorganization procedure, while the majority of bankruptcies end up in liquidation procedure (see Blazy et al. (2012, 2013)).

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Law Enforcement by Government

► Public Enforcement

Law Merchant

► Lex Mercatoria

Law of the Fair

► Lex Mercatoria

Legal Aid

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Definition

Legal aid is a type of financial aid in which the State bears the costs of litigation to allow the

poorest people access to the courts. It therefore reduces the litigation costs borne by the beneficiary litigant. It may thereby have an impact on the litigants' behavior (decision to sue, dispute resolution procedure, precaution taking, incentive to engage in a criminal activity). It may also have an impact on lawyers' activities and the effort they devote to defending their clients' interests. It may therefore be useful to compare this method of financing access to justice with other possible alternatives, such as contingent/conditional fees and legal expenses insurance.

Abstract

Legal aid is a financial aid of the State to make access to justice for poor people easier. Law and economics scholars study its impact on the litigants' behaviour (decision to sue, dispute resolution procedure, precaution taking, incentive to engage in a criminal activity) but also on lawyers' activities. Finally, legal aid is compared with other possible alternatives, such as contingent/conditional fees and legal expenses insurance.

Introduction

Legal aid (LA) conforms to the principle of solidarity and the obligation, imposed at European level by the European Court of Human Rights and the Court of Justice of the European Union, to allow all citizens to defend their rights through the courts. The methods used to grant aid vary from one country to another but are generally based on the beneficiary's financial resources (upper limit of income) and, under certain circumstances, the merit of the case. LA may be proportional, if it covers a percentage of the expenses incurred by beneficiaries for the defense of their rights (percentage of up to 100%), or granted on a flat-rate basis if beneficiaries receive a fixed amount (corresponding to the payment of a certain number of hours to the lawyer or to funding a specific stage of the litigation) and then have to cover other additional expenses. It may cover the costs incurred for a dispute in civil as well as criminal matters.

The economic literature devoted to LA is quite insubstantial, and the studies mainly concern England and Wales (Rickman et al. 1999), Scotland (Stephen 1998, 2001), France (Doriat-Duban 2001; Ancelot et al. 2012), and occasionally European countries (Lambert and Chappe 2014). All of these studies are based on the premise of a growing and continuous increase in spending on LA in the justice budget. They mostly have two separate aims: to explain the growing recourse to LA and to understand how LA affects the behavior of the parties (beneficiary, lawyer, and defendant). The insight they provide may thus be useful for public policies seeking either to reform LA or replace it with other methods of financing access to justice (contingent/conditional fees or legal expenses insurance).

Impact of LA on Access to Justice and Effectiveness of the Law

LA may be granted in civil or criminal cases.

In civil matters, the studies focus on the influence of LA on incentives to sue, dispute resolution procedure, and damage prevention. In a model based on the optimism of the parties, Doriat-Duban (2001) shows that LA increases the number of legal proceedings by reducing the costs of access to justice. Nevertheless, if it allows for the payment of lawyers' fees when a transaction is concluded before the seizing of a court, then the frequency of prosecutions will fall, and the prevention and compensation of damage will rise. As far as the dispute resolution procedure is concerned, the impact of LA seems uncertain because two effects are exerting opposite influences: the drop in negotiation costs increases the chances of an amicable settlement and the decrease in litigation costs increases the probability of judgment.

More recently, Lambert and Chappe (2014), in a model with asymmetric information, have studied the effect of LA on incentives to take precautions, the decision to take legal action, and the amount of the expenditure incurred by the plaintiff in proceedings. They show that flat-rate or proportional LA has a positive effect on

incentives to sue and, in advance, on incentives for potential perpetrators of damage to take precautions. However, the impact on the number of litigation cases is unclear because everything depends on the dominant effect, from a rise in number of prosecutions to a drop in the number of accidents.

In criminal matters, Garoupa and Stephen (2004) mention that three theoretical arguments against LA are traditionally put forward: it may have a negative effect on deterring people from committing crimes by reducing the costs of their defense; it could be a source of inequalities in the sanctions expected for the same offense; and it could be replaced by a more effective income-based subsidy. Nonetheless, the authors present an argument in favor of LA. To this end, they consider it not merely as an expense in the State budget but as a public subsidy contributing to the optimal application of justice. More specifically, in the event of miscarriages of justice, LA improves the situation of all defendants (innocent and guilty) because it reduces the marginal cost of their defense; but as a guilty party is presumed to be more likely to plead guilty than an innocent party, its effect is to provide more help for the defense of innocent parties. If this effect was sufficiently pronounced, then governments wishing to maximize social well-being would be well advised to implement a LA system. This argument is strengthened if subsidizing the expenditure on defense reduces the sanction incurred by innocent parties by allowing them to improve their defense.

Impact of LA on Lawyers

A recurrent question on LA concerns its growing budgetary burden: whereas certain authors mention the very steep rise in expenditure on LA (Gray 1994; Stephen 1998, 2001; Goriely et al. 1997; George 2006), others explain this rise as a problem of moral uncertainty linked to its attribution methods in the majority of countries in which the legal institution (the principal) delegates to the lawyer (the agent) the power to decide whether or not to defend a case and the number of hours to devote to it. However, the combination of asymmetric information and different incentives for these two parties generates opportunistic behavior in lawyers. Furthermore, LA could remove the incentives for clients to monitor the amount of effort their lawyer devotes to their defense (Bevan et al. 1994). The massive rise in expenditure on LA that began in the 1980s would therefore be due to a supply-induced demand, with the lack of opportunities for lawyers in privately financed cases having increased the relative attractiveness of cases financed by LA (Bevan 1996).

Extending this analysis, Gray et al. (1999) sought an empirical link between the increased expenditure on LA and the supply of lawyers' services. In particular, they set out to determine whether lawyers adjust the level of their service according to their opportunity costs. The attention paid to lawyers' efforts is justified for two reasons: one is theoretical linked to the aforementioned moral uncertainty, and the other is empirical linked to the concomitant rise in public expenditure on LA and in the number of lawyers (in England and Wales). In this way, lawyers may have been able to make upward adjustments to the services provided in the context of LA, due to the drop in the opportunity costs that might have been represented by relinquishing activities previously carried out on a monopolistic market that is now open to competition. In other terms, as the other cases became less lucrative, those covered by LA became relatively more attractive. Different elements are then identified as possible explanations for the rise in spending on LA, including the volume of disputes and the unit cost of each case, for a given region. The volume of disputes depends on the number of cases covered by LA and the number of lawyers (or firms) handling these cases. The unit cost of the cases depends on the number of hours of work provided by the lawyer and the hourly rate applied. If this rate is assumed to be constant, then only two variables can explain variations in the unit cost: an "input" effect reflecting the variation in the number of hours devoted to a case and a "volume" effect reflecting the change in the number of cases handled by a firm, in the presence of diseconomies of scale at the regional level. In addition, the unit cost may increase for two other reasons: the

arrival of relatively inexperienced lawyers on the market which reduces economies of scale and experience effects and the fact that in response to heightened competition, firms are accepting cases of lesser merit to which they are devoting greater effort. This empirical analysis therefore shows that lawyers may increase the budgetary cost of LA, irrespective of the preferences of their clients and the public authority, especially if little monitoring is carried out.

LA Versus Other Methods of Financing Access to Justice

In view of the different effects of LA identified by the economic literature, consideration should be given to its possible alternatives. This raises the question of the consequences of transferring State-funded litigation expenditure to another agent: the lawyer in a system of contingent or conditional fees and the insurer in a legal expenses insurance system.

Concerning transfer to lawyers, Lambert and Chappe (2014) compare the effects of LA with those of contingent/conditional fees. They show that the probability of prosecution is higher in the second case, insofar as the plaintiff bears no expenditure and consequently no risk, which is borne by the lawyer. However, for a given expenditure borne by the plaintiff or lawyer, LA allows for an increase in expenditure on the proceedings, which increases the probability of the plaintiff winning and, in advance, also increases the incentives for the potential perpetrator of damage to take precautions.

Concerning transfer to insurers, both LA and legal expenses insurance tend to strengthen the plaintiff's negotiating position: by covering some or all of the litigation costs, they encourage him/her to demand more in order to abandon the litigation. Nevertheless, as explained by Ancelot et al. (2012), this heightened risk of congestion of the courts is reduced if account is taken of the agency relationships forged in adversity and the possible benefits for lawyers of coming to an amicable settlement. In addition to the comparison of the two systems, the consequences of replacing LA with legal expenses insurance and its impacts on the litigation resolution mode are identified. The arrangements accepted by plaintiffs covered by a legal expenses insurance policy appear to be higher than those demanded by plaintiffs benefiting from LA, irrespective of their risk aversion. Consequently, LA appears to be more favorable to arrangements than legal expenses insurance because it makes plaintiffs less demanding. The development of legal expenses insurance could therefore appear to be desirable for plaintiffs but not for the legislator wishing to reduce legal proceedings.

Summary

Legal aid has seldom been explored by the economic literature. The studies – mainly European – provide interesting results regarding the avoidance of conflicts, in terms of the incentives to prosecute, to come to an amicable settlement, and to take precautions. They also shed new light on the behavior of lawyers. These analyses may prove to be particularly useful with the prospect of reforms seeking to reduce the burden of LA in government budgets, perhaps by replacing it with other methods of financing access to justice (contingent/conditional fees or legal expenses insurance). However, empirical studies that confirm or invalidate the main theoretical results remain sorely lacking.

Cross-References

▶ Access to Justice
▶ Litigation and Legal Expenses Insurance

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Legal Cost Insurance

► Litigation and Legal Expenses Insurance

Legal Disputes

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Abstract

In bringing economic analysis to bear on whether a dispute is settled without trial, the presumed institutional setting is typically one of private property where the parties are residual claimants to their legal expenses. Many disputes, however, are between private and public parties. In these disputes there is a conflict between substantive rationalities because public parties are not residual claimants. Just as the substantive content of action can vary depending on whether the actor operates within a context of private or common property, so can the substance of dispute settlement vary. While a public actor cannot pocket legal expenses that are saved through settlement, the expenses of trial can serve as an investment in pursuing future political ambitions.

JEL Codes: D23, D74, K40

Definition

A sizeable literature exists on the resolution of legal disputes, which is summarized to good effect in Miceli (2005), and with that summary containing an extensive bibliography. That literature largely operates within the framework of a dispute between two market-based entities where both parties operate within the substantive rationality associated with private property. In many legal disputes, however, one party is a public entity which operates within the substantive rationality associated with collective or common property, as Wagner (2007) explains in his treatment of public squares and market squares. This entry explores how the economic principles of dispute resolution might be modified when one of the parties to a dispute is a public entity. To provide a point of analytical departure, I start with a quick summary of dispute resolution when both parties operate inside a framework of private property. The rest of the entry explores how the analysis of how the resolution of legal conflicts might be modified when one of the parties is a public entity. The entry closes by considering some of the constitutional-level issues that arise in light of the societal tectonics that can be generated in the presence of this clash between rationalities.

Dispute Resolution Between Private Parties

Someone who buys a dilapidated hotel hires a construction firm to renovate the hotel. The

contract calls for a series of payments corresponding to various stages of completion of the work. The construction firm hires workers and contracts for the delivery of materials. The renovation is projected to take 2 years. Shortly after renovation starts, the hotel's owner discovers a considerable miscalculation in the financial projection on which the renovation was based. Correcting the mistake, however, lowers significantly the expected value of renovation. Consequently, the hotel owner revises the planned renovation and offers the owner of the construction firm a new contract, one that calls for less work, a later starting date, and a lower price. The owner of the construction firm refuses to accept the lower price, saying that the revised work plan and the different materials involved, along with complications due to the later starting date, warrants payment of the original price. The hotel owner refuses and demands that renovation proceed under the new plan, so the construction firm sues the hotel for the $20 million.

The logic of settlement looks at the situation from the point of view of each party and asks whether there are conditions under which both parties could gain by settling the case rather than going to trial. For the plaintiff, the object of a trial is to acquire the amount requested; for the defendant, the object is to avoid having to pay that amount. For a plaintiff, the expected gain from going to trial, P_T, is $P_T = AP_P - E_P$, where A is the amount requested, P_P is the probably of success expected by the plaintiff, and E_P is the plaintiff's expense in pursuing the trial. For a defendant, the similar relationship is $D_T = AP_D - E_D$. In this instance, A = $20 million. Suppose for each party the expected cost of pursuing a trial is $2 million. Further suppose that each party believes its chance of success at trial is 50%. Under these conditions, each party has the same net expected value from going to trial, $8 million.

The aggregate net value of going to trial is $16 million, but the award generated through the trial is $20 million. The other $4 million is dissipated through litigation. This dissipated amount illustrates the potential gain from settling the case. A settlement where the defendant paid the plaintiff $10 million would split the settlement range evenly, leaving each party with $2 million more than they could expect to obtain through trial. Any payment to the plaintiff between $8 and $12 million would provide gains to both parties. The existence of a settlement range fits with the observation that most commercial disputes are settled without trial. But not all such disputes are settled, nor is there any reason to expect that they should all be settled. For instance, there is no necessary reason for both parties to have the same perception of the outcome of a trial. In dealing with expectations about particular events, there is no reason to think that the sum of probabilistic beliefs must add to one. Each party might be optimistic about the outcome of a trial, as illustrated by each party thinking that its chance of success was 80%. In this case, the expected value of going to trial would be $14 million for each party. With trial now offering what the parties perceive to be an aggregate value of $28 million when only $20 million will be awarded, the settlement range vanishes amid the inconsistent perceptions. To be sure, there is good reason to think that such procedures as discovery and deposition operate to narrow the distance between perceptions; however, while the tendency to settle disputes is economically intelligible, settlement is not economically necessary.

What is particularly significant about this formulation is that both parties operate within a framework of private property where each entity owns the value consequences of its actions. The basis for settlement resides in the institutional framework of private property wherein the parties can pocket the legal expenses avoided by settling the dispute. This framework fits normal actions of private law involving disputes between two commercial entities. But a good number of disputes in modern societies are between private and collective entities. With collective entities, however, there is no ownership of the value consequences of collective action, at least within democratic regimes. To explore the resolution of such disputes, it is necessary to take into account differences in practical rationality between differently constituted entities.

Form, Substance, and Rationality in Practical Action

Economists typically work with a purely formal notion of rationality, as expressed by the axiom that people make consistent choices. This formal notion of rationality pays no attention to the context within which choices are made. It does this by presuming that all choices are made within a market context where people choose among options according to market prices. This context, however, applies only to a subset of all choices and interactions within a society. Political choices, for instance, are not made within this context even though public choice theorizing tended to assume that they are doubtlessly to increase analytical tractability.

With respect to the preceding example, suppose the plaintiff is not a construction firm but an environmental control agency that is seeking to force the hotel owner to change the renovation in a manner that adds $20 million to the expenses of renovation while adding nothing of potential value to future customers. The hotel owner can sue the environmental agency. The market-based settlement calculus, however, does not apply in this context. It applies to the hotel owner, of course, but it does not apply to the environmental agency because the agency operates outside the purview of private property and residual claimancy. The agency still engages in economic calculation because it always faces choices, but the context of calculation differs through the absence of residual claimancy, which means, among other things, that there is no market valuation of the environmental agency that some owner can claim directly.

There is a formal logic of choice, and there are substantive logics of practical action, as noted cogently by Pierre Bourdieu (1990, 1998). As a formal matter, it is reasonable to presume that people prefer more of what they value over less. As a substantive matter, however, what is valued depends on the context within which action is taken. Among athletes, for instance, practice will be the form by which the athlete prepares for competition. The substance of that practice, however, will depend on the context of competition. For someone engaged in American-style football, weight lifting will be a significant component of practice. In contrast, someone engaged in billiards might not lift weights at all. There are many substantive logics of practice that can all be rendered sensible within a covering logic of form, as illustrated by Alasdair MacIntyre's (1988) distinction between a rationality of excellence and a rationality of effectiveness.

The logic of practice must relate cost to choice along the lines Buchanan (1969) sketches. Cost is thus the value an actor places on the option that is displaced by virtue of choosing the alternative. The cost of choosing to settle a case is the value of the option that the chooser foregoes by choosing instead to go to trial. The relevant cost, however, pertains to a person who faces a choice, and that cost differs between frameworks of private property and collective property, as Ringa Raudla (2010) notes in her treatment of incorporating institutional considerations into the theory of public finance. For instance, someone who fishes on a private pond will tend to return immature fish to catch later, while someone who fishes on a common pond cannot count on those fish still being there later when they are larger.

With respect to commercial disputants, it is reasonable to relate cost to perceptions of the comparative value of an enterprise in light of the options. With respect to the value of the enterprise in the preceding illustration when both parties agree on the 50-50 assessment of prospects of a trial, the value of the enterprise is $2 million higher with settlement than with trial. That value, moreover, accrues to the owner of the enterprise. While in a large firm it will be the director of a legal office that makes such decisions, that director will bear a clear agency relationship with the owner of the firm. With collective entities, however, at least of the democratic form, there is no market for ownership, and so there is no value of the enterprise. It is still possible as a formal matter to treat collective entities as enterprises, but there is no market-based valuation of those enterprises. The relevant cost to the director of an environmental agency is not reflected in some calculation of enterprise value because there is no such value.

For such an agency, choices to settle or go to trial must be related not to some fictional construction of firm value but to the cost-gain calculus faced by the director of the agency, as modified by other political interests that the director values highly. There is still a formal logic of settlement, but the specific decisions regarding settlement are guided by the substantive logic of practice within a particular institutional framework. To get at substance requires that choices be related the chooser's valuation of perceived options at the level of practical action. Both football players and billiard players will practice for forthcoming competitions, but the substance of their practices will differ. In similar fashion, someone who fishes on a common fishing ground will act differently than someone who fishes on a privately owned pond.

Dispute Resolution Within a Mixed Economy

In her perceptive treatment of *Systems of Survival*, Jane Jacobs (1992) explained that well-working societies operate with a delicate balance between what she described as commercial and guardian moral syndromes. While her distinction wasn't identical to the distinction between commerce and government, it was close. She also explained that when the carriers of those syndromes commingle excessively, what she termed "monstrous moral hybrids" can arise. Such commingling comprises what is described as a mixed economy (Littlechild 1978; Ikeda 1997). The central issue that such commingling must confront is whether it supports or revises the character of the economic order. While democratic systems are based on a logic of equality and mutuality, there are plenty of analytical grounds for recognizing that they also face pressures leading toward a re-feudalization of the economy. It was to forestall such re-feudalization that Walter Eucken (1952) articulated the principle that state action should be market conformable. Such market conformability in Eucken's framework would present a barrier to the generation of monstrous moral hybrids in Jacobs's framework.

When both parties to a dispute operate within a private property framework, they both speak the same language of profit and loss. For instance, the defendant might be the hotel owner after renovation, and the plaintiff might be the owner of an adjacent marina who complains that the height of the hotel blocks a view of the setting sun, thereby degrading the value of the rooftop restaurant. Both participants speak the language of profit and loss. While each would have understandable incentives to exaggerate their cases, that exaggeration is limited by their positions of residual claimants and the possibility that settlement might lead to higher net worth than trial.

The setting changes if the plaintiff is an environmental agency or any political entity for that matter. The hotel still speaks the language of profit and loss, but the environmental agency speaks a different dialect, one that refers to social value that cannot materialize in anyone's account in particular. What results instead are ideological appeals that resonate with targeted interest groups along the lines of Pareto's (1935) treatment of ideology as amplified by Backhaus (1978) and as explored further in McLure (2007). In Pareto's terms, we observe the agency filing suit against the hotel, and we witness the agency advancing derivations or justifications based on claims of capturing social value. What we don't know about are the underlying motivations that led to the agency choosing that course of action, which Pareto called residues. The agency cannot claim to be trying to capture lost profits, and in this it is speaking truthfully because there are no profits that it can capture due to its status as a nonprofit entity. But in speaking of securing the social interest, it is advancing a proposition that is incapable of falsification. The head of the agency might well aspire to run for public office and sees this suit as a means of capturing favorable publicity. If so, the suit offers the head of the agency an investment at public expense in achieving that electoral outcome, though, of course, no person with such electoral aspirations would ever make such a declaration. In a suit between market participants, both parties can be honest and open in their aspirations. But when one party is a public entity, such rectitude necessarily and understandably recedes.

Disputes involving both private and public parties entail a form of Faustian bargain. Public parties can sue private parties without having to face the constraints upon the power to sue that private property imposes on market participants. In some instances, reasonable public purposes might be secured by the deployment of that power. But that power can also be employed in the pursuit of the private advantages of those who wield that power, as perhaps illustrated by an attorney general who is able to parlay legal expenditures into investments in an effort to seek higher elected office.

It is doubtful that there is any resolution to this particular Faustian bargain. This form of bargain bears a family resemblance to the problem of statistical decision theory as illustrated by Jerzy Neyman's (1950) treatment of the problem of the lady tasting tea. In that problem, a lady claims to be able to tell whether milk is added to tea that is already in the cup or whether tea is added to milk. It is in the nature of the problem setting that perfection is impossible. The greater the effort made to avoid granting the lady's claim when she really can't distinguish between the methods, the greater will be the frequency with which her claim will be rejected even though she can distinguish between the methods.

This problem setting has relevance for constitution of dispute resolution within society. Along the lines of Epstein (1985), a public agency might take private property under eminent domain, claiming that it had good public reason for doing so. After all, what else could it claim? The Fifth Amendment to the US Constitution requires that such takings be only for public purposes and that any such taking must be accompanied by just compensation. It is easy enough to give a Coasian gloss on this procedure. The ability of the hotel to build upward might destroy scenic opportunities elsewhere that are valued more highly than what is created by adding to the height of the hotel. There is a simple market test for this proposition. But in the absence of a market test, the burden falls on the public processes through which agency actions are determined. Some of those processes might be more market conformable than other processes. In any case, relationships between market-based and public-based entities create a source of turbulence that is not present in relationships between market-based entities, due to differences in the substance of rational action.

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Legal Formants

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Definition

Legal formants are the different components that concur to build any given legal system. The

comparative law scholar can understand the dynamics that shape any legal system through the analysis of their interactions. Legal formants analysis of legal systems have been developed by Rodolfo Sacco, and it is now a recognized and accepted methodology by comparative law scholars.

A Dynamic Approach to Comparative Law

Legal formants are the different components that concur to build any given legal system. The comparative law scholar can understand the dynamics that shape any legal system through the analysis of their interactions. The expression "legal formants" have been transplanted in comparative law from phonetics by Rodolfo Sacco, an Italian law professor based in Torino. "Legal formants" made their appearance in Sacco's work since the early 1970s (Sacco 1974) and have been subsequently included in his seminal book on comparative law (Sacco 1980). Legal formants theory have been available to the English reader in 1991 (Sacco 1991a, b).

Comparative law is the academic subject that identifies the "plurality of rules and institutions . . . in order to establish to what extent they are identical or different" (Sacco 1991a: 5). To achieve this intellectual exercise, comparative law scholars have to collect legal rules, in order to be able to analyze and compare them. Sacco's theory rests on the question "what is a legal rule?", as the comparative law scholar has to extract the lesser object of his study from the wholeness of the legal system. From a national point of view, the answer to question, "what is a legal rule" may be simple: national jurist in civil law jurisdictions is willing to say that the legal rule is what a statute says, whereas in common law countries would be what case law affirms. Sacco, however, considers wrong to search for "the legal rule" on a specific subject. This attitude is, in his words, "the typical view of an inexperienced jurist" (Sacco 1991a: 21). In fact, any trained lawyer, "who proceeds from the axiom that there can be only one legal rule in force, recognizes, even only implicitly, that the living law contains many different elements: statutory rules, the formulations of scholars, and the decisions of judges" (Sacco 1991a: 22). The national jurist tends to keep separate all these elements in the back of his mind. But still: "The statutes are not the entire law. The definitions of legal doctrinal scholars are not the entire law. Neither is an exhaustive list of all the reasons given for the decisions made by the courts. In order to see the entire law, it is necessary to find a suitable place for statute, definition, reason, holding and so forth. More precisely, it is necessary to recognize all 'legal formants' of the system and to identify the scope proper to each" (Sacco 1991a: 29).

"The number of legal formants and their comparative importance varies enormously from one system to another. For example, in some areas of English law, statutes are wholly lacking" (Sacco 1991a: 32). So, what can constitute a legal formant? Constitutions, statutes, case law, and scholarship are legal formants. They are so as texts, as well as work of legal actors, for they include the social practices of each particular group of interpreters. Even the way law is explained to law students in the classroom is a legal formant as teaching concurs to the modelling of the legal system. Interpretation is itself a legal formant: "Whatever influences interpretation is a source of law. To discover what influences interpretation various methods can be used. For example, one can examine the sources that an interpreter uses, be he lawyer or judge, when he advocates or adopts an interpretation of a rule" (Sacco 1991b: 345).

In Sacco's understanding, "the reasons and the conclusions given by judges and scholars" (1991a: 30) are also legal formants. "Strange as it may sound, the reasons that judges and scholars give are different "legal formants" than their conclusions. The reasons have a life of their own, independent from the conclusions they supposedly support" (Sacco 1991a: 30).

"The propositions about the law that are put forward as conclusions by scholars, legislators, or judges are another legal formant" (Sacco 1991a: 31).

Reasons and propositions about the law are what Sacco considers "declamatory statements," whereas "operational rule" designates the legal

rule, as it is applied. Sometimes "declamatory statements . . . make explicit an ideology, be it the ideology that actually inspire[s] the system in question or the one that a given authority believes to have inspired it or the one this authority wishes people to think inspired it. In civil law and in common law countries, declamatory statements are often made in accordance with the background of *jus naturalism*. Declamatory statements, for example, may insist that contracts are made by consent, while the operational rule requires not only consent but a reason or cause for the enforcement of the contract. . . Or, in common law countries, there are declamatory statements that property is transferred by the will of the parties while the operational rules require an additional element: consideration or delivery or, for the transfer of immovable property, a conveyance" (Sacco 1991a: 31).

National jurists assume that all legal formants in the same legal system have an identical content, that's why the task for the national jurist is the quest for "the legal rule" within the system. Sacco's theory, however, shows that the legal formants, within a given legal system, are never in complete harmony. "Comparison recognizes that the "legal formants" within a system are not always uniform and therefore contradiction is possible. The principle of non-contradiction, the fetish of municipal lawyers, loses all value in an historical perspective, and the comparative perspective is historical par excellence. Despite the search of unity and certainty of law, the comparative law scholar is able to show that the different legal formants are not in harmony, but rather in conflict" (Sacco 1991a: 24). An example comes from the interpretation of code provisions that are adopted with identical wording in two different legal systems. It may happen that, despite the exact wording of the statutory provisions, the two judges interpret the provisions in different ways and therefore apply different rules: the statutes alone do not determine the rules followed by the judges.

The dynamic approach, through the analysis of multiple legal formants, is opposed to the static approach based on dogmatic. The static analysis of a legal system looks for the "the rule" that must exist and, if not evident, can be deducted logically from the official sources of law. The dynamic approach allows the observer to understand the whole picture, to take into account the different forces that are at work in shaping legal systems and to acknowledge the work that all the legal actors provide. The dynamic approach focuses on law as a social activity and refutes those "'scientific' methods of legal reasoning that do not measure themselves against practice, but formulate definitions that are supported solely by their consistency with other definitions" (Sacco 1991a: 25).

The dynamic approach is at odds with positivism. A dynamic approach enables the observer to distinguish between the description that the legal system offers of itself (declamatory rule) and the rule that is in fact enforced (operative rule). A system, for instance, may grapple around the declamatory rule that affirms total and absolute "privity of contract" and then, in specific circumstances, allows compensation for interference with contract. If the set of facts that allows compensation are recurrent, we have an operative rule that is different from the declamatory rule: in specific circumstances, the contract is relevant for third parties that are obliged to pay damages in case of interference.

Sacco's approach to law through legal formants is deemed a structuralist approach, as structuralism, in law, debunks the myth of the legal rule (Mattei 2001). Structuralism, as well as Sacco's dynamic approach to comparative law, "show [s] that each rule is a complex structure composed of different "formants": the rule formulated by the legislature, the rule as interpreted by courts, the implementation of the rule by administrative agencies, the discussion of the rule by law professors, etc. It also makes plain that each rule consists of both an operative prescription and a justification for that prescription, thereby emphasizing the role played by ideology and rhetoric" (Di Robilant 2016: 1326–1327).

Tacit, or Implicit, Legal Formant: The Cryptotype

Beside explicit legal formants, such as statutes, case law and scholarship, there are implicit legal

formants that Sacco calls "cryptotypes." The terminology is imported from linguistics (Legrand 1995: 953–955). When we speak, very few of us would be able to formulate the linguistic rule we follow when we say "three dark suits" and not "three suits dark." According to Sacco, the same applies to law. It happens that jurists follow and apply rules not explicitly formulated or enforce rules they are not aware of. In our experience, the law has become a theoretical exercise, especially since we have, within the society, a particular class of professional jurists. But even in our times, social order and performance are always extant in the shaping of rules and legal systems and they always keep a different and practical dimension. Customs, the social practices, and rules of conduct that people follow within social groups, that ultimately guide the actions of the members of a community, are what Sacco defines as "cryptotypes." Judges, lawyers, interpreters are equally bound to the implicit formants that, therefore, are very influential in the modelling of different legal systems.

It is not easy to identify cryptotypes. It is even harder for national jurists, as they involuntary follow rules they are unaware of. "Normally, a jurist who belongs to a given system finds greater difficulty in freeing himself from the cryptotypes of his system" (Sacco 1991b: 387). This is why comparative lawyer is privileged in detecting cryptotypes, as she is an outsider who doesn't share the same implicit rules. "Some cryptotypes are more specific, others more general. The more general they are, the harder they are to identify. In extreme cases they may form the conceptual framework for the whole system" (Sacco 1991b: 386).

Legal Formants and Factual Approach: The Common Core Project

The Legal formants approach to comparative law is part of the methodology applied by the large group of scholars that participate in the Common Core Project. The Project, established in Trento in 1993, by Ugo Mattei and Mauro Bussani, aims at "unearth the common core of the bulk of European Private Law, that is, of what is already common, if anything, among the different legal systems of European Union Member States" (Bussani and Mattei 2002: 1). Two methodologies were drawn together by Bussani and Mattei for the Common Core Project: the factual approach to comparative law, conceived by Rudolf Schlesinger (Schlesinger 1968) and the dynamic approach to comparative law, elaborated by Sacco (Mattei 2001).

The first source of inspiration has been the Cornell seminars held by Rudolph Schlesinger in the 1960s. Schlesinger's endeavor was to describe how the rules on formation of contracts were functioning in various legal systems (Sacco 1991a: 29–30). Instead of asking participants to describe their own legal systems, he preferred to draw a questionnaire based on specific-case scenarios. His project launched what is now known in comparative law as the "factual approach." Schlesinger's work provides an accurate comparative overview, because an inquiry on how different legal systems solve the same practical problems better describes the functioning of a legal system. This approach is known by now as a functional approach, meaning that legal rules are best described by their function (Graziadei 2003).

Together with the factual approach, Common Core Project was inspired by Sacco's theory on legal formants. This theory allowed national reporters as well as editors in charge of drawing the final comparative overview to have the full picture of the dynamic that do operate within a given legal system. In the instructions given to participants about how to answer the questionnaires (Bussani and Mattei 2002: Annex transform in 1), we read: "On a first level ('operative rules'), the national reporters are asked to indicate how the case would be solved according to case law, legislation, legal doctrine, custom and usage" (Hesselink and Cartwright, 3). They should indicate as well "whether these formants are concordant. . . from an internal point of view and from a diachronic point of view. On a second level ('descriptive formants'), the reporter is to indicate the reasons why lawyers feel obliged to adopt the solutions described at the first of the inquiry. Finally, on a third level ('metalegal formant', or

cryptotypes), the reporters are invited to indicate any other element that might affect the solutions mentioned at level 1, such as policy considerations, economic factors, social context and values, and the structure of legal process" (Hesselink and Cartwright 2002: 3; cf. Cartwright and Hesselink 2002 for a description and critiques of Common Core Project).

Legal Formants in Critical Legal Theory

Critical legal thought praised the legal formants approach to the analysis of law. Duncan Kennedy in a Critique of Adjudication (1997: 92) states the importance of Sacco's approach, as a formidable tool in the scholars' hands. Legal formants, showing the dynamics within a legal system, refute the idea of the inevitability of deduction. "A comparative method can thus provide a check on the claim of jurists within a legal system that their method rests purely on logic and deduction" (Sacco 1991a: 24). There is no obliged logical deduction from a legal rule. Duncan Kennedy bases his praise for Sacco's work on the description of how identical code provisions are applied differently. For Kennedy, this is the evidence of the possibility for the judge, the scholar, and more broader the interpreter, to choose among various possible application of the rule. The judge, the scholar, and the interpreter cannot hide behind the neutrality of the law, neither behind the logic of the law. Any application of the rule, within any legal system, is a specific choice for the interpreter. Legal formants, therefore, are extremely effective in conducting an internal critique, to debunk the neutrality of the legal system using the same devices that the various legal actors use.

At the same time, Duncan Kennedy (2012) urges the comparative law scholar to take into account ideology as a legal formant that operates in an implicit way, therefore a cryptotype. The mainstream comparative law has not been particularly focused in this direction. According to Kennedy, if the deductive process of the judge, the scholar, and the jurists community is not determined, constrained, or forced by legal necessity, it is clear that the community of the interpreters are actually choosing the solution. How do they determine the rule that they are going to apply is the central question of Duncan Kennedy's scholarship. Confronted with legal formants methodology, he is willing to unveil ideology (Du. Kennedy 1997: 157–179) as one of the components of legal systems, that implicitly influences decisions. Ideology is therefore one of the most effective examples of cryptotypes, because it influences jurists' decisions in an unconscious way. Classic comparative law, though, never considered politics and ideology as part of the legal system, because classic comparative lawyers preferred to situate themselves on a scientific level, where law is a technical and autonomous subject that has a separate life from politics.

Comparative Law and Economics

In the 1990s, Ugo Mattei, a comparative law scholar who studied law and economics in the United States, proposed a new approach to legal research (Mattei 1997; cfr. Mattei and Cafaggi 1998; Caterina 2006). Comparative law and economics was "the new frontier" (Mattei and Cafaggi 1998: 346) of legal scholarship that could "enable scholars to tackle major challenges of globalization" (Mattei and Cafaggi 1998: 346). Comparative law, the science that addresses the study of "similarities and differences between legal systems, is conjugated with law and economics," (Mattei and Cafaggi 1998: 346) the science that evaluates legal rules and institutions from the point of view of economic efficiency. The final goal of this new academic challenge was to assess which legal system was more efficient. "Comparative law and economics seeks to explain in precise terms the convergence of legal rules by using efficiency as a key metric" (Di Robilant 2016: 1387). The legal formants approach is paramount in this endeavor, as it takes into account all the forces at work in a legal system, and not only black letter law. In addition, a dynamic approach sheds light on how and in which measure the rules and the community of jurists are actually working, consciously or

unconsciously, to build a more efficient legal system.

Comparative law and economics, in the hope of the founder, could work both at the level of positive and normative analysis. At the positive level, comparative law and economics can provide useful insights for understanding the reasons of the differences and the peculiarities of each legal system vis à vis the more universalistic efficient model. At a normative level, the scholar can suggest policy changes that move any legal system towards efficiency every time that a distance from the universalistic model is not justified. Moreover, comparative law and economics could give important contributions to the pattern of legal change, especially through the analysis of competing legal models and their inclusion in the legal system through the various legal formants, including path dependency and implicit legal formants (cryptotypes). It is well known that in the globalized world, legal systems are subject to changes, sometimes imposed, sometimes voluntary. Comparative law and economics can provide an understanding on which legal formant takes the responsibility for the change.

The development of comparative law and economics proceeds at slow pace in the academic legal analysis for several factors. Ramello (Eisenberg and Ramello 2016a: 3) identifies the causes in the lack of a specific journal that gives "dignity" to the discipline, and in the European character of comparative law and economics, uninteresting to the USA, and therefore global, scientific environment. This said, we can add that very few scholars are equipped for the task: it requires a good preparation in both disciplines, both comparative law and economics, usually very distant one from the other; secondly, the methodology is not always clear, same for expected results. Ramello and Eisenberg are willing to revive this particular angle of the discipline, bringing more comparison and a more cross-boundaries viewpoint into law and economics. Their recent book (Eisenberg and Ramello) is definitely heading towards this direction.

It is still unclear if legal originalists approach to legal systems, that led the way to World Bank "Doing Business" reports, falls into the broader category of "comparative law and economics" (Eisenberg and Ramello 2016b: 8–9; Michaels 2009b). Through this program, the World Bank established its own method of assessing economic efficiency of legal systems (Djankov 2016; Michaels 2009a, b). The reports provide "objective measures of business regulations and their enforcement across 190 economies" https://nation.com.pk/29-Jan-2018/conducive-environment-for-business.

The reports "gather and analyz[e] comprehensive quantitative data to compare business regulation environments across economies and over time" https://nation.com.pk/29-Jan-2018/conducive-environment-for-business.

The "Doing Business" reports "encourage economies to compete towards more efficient regulations; they offer measurable benchmarks for reform and serve as a resource for academics, journalists, private sector researchers and others interested in the business climate of each economy" https://nation.com.pk/29-Jan-2018/conducive-environment-for-business.

Cross-References

- ▶ Economic Analysis of Law
- ▶ Legal Origin
- ▶ Legal Transplants

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Legal Insurance

► Litigation and Legal Expenses Insurance

Legal Origin

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Abstract

Flexible common law is considered to be more conducive to external investment than more rigid civil law. However, both systems can either adapt to new situations or become less flexible over time. Legal systems function best, when there is sufficient room for revision and review.

Definition

The concept of legal origin stems from the law and economics literature. It analyzes the effects of different legal traditions on economic performance. Common and civil law systems have spread over the globe and impacted the organization of economic life in Western Europe and former colonies.

Law Systems

Common law is of English origin and prevails in the UK and former British colonies. Judges have a great degree of discretion in common law systems. Common law evolves gradually through decisions in specific disputes that are upheld by higher courts. It differs from civil law that depends on legal statutes and comprehensive codes. The legislator in civil law systems wants to provide rules for as many situations as possible. Judges can only use discretion, if the legislator either overlooked the problem or left it deliberately open for the courts (Buetter 2002, 29). History has shaped how courts take decisions. French

judges became bureaucrats employed by the state, while English judges gained considerable independence from the Crown in the Glorious Revolution of 1688 (Mahoney 2001). Common law is said to support market outcomes, while civil law takes directions from the state. Civil law codes originate in the French Code Napoleon of 1804. The Code Napoleon abolished feudal rights and offered equality under the law to everybody (but not to married women). The Napoleonic Code was imposed on conquered territories in Italy, Spain, the Rhineland, and the Low Countries. Many of these countries voluntarily adopted the Napoleonic Code after Napoleon's defeat. The Dutch Civil Code of 1838 and the German Civil Law of 1898 are offshoots of the Code Napoleon (Meijer and Meijer 2002). The German Civil Code differs somewhat from French civil law and constitutes a different class. Scandinavian law differs and constitutes a class of its own. Legal origin theory, therefore, divides countries in four groups: (1) common law countries, (2) French civil law countries, (3) German civil law countries, and (4) Scandinavian civil law countries. Former colonies adopted the legal code of their former rulers after gaining independence.

Legal Origin and Financial Development

The law and finance literature found that financial development is related to legal origin. Common law countries make more extensive use of external finance (LaPorta et al. 1998). Both shareholders and creditors are better protected in common than in French civil law countries. Cross-country research found that French civil law countries have smaller stock markets, less active public offering markets, and lower levels of bank credit as a percentage of GDP than common law countries (LaPorta et al. 1997). A predominance of debt over equity finance characterizes civil law countries. This applies with the greatest force to Germany and Japan (LaPorta et al. 1997). Debt finance is ill suited to cope with entry and exit of firms. Both Europe and Asia showed little turbulence in their populations of quoted firms due to the scarcity of new quotations. This differed from the USA, where new firms appeared in droves on the NYSE and Nasdaq after 1980. Failing firms in German civil law countries could cause the collapse of lending banks. A greater reliance on equity in common law systems offers more opportunities for continuation in bankruptcy proceedings. More US bankruptcies resulted in reorganization and continuation than in continental Europe (Brouwer 2006). The distinction between civil and common law countries overlaps that between relationship and market-based financial systems (Rajan and Zingales 1998). Anglo-Saxon countries have market-based systems, while continental Europe and Asia feature relationship-based systems. Rajan and Zingales found that market-based systems grow faster. Anglo-Saxon finance is more hospitable to entrant firms and therefore better suited to finance innovation (Djankov et al. 2002). Relationship banking, by contrast, mainly funds tangible assets that can be used as collateral to loans. The higher risk associated with debt finance prompts financial intermediaries in continental Europe and Japan to bet on the same risks. All are rescued by the state, if disaster strikes (Rajan and Zingales 2003, 18).

Legal Origin and Economic Development

Common law seems better suited to further economic development than civil law. Former English colonies like the USA, Canada, and Australia illustrate this narrative. However, not all former English colonies in Africa and Asia show superior economic performance. Japan that adopted German law outstripped economic growth in many former English colonies. Moreover, Belgium, France, and Germany achieved rapid economic growth after 1945. The empirical evidence is, therefore, not completely in favor of common law countries. Common law countries grew more rapidly in the 1960–2000 period than French civil law countries. German civil law countries, however, grew fastest (LaPorta et al. 2008). High costs of litigation and judicial arbitrariness are mentioned as reasons for slow growth in common law countries. The relative good performance of France, Belgium, and the Netherlands is ascribed to the more flexible use

of French civil law by judges in those countries. Judges in Italy and former French colonies stuck more to the letter of the code (LaPorta et al. 2008). Jurisprudence was recognized as a source of law in German courts, which enhanced flexibility. The capacity of legal codes to adapt themselves to new circumstances might, therefore, be more significant in explaining economic development than origins. Common law systems are said to evolve toward efficient rules through sequential decisions by appellate courts that can reverse decisions. The trial and error character of common law systems promotes flexibility. Napoleon did not allow for judicial review by judges. The centralized judiciary he installed was deemed superior to the arbitrariness of local judges of the ancien regime. French judges were villains in constitutional development, while English judges were heroes (Mahoney 2001). The English king was not above the law in contrast to French civil law. But, France installed administrative courts to review rules and decisions made by the state.

The Debate

The legal origins hypotheses put forward by LaPorta et al. have sparked an intense debate between proponents and critics. Critics pointed at the good economic performance of civil law countries like Japan, Belgium, and Germany. Culture, politics, and history were more important than legal origin in their view (LaPorta et al. 2008). Intermittent variables instead of legal origin might explain the differences between the different law systems. Years of schooling are sharply higher in common law than in French legal origin countries. Some authors point to religion to explain differences between countries. Protestant England was more conducive to market-led growth than Catholic France. Politics are also mentioned as explanation for divergent economic performances. Social democracy took root in continental Europe but is absent in the USA. Others point at the reversibility of financial markets over time. Latin American countries of French legal origin were more financially developed than the USA and the UK in 1913 (Rajan and Zingales 2003). LaPorta et al. refute these critiques in an elaborate response. They argue that the distinction between French civil and common law elucidates a host of phenomena from financial development, to regulation and state ownership of banks and companies. The beneficial effects of common law systems derive from the smaller hand of the state in economic affairs than in civil law countries. Heavy government interference entails more corruption, a larger unofficial economy and higher unemployment (LaPorta et al. 2008).

Anglo-Saxon Finance Came to Europe

Common law countries leave more to markets, while civil law countries turn to the state to solve economic problems. However, recent developments have put several characteristics of common law countries into question. The spread of Anglo-Saxon finance over the globe in the past decades has largely eliminated the differences in financial development among western European countries. Bank loans to the private sector as a percentage of GDP in continental Europe were almost equal to that of the USA in 2000. Stock market capitalization of continental European countries increased sharply from 17% in 1980 till 60% of US and UK capitalization in 2000 (Rajan and Zingales 2003). However, financial catching up did not boost entrepreneurship in continental Europe. There were few technological start-ups in Europe due to a lack of early stage venture capital. However, Europe became familiar with Anglo-Saxon private equity and hedge funds. These vocal shareholders demanded changes in executive boards and the breakup of companies. Many corporations were acquired by private equity or were prompted by hedge funds to sell themselves out to increase shareholder value (Brouwer 2008, Chap. 7). Globalization of finance might spell the end of relationship banking and the spread of market-based transactions. But, it is questionable, whether this financial convergence will stimulate economic growth. Anglo-Saxon financial innovations were a main cause of the financial crisis of 2008/2009 that led to the near meltdown of the world financial system. Securities based on mortgages lost most of their value, when home prices dropped and foreclosures abounded. The US securities were sold to

domestic and foreign banks, whose balance sheets deteriorated, when the losses appeared. Banks tended to collapse, when trust evaporated and interbank lending came to a halt. States had to step in to prevent banks from failing in both the USA and Europe. Financial markets are only stable if investor opinions on projects and people differ. No securities would change hands if investors would all agree on the value of a security (Brouwer 2012, Chap. 4). Security prices take a dive when investors are all looking for the exit and boom when investors enter financial markets in herds. Superior performance of Anglo-Saxon finance rests on independent, uncorrelated investor decision-making. But, investors came to rely heavily on opinions of rating agencies. Herd-like behavior caused a worldwide financial crisis. Banks participated in derivatives trade that did not create value but distributed gains and losses among buyers and sellers of these securities. Moral hazard problems appeared, when losing banks needed to be rescued by central banks. Both financial markets and legal courts are methods to solve disputes and differences of opinion. Judges take decisions after hearing both parties. Markets bridge the difference between buyer and seller valuations of a security. Security prices change continuously on secondary markets reflecting changes of investor opinion. Court decisions can be reversed on appeal or review. Landmark decisions by higher courts confirm new interpretations of the law. Financial markets and courts stir development, if initial differences of opinion are resolved through discourse.

Conclusions

The relationship between legal tradition and economic performance is not time and place invariant but depends on the quality of discourse and decision-making in markets and judiciaries. Both common and civil law systems can function well, if they allow dissent and overcome differences of opinion through appeal procedures and judicial review. Common law systems are more conducive to discussion, but discourse stops if unanimous opinion prevails.

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Legal Positivism and Law and Economics

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Abstract

Law and economics scholars are rarely addressing traditional legal theory. Nevertheless, legal theory could help to better assess the limits of law and economics and the limits of legal theory. Moreover, legal

positivism largely paved the way for the emergence of law and economics. This entry will stress the points of convergence and the complementarities between these two approaches.

Introduction

Law and economics scholars are rarely addressing traditional legal theory and are often ignorant about legal positivism (with some exception of course, like Richard Posner (2003) or Lewis Kornhauser (2006, 2010) and Krecké (2016)). Legal theorists are frequently considering law and economics as an exteriority with its relevance often dubious for their own work; being "impure" (in a Kelsenian meaning of the word), it is not considered as "legal" knowledge. From this point of view, it is possible to consider that the legal positivism legacy could explain the transatlantic divide in the reception of law and economics (even if through a deeper analysis, this reality is not a necessity, Lanneau (2016)) and why law and economics remains controversial in the European legal academia. Despite this apparent mutual ignorance, both approaches are deriving from the same concern and appear complementary at many levels. Reciprocally legal positivism could enrich traditional law and economics. Being in an encyclopedia of law and economics, this entry will focus mainly on the former enrichment.

Legal positivism is hard to define precisely, and some could say that there are as many positivisms as positivists. First, because the definition would change depending on the way it is conceptualized: legal positivism is different if it is considered as a methodology (a way to inquire into legal phenomena using the methods of natural sciences), as a theory of law (an inquiry into an object called "law"), or as an ideology (the primacy of positive law over all other normative systems). Second, because in each of these apprehension different schools exist: normativism, analytical school, post-positivism (for more details, see Grzegorcyk et al. 1993). Despite all these differences, it is possible to consider that positivists agree on three main theses. First, they consider that law is the product of human beings; it is not something immanent. For that reason, law is perceived as an instrument. Second, and except when positivism is approached as an ideology, it is trying to develop a scientific approach of law derived from the methods of natural sciences and thus rejecting the classical distinction between episteme and praxis. Third, they are emphasizing the distinction between what is and what ought to be considering that the proper function of a science of law is to inquire into the is, not the ought (the ought would then define doctrinal approaches).

Before analyzing some of the points of divergence which are also explaining the complementarity between the two approaches (and its possible fertility), it is required to highlight the points of convergence to stress the common grounds of these approaches.

Points of Convergence

Legal positivism and law and economics are sharing two important features despite an undertheorization of law and economics. First, at the methodological level, both approaches are trying to develop a scientific approach to law. Second, at a value level, both are rejecting an immanent conception of law through a clear separation of law and morals.

Developing a Scientific Approach to Law

In order to develop a scientific approach of law, it is first required to distinguish between two levels of discourse: the level of the object (the law) and the meta level of the science (the science of law). The purpose of the science is then to describe its object ("what and how the law is, not how it ought to be" (Kelsen 1967). For that, it is required to follow a "scientific method," a method based on causes and consequences since most legal positivists are fascinated by the methods of natural and empirical sciences. Thus, it is rejecting propositions which cannot be said either true or false (ideally on empirical grounds), it is rejecting the idea that there is an essence of things (since this essence cannot be the subject of scientific testing),

it is rejecting all forms of reason that are not episteme, and it is clearly distinguishing between the object and the science regarding this object. For Kelsen, a true science of law should "eliminate from the object of this description everything that is not strictly law" (Kelsen 1967). Of course, this approach is more aspirational than practical.

For law and economics, law is also an object of inquiry and economics (as a methodology to approach this object) is supposed to lead to some positive knowledge. This knowledge is not about the law considered as an object (what is the law?) but of the law considered only through its function (what are the consequences of the law?). This positive knowledge could be considered in two different ways. First, since the proposition about law are derived from models, the knowledge is positive (as logically derived from hypotheses); if we are assuming that people are rational and that law is providing constraints, then some consequences could be expected. Second, law and economics is more and more trying to empirically test some of its propositions to identify an "objective" effect of some law.

The Separation of Law and Morals

The separability thesis (the separation of law and morals) does not say that there are no links between law and morals or that we should not draw any lines between them. Indeed, Hart remarked that "There are many different types of relation between law and morals," but "there is nothing which can profitably be singled out for study as the relation between them" (Hart 1983; 1994, 185). There are no essential (Hart 1958, 601) or necessary connection between law and morals; law is not dependent on morality. Because of this feature, law is, for a positivist, not defined by its content but by its structure (a set of primary and secondary rules for Hart, a dynamical system of Kelsen).

This content-free conceptualization of law is obvious in law and economics. Indeed, since the law is merely a function, it does not have any required content. Moreover, abiding by a consequentialist approach of ethics (since economics is consequentialist) it is prone to criticize any deontological conception regarding law and regulation (Kaplow and Shavell 2002). This separation is also obvious considering that most scholars are enjoying debunking the inefficiency of morality tendencies in positive regulations.

Points of Divergence and the Complementarity of Approaches

For legal positivist, law and economics is lacking a clear concept of law. For law and economics practitioners, legal positivists are unable to address the consequences of norms or to rationalize the content of norms. Both of these blind spots – which could easily be explained by the focus of each approach – should be considered when addressing the value of each approach which appear from a practical point of view as complementary.

The Problem of "Validity," the Blind Spot of Law and Economics

Despite the fact that for one of the major proponents of law and economics the question of what is law "has little practical significance if, indeed, it is a meaningful question at all" (Posner 1987, 765), having a concept of law is essential for at least two reasons. First, in order to have a clear understanding of what law and economics is, it is crucial to define what the law is for law and economics – otherwise the risk is simply equating an economic analysis of law to an economic analysis of norms; which is too often the case because the concept of legality is out of the reach of economic analysis (Lanneau 2010). Second, if the specificities of the law are not taken into account by law and economics, its value rests on poor foundations. Besides, to state that the concept of law "has little practical significance" is something that needs to be proven (hence the question addressed). To abide by a predictive theory of law – what the judges will do – is insufficient because in order to understand what they are doing, it is necessary for the analysis to be "comprehensive" enough to at least understand (or often presuppose) the concept of norms and legal order, otherwise it would be impossible to think of norms as reasons for action.

The identification of "valid" law requires a concept of validity. The reason why legal positivism could then be interesting for law and economics is that this question is stressing the systematic dimension of law (law is a set of norms that are interlinked to some extent). Kelsen, for example, is stressing the fact that legal orders regulate their own creation and application: this is the dynamic aspect of law (Kelsen 1967). If law is seen as a dynamic structure, it implies that each norm is produced according to a "superior" norm (or meta-norm), or at least that the procedure to create a norm is regulated by a norm in order to earn its validity (hence the necessity of a Grundnorm at the top of the system). This feature is not without impacts on economic analysis of law. Indeed, economic analysis is quite often focusing on the consequences of a primary norm ceteris paribus. In that case, it restricts itself to an economic analysis of a norm in "isolation" without regards to the system in which it belongs. When this happens, it is necessary to qualify the result of such economic analyses. Furthermore, the concept of efficiency becomes harder to figure out when the dynamic structure is taken into account. If, for example, a legislative process is supposed to be efficient, it does not mean that it cannot produce inefficient primary norms. However, are these primary norms really inefficient since they are produced by an efficient structure? (Lanneau 2016).

Rationalizing the Content of Norms and Assessing Consequences, the Blind Spot of Legal Positivism

For legal positivist, law is the product of authorities which are determining the "goals" of these rules. Rationalizing the goals is considered as "impure" in the Kelsenian system because it entails the use of methodologies that are considered as external. Even more, an analysis of the consequences is required if a legal order is supposed to be purposeful. This situation "forces the question, do these legal rules achieve the objectives at which they aim, and would alternative rules do any better?" (Bix 2004); then law and economics could be use in all of its dimensions to inquire into norms, subsystems of norms or the whole system of norms. And Kelsen does not seem opposed to an inquiry into the reason for norms that do not necessarily appear in legal propositions; it is simply not the task that he is trying to achieve. He even recognizes that: "For the legal norm obliges the debtor not only and, perhaps, not so much in order to protect the creditor, but in order to maintain a certain economic system" (Kelsen 1967). It is then possible to suggest a rationale for norms or systems of norms, and economics is one of these rationales.

Conclusion

Understanding the proper domain of validity of both legal positivism and law and economics is a prerequisite for clear thinking. Moreover, understanding the blind spots of both approaches could help to enrich both and contribute to developing a true law and economics approach and not a mere economic analysis of law. This path remains to be fully taken but should, with time, help European academics to seize the potential of law and economics.

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Legal Protection Insurance

► Litigation and Legal Expenses Insurance

Legal Transplants

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Definition

The term "Legal transplants" is commonly used to designate the dissemination of legal models from an exporting legal order to a receiving one.

In a wider perspective, reception, transplants, or borrowings may either refer to the process, or to the results of a project of legal reforms, which is in turn initiated by a plan of legal change based upon an imitation of laws, doctrines and theories, and judicial decisions, already in place in different legal orders.

Within the fabric of such terminology, the notion of legal transplants has been, for the last four decades, most central. This is also due to a successful and widely discussed book by the legal historian Alan Watson (1974), which is devoted to a specific set of borrowings within the realm of private law. While the success of Watson's study emerged from the plain recognition that borrowing is usually the driving factor in legal change, reasons for dissent, repeatedly manifested, among others, by Pierre Legrand, were rooted on the denial of the same possibility of transferring rules and laws from one legal order to another (Legrand 1996).

Regardless of the academic discourses on whether legal transplants are sustainable as a notion in the legal theory, they are common practice. Nevertheless, the degree to which new laws are stimulated by foreign examples can vary. A frequent and often justified criticism is that imported laws are not suited to a certain local context.

Legal borrowings and transplants simply occur, though they can be more or less successful and effective, more or less persistent.

Dynamic Approach to Comparative Law

Comparative lawyers have paid a particular attention to the phenomenon of legal transplants.

At first, the traditional approach envisioned a static mapping of the major legal systems (David 1985): following this thread, which was the custom in the first part of the last century, national legal orders were classified and combined within larger groups, on the basis of the so-called "styles of legal families," or common traits (Zweigert and Kötz 1998). Such an approach, still influenced by strands of national positivism and by the recognition of enacted legislation as the center of the observation, certainly removed some of the emphasis previously placed on the aspect of intra-system dissemination of rules.

Where mixed systems, such as South Africa or Israel, were recognized, they were presented as exceptional to the monolithic coherence of the several state legal orders, based mainly on the historical development of national law.

A new approach to comparative law was inaugurated in a seminal study by Rodolfo Sacco (1972, 1991). Sacco, progressing from the contributions of Gino Gorla and Rudolf Schlesinger, shifted the focus from the static description of legal orders to a dynamic reading of the borrowings, which nurture them. If we consider Sacco's starting point, comparative law presupposes the

existence of a plurality of legal rules and institutions. A comparativist is called to study them in order to establish the extent to which they are identical or different. The analysis of legal formants, that is the different formative elements of a legal rule, has the aim to discover how the "jurist concerned with the law within a single country examines all of these elements and then eliminates the complications that arise from their multiplicity to arrive at one working rule" (Sacco 1991, p. 22). A full understanding of legal formants and their interrelation allows us to ascertain the factors that affect the given solutions. This clarifies the weight that interpretative practices (grounded on scholarly writings, on legal debate aroused by previous judicial decision, etc.) have in molding the actual outcome of the rules.

It follows that circulation of norms, borrowings, and transplants, all that is considered to be part of a process of reception, is the circulation of formants. By recognizing fragmented circulation, comparative law challenges the positivistic idea that reduces legal borrowings to the dissemination of enactments. The fragmented nature of the process leads to very different situations: In one case, the rule contained in a doctrinal formant may be able to circulate and finally be embodied in a statute.

In other circumstances, the influence may remain at the level of homogeneous formants (i.e., case law to case law).

Legal Borrowings, Global Harmonization, and the Neutrality of the Law

Historically, the idea of law's indifference toward specific social contents has been kept alive by the millennial success of Roman law.

Subsequently, colonization only served to confirm the fact that different societies may be governed by similar laws. A more recent reappraisal of the idea occurred in the case of transition from Sovietism to market, in the wide area formerly under communist rule.

The belief that law or, more precisely, some areas covered by private and business law can be independent, or neutral, with respect to a given society is closely connected to the idea that law can have a predictable impact on economic performance. The idea is not new at all: in fact it is linked with the spread of modern rationalism, which secured the transition from natural law to rational law. Similarly, the process of searching for the best legislative practice beyond national borders in order to support the modernization of a national legal system is not a new strategy. In this respect, one may recall the famous polemic originated two centuries ago between two great German legal scholars, Anton F. Thibaut, on the one hand, suggesting that the German states had to imitate French "rational" codification of private law in order to support modernization, and Friedrich K. von Savigny, on the other hand, contrasting the proposal, on the basis of a temporary cultural inadequacy of German legal scholarship.

During the last 20 years, after the waning of ideological confrontation, the resurfacing of a search for national identities based on culture and civilization has made the idea of neutrality of certain areas of the law somehow more difficult to defend. As a result, the recognition of what can be considered more neutral, or less dependent on society, has changed.

All throughout the period of the East-West confrontation, family law was deemed to be more indifferent (and therefore the comparison was inspired by a search of similarity), while economic and commercial law was taken as absolutely unfit for comparison. Today, in the age of globalization, many commentators would subscribe the statement that it is a smoother process to harmonize, for example, company law than the legislation addressing family law issues.

In order to draw closer to assessing the relevance of the principle of indifference toward legal change, one should begin by distinguishing between two possible ramifications: indifference as a political issue and indifference as a cultural issue.

As a political question, the principle of the law's indifference to the social context has gained strength since the end of the cold war. While the idea of the uselessness of communist law "in

its entirety" (*tabula rasa* principle) was being affirmed by the governments and the international institutions supporting legal reforms in post-communist states, the neutrality principle characteristic of Western private law was put forward.

The adoption of an ideal model of market development by the neoliberal economists has significantly influenced the actions of the European Union and the international financial institutions, such as the World Bank and the International Monetary Fund, both seeking to speed up the process of market integration. Yet, this brought the focus of the discussion away from the institutional perspective: The "best" legal transplant appears to be a denationalized one, clothed in an appearance of objectivity that thwarts local resistances based on cultural identity. This separation of the action of the law from the actual role played by institutions is central to an understanding of the many failures of legal reform agendas.

It is, in fact, rather difficult to conceive a role for a legal transplant without considering how local institutions work. For any single new rule that is introduced, role-occupants will necessarily consider, more or less consciously, a set of pre-existing conditions that are country-specific and often non- or sub-formalized.

As a cultural question, the idea of indifference is indebted with a couple of phenomena that have significantly marked the last decades of the twentieth century:

- *Postmodernism*: There is something paradoxical in the fact that by insisting on the incommensurability of phenomena such as culture and social behaviors, postmodernist theories, which were perceived as a defense of localism against the forceful nature of globalization policies, by making relative the belief in justice and by criticizing the principle of objectivity in the law, have contributed to paving the way to the spreading of globalized formal regulations.
- *Uniformization of the law*: The success (both in terms of absolute numbers of initiatives, and of the number of adhering states) of the recourse to international conventions has brought the style of international law into the process of legal transplant. This has important effects on the issue of neutrality, as international law was traditionally characterized by indifference toward domestic diversity and cultural differentiations: the traditional approach to the cultural issue practiced by international lawyers stresses the recognition of "similarities in economic development" (in such a sense, for instance, Thailand and Kenya are similar, in spite of evident cultural difference).

In other words, the technical side of neutrality is expressed by the language of performances and functions, while the cultural difference calls for an explanation in terms of history. International law deals with the former, while the latter is left to the realm of local policies.

This approach, however, has been subjected to a set of critiques (Kennedy 2003).

A first argument points to the fact that it is almost impossible to discern local from foreign cultures; even within a short span of time what was an alien culture may become local, as illustrated by the important cases of languages and arts, during every historical era and everywhere in the world.

Second, the "cultural exception" is of relevance to the context of economic issues. In particular, there are significant cases where the State actors use cultural issues to protect what are perceived to be national economic interests.

Finally, legal culture is encompassed by the more general definition of culture; the isolation of local legal culture from the process of legal transplants verges on the absurd. As the comparative law analysis has demonstrated, the dissemination of rules and legal change occur with the active involvement of legal doctrines. This is usually classified as interpretation, but it would be more accurate to speak of "interdoctrinal legal transplants."

Transplant of Vague Notions

In contrast to what was common practice until the middle of the last century, when the process of legal reform via legal transplants occurred mainly

from state to state, at a slow pace, and generally through the vehicle of legal scholars, an important portion of the dissemination today is entrusted to supranational institutions, such as the International Monetary Fund, the World Bank, and the European Bank for Reconstruction and Development. These institutions support intergovernmental agreements aimed at fostering legal reforms and introduce a matrix of soft laws, proposals, and recommendations for legal change.

In the past, a new statute, a code, or a constitution was adopted or emended on the assumption that the "prestige" of the imported set of rules was sufficient to legitimize the change.

Today, the process of legitimizing the legal reform cannot be built upon a simple and circular argument such as the reputation of the foreign model.

Within this new situation, we notice that the process of legal transplantation is characterized by the recourse to vague formulas, such as *due process*, *governance* (and *good governance*), *reasonableness*, *rule of law*, *transparency*, and *accountability*.

We can identify three factors that have contributed to this shift in the building of legitimacy for the phenomenon of legal transplantation:

- Functionalism
- Cultural resistance
- Recourse to "naïf language"

As far as functionalism is concerned, one may consider replacing evaluations from the side of the borrower, based upon historical ties and cultural appreciation, with assessment built on the assumed utility of a set of norms targeted toward improving economic performance.

Cultural resistance concerns the increased awareness, from both sides (importer and exporter of legal rules), that local diversity is (or can be) an obstacle to an open transfer of rules among different legal orders.

When mentioning "naïf" (i.e., nontechnical, ordinary) language, one may recall the use of general terms and concepts that characterize lawmaking as practiced by some institutions. As an illustration, we can consider the case of the European Union: If we examine the style of EU laws we cannot fail to notice that, while drafting directives and regulations, the EU institutions do not feel the obligation to adhere to the system of concepts and doctrines practiced at state level by local jurists.

This approach has led, in the last 15 years, to a proliferation of the use of vague notions and to their inclusion within the rhetoric of "good governance for the market." Furthermore, because broad formulas expressed in ordinary language are more palatable to the media, a bundle of concepts whose juridical/technical content is far from certain became the paradigm for assessing the modernization of a legal system.

Let's consider some examples: What is, for instance, the actual meaning of the slogan: "Russian law today is based on the US model of corporate governance"?

It is easy to grasp the symbolic meaning of the statement: Those involved in reforming Russian law indicate that the Russian commercial law has accomplished its renewal from plan to market. By proclaiming the adoption of the US pattern for corporate governance (whatever its contents can be), it is also implied that the economic system is able to become as sophisticated as the ones where corporate governance based on US law is in operation.

Such a symbolic significance, however, does not shed a lot of light upon the casual links between the nature of the market and the contents of the rules: Is it from a particular market that the corporate governance has come into effect, or, the other way round, is it the particular organization of the market, with its constraints and freedoms, that originated such a model for corporate governance?

Another relevant example concerns the notion of the "Rule of Law."

The lip service paid to the rule of law idea by many constitutions adopted, for example, in the Russian Federation or in the People's Republic of China during the last 20 years, acts as a legitimization for legal and judicial reform and for intrusions inspired by those who formulate, know, and possess the taxonomy of reforms currently attached to the vague notion under scrutiny.

The insistence in reproducing the rule of law blueprint within constitutional texts also demonstrates that the professionals who organize legal reforms in the new post-Soviet Countries "are part of the West," and share the so-called Shihata's doctrine (named after the former General Counsel of the World Bank). The doctrine is based on a global generalization of Max Weber's assessment of the role of rules and institutions for economic development.

Following such a design, the process of transplanting new laws is conducted by following two different steps: Bringing the rule of law and other related and vague notions to the attention of reformers; and conveying operational rules as necessary consequences that follow the adoption of rule of law as a "constitutional standard." The process is manifest in the pronouncements made by major financial institutions, as well as by other institutions, such as the European Union, or the World Trade Organization.

Its recognition, however, should not lead us to the immediate identification of that two-step process as a sort of machination; using vague notions in order to ease the bypassing of cultural sovereignty could, in fact, be part of a plan, aimed to an intense homogenization of the rules that are conceived by the International Financial Institutions as conducive to liberalization of trade, but this is not the only possible explanation of the success of the rule of law notion.

Besides the desire to avoid negotiations in the process of legal transplant, other reasons can be spent, such as the spreading, among the agencies exporting legal rules, of a practice of legitimization for their action based on the recourse to broad and consensus-making formulas. And if we share the élitarian explanation for the success of legal transplants suggested by some comparativists (Watson), we will assume that a recourse to vague notions is welcomed by the lawyers in the recipient country, who share the interest of the exporters in overcoming local resistances against transplants.

Whatever the case is, strategy or serendipity, it is very reasonable to assign to the mentioned vague notions the role of reducing transaction costs arising from the process of legal transplant.

Legal Transplants and International Law

The transnational institutions' officials that are active in supporting legal transplants have inherited an obsession with the establishment of worldwide recognized norms from international lawyers. To attain the objective of a global recognition of international norms in a world where cultural diversity claims are reaching their climax, there are only two, rather conflicting, paths. The first entails recourse to hyper-specialized language, which is assumed to be, similar to the language of technicians and engineers, neutral and unrelated to local considerations. The alternative lies with the use of ordinary language, which does not dabble with the jargon of local experts.

The rule of law has not only become a substitute for discussion on the effects of development policies, but also a means to avoid, at least during the initial stages of dialogue between donors and recipient countries, an embarrassing confrontation on the "operational meaning" of widely debatable political notions such as democracy, pluripartitism, and judicial independence. Such an opportunity has proved to be useful not only for the international financial institutions seeking to sidestep problems with their mandate, but also for the EU institutions, involved in the extremely delicate issue of outlining the conditions for the Union enlargement toward East.

It is very clear, at this point, that the problem of providing exact definitions has been simply postponed by the urgency of having to adopt legal reform programs without too much discussion about contents or possible effects on the concerned domestic legal and economic system. Vague notions are useful as long as they respond to the persistent problems of globalization: scarcity of time and lack of consent. If this is the context, the strategy of legal transplants and reception requires that the rhetoric of the vague notions be characterized by a neutral style. Normative arguments follow at a later stage, once the sovereignty barrier has been circumvented: The process of transplanting rules assumed to be necessary for a good development of the market will be presented as a natural derivation from the vague notion itself.

What lies at the core of the practice of legal transplants is the contamination by the "style" of negotiation that characterizes both international conventions and supranational legislation. Indeterminacy of language allows the reaching of consensus (when required) and obtaining agreements within a reasonable span of time. In other words, a vague language facilitates the following:

- Postponing the tackling of obscure issues and puzzles related to implementation
- Avoiding a dive into details of distributional nature, and choices connected with introduction of good governance standards
- Putting off the resolution of arguments deriving from translation
- Empowering external lawmakers, who ground their legitimacy on a set of previously adopted vague formulas
- Keeping the governance of macroeconomic decisions under the control of "external standards provider" (e.g., the EU, during the process of enlargement toward Central and Eastern Europe)
- Producing an output ostensible to the donors (codes, laws, conventions, and the like)

These facilitating factors support an uncontested transplant of laws that are considered necessary for market functioning and economic development.

At the same time, however, they produce a false image of law as a static, neutral set of rules of universal application, under the unique condition that a commitment to the rule of law is expressed by the governments.

Conclusion

Both comparative analysis and functionalist methodology tell us that different rules may lead, through interpretation, to analogous results. The actual insistence on extensive harmonization is originated by a deficit of confidence in the capability or in the willingness of the local governments to set in place the enactments that are considered to ease economic development.

A reduction of the emphasis on the absolute necessity to imitate the formal contents of the laws, and a more convinced recognition of the role played by institutions in modeling the rules: These two actions, when taken together, can reduce the friction that characterizes the process of legal transplants.

In doing this, an important contribution may derive from institutional law & economics: It is indeed essential that, within the process which prepares legal change, every single macroeconomic recipe, for instance, the recognition of freedom of competition as an element of good economic performance, be separated from the several possible legal designs that it can assume. This should be based on the recognition that, historically, a successful transition from stagnation or underdevelopment to economic development was originated by a peculiar blend of mainstream economic theories and local regulations.

Cross-References

- ▶ Law and Economics, History of
- ▶ Legal Formants
- ▶ Rule of Law
- ▶ Transition Economies: Rule of Law and Credible Commitment

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Legislative Television

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Abstract

Seminal studies describe legislative television as an advancement in political information technology that is used by incumbent legislators for protection against political challengers. Today, legislative television spans much of the globe, creating both intra- and international differences that have made the study of the impact of legislative television on the political process something akin to a natural experiment. This entry discusses some of the studies that make up this branch of the law and economics literature, with particular focus on how the presence of television in a legislature impacts turnover rates, session lengths and the popularity of various parliamentary procedures.

Definition

Legislative Television refers to the televising, either in real time or on a tape-delayed basis, of a government's (local, regional, or national) legislative process.

Televising Legislatures in the U.S. and Beyond

In a study whose primary focus is *not* the televising of legislatures or politics and politicians, Cowen (2000, p. 51) cuts to the heart of the subject, stating:

> Successful politicians must use television and compete with popular culture for audience attention. Leaders therefore court voters by entertaining them and making them feel good. This strategy may win popularity and increase votes. . .

It is the general theme expressed above by Cowen that seminal studies on legislative television, either from a US or international perspective, have used as a theoretical foundation for modeling the behavior of politicians in the world where their daily activities are televised for thousands, or even millions, of constituents. The seminal studies by Crain and Goff (1986, 1988), with supplemental work by Greene (1991), describe legislative television as an advancement in political information technology – one used by incumbent legislators for protection against political challengers – thus placing the subject in the broader law and economics subcategory known as the economics of information (Stigler 1961; Nelson 1970, 1974, 1976; Telser 1976).

According to the National Conference of State Legislatures (ncls.org), 32 of the 50 states in the USA now offer televised coverage of state-level legislative sessions. In terms of national governments, Canada and Mexico join the USA, where the Cable-Satellite Public Affairs Network (i.e., C-SPAN, C-SPAN2, and C-SPAN3) operates, and most of Europe in offering televised broadcasts of legislatures. These continents are, however, different from Asia and South America, where relatively few countries now provide legislative television. Thus, from an academic perspective,

these intra- and international differences have made the study of the impact of legislative television on the political process something akin to a natural experiment and, therefore, fertile ground for modern scholars of law and economics.

The comprehensive work of Crain and Goff (1988) begins with an empirical analysis of the impact of legislative television at the state level (in the USA). They find that in smaller, less diverse (in terms of population) states, wherein legislative television is theoretically useful in protecting incumbents, the presence of television cameras serves to reduce the number of winning challengers in state house elections. This result carries to the federal level, given Crain and Goff's (1988) finding that legislative television coverage, in this case C-SPAN coverage, served, in more homogeneous districts, to increase the typical US House of Representatives incumbent's vote share. Mixon and Upadhyaya (2003) carry this theme forward in finding that the presence of C-SPAN cameras in the US House has, throughout its history, reduced turnover in that legislative body. This result not only confirms the incumbency-protection hypothesis in Crain and Goff (1988), but it also supports Mixon and Upadhyaya's (2002) earlier finding that the presence of C-SPAN2 cameras in the US Senate has, throughout its history, reduced turnover in that legislative body. These results complement the reverse causality found in Crain and Goff (1986, 1988) and Tyrone et al. (2003), wherein incumbents, seeking electoral protection from challengers, choose to adopt the televising of their legislative sessions.

Digging further into how incumbents are able to use legislative television to their advantage, Mixon (2002) and Mixon et al. (2003) find that US Senate filibustering is, in the presence of C-SPAN2 cameras, more effective as a form of low-cost political advertising for incumbents and, therefore, occurs with greater frequency. Similarly, Mixon and Upadhyaya (2003) find that one-minute speeches in the US House of Representatives increased in value and frequency in the presence of C-SPAN cameras. Given these results, it is not surprising that studies indicate that the presence of television cameras lengthens legislative sessions, which, in the case of the US Senate, has been estimated to be an additional 63 min per recorded vote (Mixon et al. 2001; Mixon and Upadhyaya 2003). As Kimenyi and Tollison (1995) show, longer legislative sessions, such as those occurring in the presence of legislative television, come with a secondary effect – more complex legislation and greater government spending.

Where does this research program go from here? The short answer is *outside of the USA*. In one of the first published studies in this category, Soroka et al. (2015) find that televising the Canadian House of Commons has not had any discernible effect on politicians' behavior. This result confirms those in unpublished studies referenced in Soroka et al. (2015) indicating that the presence of cameras in the British House of Commons has had little, if any, effect, while the televising of Canada's House of Commons has impacted only the attire and within-session attention of the members of that legislative body. Clearly, there is much yet to learn about the law and economics of legislative television.

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Lender of Last Resort

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Definition

A lender of last resort (LoLR) is an institution, usually the central bank (CB) or a public deposit insurer (DI), which offers emergency financial assistance to commercial banks particularly during a financial crisis. In most cases, financial assistance means provision of liquidity to a single financial institution or to the financial market as a loan (liquidity assistance), usually against first-class collateral. Sometimes, the LoLR also recapitalizes commercial banks and provides risk-capital support that has not to be paid back (bank bailout).

Origin

The need for a CB to provide liquidity assistance was first mentioned by Henry Thornton (1802/1939) and advanced byWalter Bagehot (1873) who elaborated the9 principles applied to a policy of an LoLR. He proposed that the Bank of England should announce in advance its readiness to lend against collateral any amount to an illiquid but solvent financial institution at a penalty rate of interest. Bagehot suggested that during a financial crisis the central bank should lend freely at interest rates higher than precrisis levels to any sound borrower. Quality standards on collateral should be relaxed during crisis, but banks without good collateral were assumed to be insolvent and should be allowed to fail (Freixas et al. 2000a).

During the twentieth century authorities in many countries have acted as LoLR (Bordo 1990). Recent examples comprise the Swedish Riksbank and particularly the Bank of Japan which during the financial crisis of the 1990s provided substantial liquidity assistance to commercial banks; moreover, in Japan the Ministry of Finance injected almost 25 trillion yen of public funds into the banking industry (Nakaso 2001; Bebenroth et al. 2009). After the collapse of Lehman Brothers in September 2008, CBs of all major OECD countries conducted expansionary open market operations and provided liquidity assistance to single banks and other authorities conducted extensive recapitalization schemes (Petrovic and Tutsch 2010).

The need for a CB to provide liquidity assistance was first mentioned by Henry Thornton (An enquiry into the nature and effects of the paper credit of Great Britain (ed with an introduction by FAvon Hayek). George Allen and Unwin, London; 1802/1939) and advanced by Walter Bagehot (Lombard street: a description of the money market. Dodo Press, London; 1873) who elaborated the principles applied to a policy of an LoLR. He proposed that the Bank of England should announce in advance its readiness to lend against collateral any amount to an illiquid but solvent financial institution at a penalty rate of interest. Bagehot suggested that during a financial crisis the central bank should lend freely at interest rates higher than precrisis levels to any sound borrower. Quality standards on collateral should be relaxed during crisis, but banks without good collateral were assumed to be insolvent and should be

allowed to fail (Freixas et al. J Financ Serv Res 18(1):63–84, 15 2000b).

Bank Runs and Interbank Market Failures

The need for liquidity assistance by an LoLR results from the fact that commercial banks are fragile institutions that simultaneously offer very liquid deposits to their customers and invest funds received into profitable but illiquid projects. With this kind of liquidity creation, banks are subject to the possibility of a bank run, i.e., a situation where all depositors, even those without actually facing liquidity need, want to withdraw their deposits. Because deposits are subject to a "sequential service constraint" and are paid out in full on a "first come, first served" basis, depositors have to stand in front of the line to get their deposits repaid. A run may then result from a coordination failure among depositors, i.e., when sunspot events make depositors withdraw deposits because they believe that other depositors will do so (Diamond and Dybvig 1983). Moreover, a bank run can also occur by changing fundamentals such as expectations that a bank's capital cushion may be totally spent when assets devaluate (Jacklin and Bhattacharya 1988). Since the bank's assets are not ready marketable and short-run rewards from "fire sales" are small, a run always results in an insolvency of an otherwise sound bank.

Interbank markets may shield individual banks against the risk of a bank run because they allow for a reallocation of liquidity among financial institutions. As long as individual bank's liquidity needs cancel out, banks with liquidity surpluses may lend to other banks with a deficit, provided that they are considered creditworthy. If a run on a single bank, however, results in an aggregate liquidity shortage, an additional source of liquidity from outside the banking system is needed. If interbank markets function efficiently, the CB may provide additional liquidity through open market operations, leaving the allocation of liquidity to the interbank markets. This is, however, not sufficient during a financial crisis when interbank markets do not work smoothly, because market participants perceive increases in counterparty risk or liquidity risk (Flannery 1996; Freixas et al. 2000a; Eisenschmidt and Tapking 2009; Heider et al. 2009). Then, the LoLR is forced to provide liquidity assistance to single institutions because the failure of an illiquid bank may have systemic consequences.

Systemic Crises

A run on a single bank may spread over the banking system if depositors consider the failure of another bank as a signal that their own bank is in trouble and withdraw their funds. If this occurs because depositors suspect similarities between banks, i.e., only depositors of banks with similar types of business withdraw while others do not, the contagion is called information based (Chari and Jagannathan 1988). If the failure of the first bank leads to widespread run on banks without any assessment of similarities or dissimilarities, the situation is called pure panic (Kindleberger 1989). The interbank market may also be a source of financial contagion when liquidity needs of one bank are sufficiently large to create an economy-wide shortage of liquidity, which then spills over to other banks (Allen and Gale 2000). With extensive interbank exposures, the failure of one bank may have immediate effects on other institutions, especially if interbank lending is unsecured.

Systemic banking crises may be tremendous costly for society because they threaten the ability of the financial system to fulfill its basic functions and to provide liquidity. While this may justify LoLR liquidity support, it may also get into conflict with the CB's ordinary monetary policy which is aimed at controlling interest rates or medium- or long-run monetary growth and inflation (Goodhart and Schoenmaker 1995). Though emergency financial assistance is meant to satisfy extraordinary short-term increases in liquidity demand of depositors, CBs often have difficulties to exit from these measures. Especially if LoLR policies are extended on terms more favorable than are available in the interbank markets, banks may have an incentive to use the CB's

standing facilities too extensively, making it difficult to keep the control over base money supply.

Solving this problem implies separating emergency liquidity assistance from monetary policy and to assess LoLR function not to the CB but to the public deposit insurer. Since the DI has to repay deposits in case of a bank failure, its incentives to provide financial assistance differ from those of the CB, and the optimal allocation of the LoLR functions between authorities depends on the size of the liquidity shock. The central bank should act as LoLR when a bank's liquidity needs are small, but the deposit insurer should be in charge when they are large (Repullo 2000). Kahn and Santos (2005) further argue for allocating supervisory power to the deposit insurer and identify conditions under which centralizing LoLR and deposit insurance functions is inefficient. In particular, when incentives to share information are weak, the allocation of regulatory power across government agencies should be contingent on their respective comparative advantages in gathering and utilizing relevant information.

Bank Bailouts

While Bagehot proposed only to support illiquid but solvent banks, the distinction between solvent and insolvent institutions is often difficult to make, especially in a short period of time (Goodhart 1999). Moreover, it may be less costly to recapitalize an insolvent bank than allow it to fail, and the failure of an insolvent bank may have systemic effects on the financial system. Therefore, an LoLR may also consider it worthwhile to recapitalize insolvent banks in a bank bailout. Such bank bailouts include instruments that either applies off the balance sheets of banks (like guarantees) or instruments that alter their balance sheets. The latter comprise a recapitalization through the asset side of the bank's balance sheet (purchases of nonperforming loans or "toxic assets" which are transferred to a "bad bank") or a recapitalization through the liability side of the balance sheet (introducing either fresh risk capital or junior debt from the LoLR).

Though an ex post recapitalization of insolvent banks may be welfare improving, it creates – as any form of insurance – moral hazard on the part of commercial banks and sets ex ante incentives for banks to assume excessive risks. Guarantees give banks an incentive to take similar risks, thereby reducing asset diversification inside the financial sector and increasing its vulnerability against common shocks; they also create incentives to take higher asset risks and to accept a higher leverage (Chaney and Thakor 1985; Acharya 2009). Besides, guarantees influence the banks' competitors since they allow the beneficiary bank to take higher risks thereby forcing its competitors to accept higher risks, too (Gropp et al. 2010). Recapitalizations either through the asset or the liability side give banks an incentive to invest in unduly risky assets and to reduce reserves while depositors lose incentives to monitor the behavior and performance of their banks and to exert market discipline (Kaufman 1991; Saunders and Wilson 1996; Demirgüç-Kunt and Huizinga 2004).

Penalty Rates

To prevent these adverse effects, the LoLR may provide liquidity only at a penalty rate, i.e., at an interest rate higher than the market rate. Demanding such a penalty rate, however, may aggravate the bank's solvency problem. It may also send signals to market participants that the bank is in trouble; this makes banks reluctant to apply for funds because they fear to be singled out as a weak institute. Moreover, charging a penalty interest rate may even give an incentive to bank managers to "gamble for resurrection," i.e., to invest in projects with higher risks and higher returns in the hope of surviving and getting out of trouble (Rochet and Vives 2004; Repullo 2005; Castiglionesi and Wagner 2012).

"Constructive ambiguity" may be an alternative device to constrain moral hazard on the side of banks. It can be defined as a situation where the

LoLR ex ante creates uncertainty as to whether, when, and under what conditions financial support of an individual financial institution will be provided. If the LoLR keeps secret whether or not financial support will be granted, banks will not know individually whether they will be rescued or not; moreover, this might avoid "imitation effects" within the banking sector. If the LoLR is ambiguous about the conditions of financial assistance, it keeps a bank's shareholders and management uncertain about the costs they have to bear in the case of financial assistance.

The beneficial effects of "constructive ambiguity" assume that following a mixed strategy and randomizing the unconditional rescue of banks dominates pure strategies where the CB either always liquidates or always bails out a distressed bank. If a bank failure has systemic consequences, the optimal strategy chosen by the LoLR depends on the size of the bank in trouble. The LoLR should set an upper limit for the size of the uninsured bank debt and never rescue banks that exceed that limit; constructive ambiguity should be applied to the rest of the banks (Freixas 2000). In a dynamic setting the effect on moral hazard is complemented by adding a value effect because rescuing a bank increases the current value of future bank profits and that increases the bank's incentives to improve loan quality. Then, a mixed strategy is never beneficial, and the LoLR should always follow a pure strategy, i.e., rescue a bank if the value effect dominates and liquidate otherwise (Cordella and Yeyati 2003).

Private Sector Solutions

If "constructive ambiguity" is ineffective as a check on moral hazard, concerted private sector lending, organized by the CB, or private bank mergers and acquisitions, promoted by bank supervisors, could form alternatives. Orchestrated liquidity support operations may overcome the market's coordination problems by encouraging a dialogue among banks or by imposing pressure on surplus banks to lend; this may be warranted if the CB has superior information about the banks' solvency (Freixas et al. 2000a). Promoting takeovers of weaker institutions by solvent banks results in larger rents for the incumbent banks and creates additional incentives not to invest into gambling assets and to remain solvent (Perotti and Suarez 2002; Acharya and Yorulmazer 2008). Private sector solutions, however, are difficult to implement if the number of banks is large, market entry is easy, and the degree of competition in the financial sector is high. They are more probable to occur in financial systems with limited competition in banking, as during the 1970s in, e.g., Germany where after the failure of "Bankhaus Herstatt" liquidity assistance was organized as a private club (Beck 2002).

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Leniency Programs

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Abstract

Article 101 of the Treaty on the Functioning of the European Union prohibits cartels and other antitrust agreements that reduce or eliminate competition between firms. Leniency programs are an important investigative tool which give cartel's members incentives to report their cartel activity and cooperate with competition authorities. We present their main objectives, their development in different countries, their direct and indirect effects and how these programs could be improved.

Synonyms

Amnesty Programs

Definition

A leniency program consists in canceling or reducing any fine or other sanctions against companies, engaged in an illegal cartel, when they report strong evidence of their activity to a Competition Authority.

Leniency program's objectives

Across the world, one of the main objectives of antitrust authorities concerns the fight against illegal cartels. For that purpose, they conceive new tools to prosecute them and to increase their effectiveness. For more than 30 years, leniency programs constitute a major innovation applied by many competition authorities to fight cartels. These programs were first applied in the USA in 1978: the Amnesty Program. Currently, following the success of the American system, different

leniency programs are in effect in most advanced countries (most of the European member states, e.g., Germany since 2000 and France since 2001, Japan, Australia, New Zealand, Canada, China, South Korea, etc) and also in some developing countries. More than 50 countries have adopted different leniency programs.

For competition authorities, the main objectives behind this tool are:

- To increase their effectiveness in order to uncover cartels by relying on testimony from cartel's firms (enhance cartel detection, reduce the cost of prosecution)
- To prevent or reduce cartel formation by making cartel less stable, providing a greater incentive to deviate from cartel agreement and to immediately cooperate with authorities (enhance cartel deterrence)

History

The first American Corporate Amnesty Program, implemented in 1978, granted amnesty to the first company that gave strong evidence of its cartel before any authority's investigation. This program was unsuccessful (one case by year) for two reasons. Firstly, the amnesty depended on the discretion of the attorney general and required full cooperation of the applicant. Secondly, before any investigation by an authority, the individual risk of conviction is low, and the first American program gave no sufficient incentives to be effective. Hence, in 1993, the US Antitrust Division of the Department of Justice decided to review the program. The current program also provides full amnesty to the first company revealing information even after the authority's investigation has already begun and until the authority has sufficient evidence to condemn the cartel. Since this reform, there are one or two leniency applications per month.

In 1996, the European Union has also implemented its own leniency program. However, after 5 years of implementation, results appeared to be mixed. There was no certainty that the first applicant would obtain complete immunity. In fact, less than half immunity was granted. In addition, once the Commission had begun an investigation, it was only possible to obtain a maximal fine's reduction of 75%. That is why the policy was first improved in 2002 and in 2006, with the objective of a greater transparency and certainty.

Current conditions are as follows:

- The Commission cancels any fines to the first applicant that provides substantial evidence of the cartel, allowing the authority to implement an investigation pursuant to Article 14 (3) Regulation No. 17 or to prove an infringement of Article 81 of the Amsterdam Treaty.
- In addition, if another company provides further information, it may receive a fine reduction (first firm to cooperate, reduction of 30–50%; second firm to cooperate, 20–30% reduction; other firms to cooperate, reduction of up to 20%).

Direct and Indirect Effects

Theoretical analyses have shown that leniency programs can increase the incentive to cooperate with authorities and may have a deterrence effect on collusion. However, they may also have a pro-collusive effect (Motta and Polo 2003). Indeed, leniency programs can increase the benefits of a cartel's member as they reduce the expected cost of the antitrust sanction. Hence, it is possible that the number of cartels increases because of leniency. Different empirical studies seem to conclude that the positive effect on cartel destabilization and on cartel deterrence dominates the pro-collusive effect. However, empirical identification is only derived with data from detected cartels (Brenner 2009; Miller 2009). Therefore, if the success of a leniency program depends on the number of uncovered cartels, it may mean that there are more current cartels and not necessarily more efficient prosecution.

To reduce this pro-collusive effect and to increase the effectiveness of a leniency policy, it is necessary to have higher sanctions against cartel's members and to have a real power of investigation. Indeed, if fines are weak and if the

probability of an investigation is low, the expected sanction will be low. Then, cartel's members will have no incentive to report to the competition authority because the risk of a conviction is weak. That is why, since 2002, the European Commission has decided to increase the level of fines against cartel's members. The maximal fine was doubled and represents 10% of a company's global turnover. This policy has increased the incentives to apply for leniency.

In contrast with the European program, the US program only grants exclusive amnesty to the first confessor. This strict program may create a "preemption effect" and may increase the deterrence effect (Harrington 2013). Indeed, even if one member thinks that the competition authority has a low likelihood to undermine the cartel, he may also think that another member may report and apply for leniency. In these conditions, he can have a strong incentive to quickly cooperate with authorities to preempt other members and to benefit from the fine's reduction. With the European program, second and third firms revealing strong evidence receive reductions in sanctions as well, but lower than the first confessor. Hence, the "preemption effect" exists but is less powerful than the one in the American program. It is also important that the gap in the reduction of fines be sufficiently great to increase the incentive to be the first to cooperate.

Can a Ringleader Apply for Leniency?

In the current US leniency program, a firm may only be eligible for amnesty when it is not a "ringleader." This clearly means that it is not at the origin of the cartel and that it has not invited any other firm to take part in the cartel (organize meetings, communication between cartel members, etc.). The first European leniency program, between 1996 and 2002, applied discrimination to the ringleader, too, but it was less strict: a ringleader was not illegible for full amnesty but could only have smaller fine reduction between 10% and 50%. However, the current program, following two revisions in 2002 and in 2006, is more accurate and allows any cartel's firm, even a leader in the cartel, to benefit from full immunity provided it is not the cartel's instigator (which organizes and initiates the activity).

What is the economic impact of excluding the ringleader? If a firm, as a ringleader, is excluded from amnesty, it increases his potential sanction's expected cost in comparison with other members. Then, this ringleader can ask the others for a monetary compensation. This can create an asymmetry between this firm and the others and may decrease the sustainability of the cartel. Indeed, the result depends on the probability to be reviewed by the competition authority (Bos and Wandschneider 2011). If this probability is rather low, including the ringleader in the program may increase the probability of a successful prosecution. In contrast, if this probability is rather high, it may be better to exclude the ringleader to reinforce asymmetry with others.

How to Improve Leniency Programs?

Since the first American leniency programs, many measures have been adopted to improve their efficiency.

Leniency Program for Multimarket Firms

Multimarket contacts can facilitate the sustainability of collusion (Bernheim and Whinston 1990). In practice, cartels may concern many markets. That is why in 1999, the USA has adopted **the Amnesty Plus program**. Its objective is to convince a firm convicted in a first market to report evidence on a collusive agreement in another market. Hence, this firm could obtain amnesty as a cartel member in the second market if it is the first one reporting this cartel and a fine's discount as member in the first cartel. Theoretical conclusions on the Amnesty Plus reform are not clear. Indeed, it has two opposite effects on companies' incentive to collude. It may reduce the deterrence effect by increasing the sustainability of multimarket collusion. However, it can reduce the cartel's expected duration by increasing the risk of report after the detection of the first cartel

(Lefouili and Roux 2012). If the program is rather lenient, it would seem that the procompetitive effect is stronger.

Leniency Program and Fight Against International Cartels

In practice, many cartels concern international markets and may be prosecuted by different jurisdictions. In the USA, 90% of recent fines for antitrust infringement result from international cartels. Information sharing among competitive authorities of different jurisdictions could increase fight against cartels, reduce the cost, and improve the effectiveness of an investigation (reducing time to obtain strategic information, improving exchange of strategic documents). However, information sharing between different authorities could reduce the effectiveness of leniency programs as well (Choi and Gerlach 2012). Indeed, confidentiality is essential and is a necessary condition to be credible and to protect the integrity of leniency applications.

A More Incentive System: Reward for Whistleblowers

In April 2005, the South Korean Fair Trade Commission has introduced a reward system to give more financial incentive for outsider whistleblowers to reveal information and provide evidence on secret cartels. Hence, in June 2005, an anonymous person who revealed a welding rod cartel, providing strong evidence, received a reward of $63,700. In the USA, through the False Claims Act, there is a similar financial reward mechanism to fight fraud against the government, but not for violations of competition law. In Europe, no reward system for informers exists. Theoretical predictions suggest that rewarding cartel members for reporting is a powerful tool to deter cartel formation (Aubert et al. 2006; Buccirossi and Spagnolo 2006). It increases the risk of an individual deviation, bringing more incentive to report. It can also increase the cartel's expected cost because firms will have to "bribe" individuals to prevent them to report. However, a first experimental analysis concludes that rewarding whistleblowers does not further deter cartel formation in comparison with traditional leniency (Apesteguia et al 2004). But a second one, assuming a dynamic setting, predicts that rewards increase cartel detection due to self-reporting (Bigoni et al. 2012).

Leniency Program and Administrative and Criminal Enforcement

In the USA and in South Korea, there are criminal sanctions for individuals engaged in cartel activities (custodial sentences). In the USA, since 1994, a criminal leniency has been implemented. Moreover, since 2004, an individual involved in a cartel can be imprisoned for up to 10 years. Most of European member states have the possibility to impose criminal sanctions on individuals for cartel conduct. For example, in France, individuals can face jail time for up to 4 years and may have a criminal fine for up to 35,000 euros. Moreover, some European states (UK, Ireland, and Austria) have both administrative and criminal leniency programs. In these countries, the competition authority will not prosecute an individual if he satisfies conditions for leniency. Other member states (Belgium, France, Germany, Slovenia, Estonia, Ireland, etc.) do not have any criminal leniency program. In practice, jail sentences are indeed rarely imposed. Moreover, currently, the law of the European Union does not provide for criminal sanctions, and each member state is free to impose its own system of penalties for antitrust infringements. In contrast, in the USA, there were many jail sanctions against chairmen of companies engaged in cartel activities. The idea is that jail sentences are a great disincentive for individuals to participate in a cartel. In Europe, some officials think that high administrative fines are sufficient to deter cartel conduct. Both mechanisms are indeed complementary. With an administrative leniency, the efficiency only depends on the incentive of cartel companies. With an individual criminal leniency, the impact depends on the objectives of an employee concerned by a criminal sanction, but it may also concern his company itself. Indeed, if the company anticipates the risk of report by its employee, it could have more incentives to apply for a corporate leniency.

Cross-References

- ▶ Cartels and Collusion
- ▶ Criminal Sanctions and Deterrence
- ▶ Experimental Law and Economics

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Lex Mercatoria

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Abstract

Lex Mercatoria, or the Law Merchant, generally refers to the customary rules and procedures developed within merchant communities to support trade in medieval Europe, without the assistance of government, although this system has had many names through its evolution. This system began to develop sometime in the early Middle Ages, but became widely recognized as commerce expanded in the eleventh and twelfth centuries. Lex mercatoria lowered transactions costs, and provided incentives to live up to promises, thereby allowing for widespread use of contracting and credit as commerce expanded. The customary law system developed behavioral rules based on customs, practice and usage within the network of merchant communities, but processes to encourage recognition, provide adjudication and generate changes in the rules. The primary impetus for recognition of the law merchant within the commercial sector were the positive incentives associated with maintaining reputations and repeated dealings, along with the potential of reputation sanctions (e.g., spontaneous ostracism) for misbehavior. Arbitration was probably the primary dispute resolution process, although merchants used other courts (particularly fair courts sometimes referred to as piepowder courts, market courts, urban courts and ecclesiastical courts) when they

were willing to base decisions on the law merchant. Change was generally initiated through bargaining and contracting, followed by emulation so that new rules spread. Various general principles of the law merchant became increasingly universal over time, although the system remained polycentric in many ways. One reason for polycentric characteristics is that authoritarian legal systems (e.g., royal law, urban law) strove to gain control over commerce and its regulation by imposing additional laws on merchants that often conflicted with the law merchant, forcing changes in merchant practice and usage. The success of such efforts varied over time and space.

Synonyms

Custom of merchants; Customary law of merchants; Law of the fair; Law merchant; Merchants' law; Method of merchants; Way of trade, The

Definition

Lex Mercatoria: The customary rules and procedures developed within merchant communities to support trade in medieval Europe, without the assistance of government.

Introduction to the Law Merchant

Ninth century documents suggest that merchants in parts of Europe used different legal procedures than local communities (Kadens 2004, 43). According to Notger of St. Gallen, writing around 1000 A.D., "merchants maintain that a sale made in a fair should be binding . . . since it is their custom" (Volckart and Mangels 1999, 439). Greif (2006, 70) quotes numerous eleventh century documents illustrating "that the Maghribi traders . . . employed a set of cultural rules of behavior – merchants' law." Such institutional arrangements continued to evolve as a system of customary law used by merchants and referred to as "merchants' law," "custom of merchants," "customary law of merchants," "method of merchants," "the way of the trade," and "law of the fair," but now regularly labeled *Lex Mercatoria* or the "Law Merchant" (*Lex Mercatoria* terminology also is applied to rules and institutions supporting modern international trade, but the focus here is on the medieval system). A large literature describing and analyzing medieval *Lex Mercatoria* exists [for example, *The Little Red Book of Bristol* written sometime around 1280 (Bickley 1900; Teeter 1962; Basile 1998); Stracca (1553); Malynes (1622); Marius (1651); Zouche (1663); Mitchell (1904); Bewes (1923); Trakman (1983); Berman (1983); Benson (1989, 1999, 2011, 2014a, 2014b), and Milgrom et al. (1990)], although there also are critics of the medieval Law Merchant story [e.g., Volckart and Mangels (1999); Kadens (2004, 2012); Sachs (2006); Michaels (2012); criticisms are not addressed here, but see Benson (2011, 2014a, 2014b)].

Among factors that encouraged Europe's advance into the "High Middle Ages" were technological innovations reducing labor requirements in agriculture, allowing specialization, and resulting in substantial expansions in production and trade. Growing numbers of merchants from widely dispersed areas of Europe traded with one another, primarily at fairs. Transactions costs were high as merchants had different cultural and ethnic backgrounds. Such transactions costs could be reduced with legal arrangements to increase credibility of merchant promises, but to the degree that states existed, they were "unable to supply the basic services of the state" (Volckart and Mangels 1999, 435), including enforcement of commercial contracts. In this context, "the basic concepts and institutions of . . . *lex mercatoria* . . . were formed" in eleventh and twelfth century Europe by merchants themselves (Berman 1983, 333).

Customary Law

Lex Mercatoria was customary law: a system of rules and governance processes that

spontaneously evolved within merchant communities and recognized because of trust arrangements, reciprocities, mutual insurance, and reputation mechanisms, including ostracism threats. Negotiation (contracting) was the most important source of legal change. Agreements only applied to the parties involved, but others voluntarily adopted changes if they appeared beneficial. As resulting behavior spread it became expected, and a new rule was recognized. Individuals also could unilaterally adopt behavior which others then observed, came to expect, and emulated, or an arbitrator/mediator might offer an innovative solution to a dispute, followed by voluntarily adopted by others.

Contracts and Credit

Face's (1958, 1959) examination of twelfth and thirteenth century documents demonstrates that nonsimultaneous (contractual) trade between Northern and Southern European merchants was the overwhelming dominant practice at the Champagne fairs, the most important European fairs at the time. Six annual fairs were held sequentially in different Champagne towns, each lasting about 52 days. These fairs included: (1) eight "entry" days when merchants set up their shops, (2) ten days for exclusively trading cloth, (3) eleven days to trade cordovan (leather) goods, (4) nineteen days when goods sold by weight, such as spices and dye-stuffs, were traded, and (5) four days for settling accounts and drawing up "letters of the Fair" (Face 1958, 427). Thus, Southern European "caravan" merchants bought northern wool and linen before selling their spices, dyes, or cordovan, using promissory notes or letters of credit from money lenders (or simply verbal promises) accepted by French, German, English, and Flemish merchants. These financial instruments were negotiable so northern merchants could buy goods from any other merchant or retain instruments for later use. Documents also demonstrate that caravan merchants bought spices, dyes, and cordovan on credit in Mediterranean ports and made large numbers of cloth sales to *draperii*, again often on credit. Similarly, Northern merchants bought and transported cloth to Champagne, sold it, and bought spices, dyes, and/or cordovan to transport and sell, almost entirely through the use of credit. Merchant also contracted with agents or partners "to act in his place, to fulfill old obligations, and in many cases to undertake new ones" (Face 1958, 431), and with professional freighters who transported trade goods to and from fairs (Face 1959). Clearly, as the *Little Red Book of Bristol* c. 1280 (Basile 1998, 11) states, "it is well known to all that merchants sell their goods and merchandize on credit . . . and also that servants and apprentices of such merchants [sell on credit] the goods and merchandise of their lords to other men in the same way" (parenthetic in original).

Merchants had incentives to live up to contractual promises and behave as expected because information spread rapidly throughout interdependent merchant communities (Face 1958; Milgrom et al. 1990; Grief 2006). Therefore, reputations for honesty became valuable, and the threat of spontaneous, uncoordinated but effective punishment for misbehavior developed: ostracism by merchants as they received information about dishonesty (Greif 2006, 66–69).

Disputes

Deterrence is never perfect, so opportunistic breaches no doubt occurred. A merchant might accuse another of misbehavior, however, and the accused might deny it. Disputes also could arise because parties disagreed about what rule applied or how to deal with an unanticipated contingency. Impartial third-party dispute resolution reduced costs of disagreements (i.e., violence) and therefore, encouraged contracting. Merchants included arbitration clauses in contracts (Face 1959, 243), and reputable merchants served as arbitrators (Malynes 1622 [1686], 447–454). Few documents from arbitrated disputes survive, however, in part because merchant arbitrators had a "determinate power to make an end of controversies in general terms, without declaration of particulars"

(Malynes 1622 [1686], 450). Merchants wanted quick solutions to disputes so they chose arbitrators with "skill and knowledge of the Customs of Merchants, which always does intend expedition" (Malynes 1622 [1686], 450).

Temporary participatory courts, often called *Piepoudre* or Pie Powder courts, were also established at fairs. Groups of merchants traveling to a fair generally chose captains or consuls to perform various administrative duties such as determining locations of merchant stalls, but they also served on the fair court (Bewes 1923, 14). As with arbitrators, Pie Powder courts did not leave significant records: their purpose was to provide quick and equitable dispute resolution so merchants could complete transactions at one fair and quickly move to the next. Indeed, Pie Powder court rulings were not binding on any merchant other than the parties in the disputes and then only for the terms of their contracts. Decisions from different merchant courts could be inconsistent, as local rules were understood to apply in a market or fair. In fact, merchants did not have to use Pie Powder courts. Other legal systems were evolving (Berman 1983) and if a nonmerchant court with a reputation for fair decisions was willing to try a case quickly, merchants certainly could and did use it. Ecclesiastical courts were often available, for instance, because many fairs were held at priories and abbeys. Furthermore, the Church was a major producer and trader so ecclesiastical commercial rules often were consistent with *Lex Mercatoria*.

Some Pie Powder courts were taken over by authorities such as "a mayor of a corporate town. Sometimes they belonged to a lord" (Holdsworth 1903: 331). Even when a manor or urban court claimed jurisdiction, however, merchants often dominated dispute resolution (Basile 1998 [c. 1280]: 20). For instant, a lord might impose his court on a fair but use merchant juries. Some local authorities also imposed some of their own rules, but the ability to do so depended on availability of other potential courts (e.g., arbitration) and trading locations. An authority with a particularly attractive fair location could capture location rents through his court. Kings often "granted" rights to hold fairs, however, and in doing so, they frequently stated that merchant law must apply. These grants may have deterred local powers from interfering with markets. While merchant "justice during the fairs" often was recognized by royal authority, it should not be inferred that royal "backing" was necessary for *Lex Mercatoria* when it was not threatened by a coercive power.

Universal and Polycentric Law

The medieval Law Merchant was polycentric (Benson 1999, 2011, 2014a, 2014b), with parallel, interdependent, and overlapping merchant communities using their own rules and procedures, but this does not mean that the most important principles of *Lex Mercatoria* were not universal (Epstein 2004, 8–9). Indeed, even though variations in rules over time and space were common, "the law, in its broad lines, as laid down by the merchants . . . was necessarily of the international character" (Bewes 1923, 299). By 1200 merchant behavior in commercialized Europe implies recognition of universal rules such as (Benson 2011, 2014a, 2014b):

1. Respect other merchants' property rights.
2. Respect freedom of contract.
3. Be honest.
4. Do what you promised to do in a valid agreement, unless a subsequent voluntarily agreement alters the first contract.
5. Provide truthful information about observed misbehavior of other merchants
6. Follow local practices and usage unless all parties agree to behave otherwise.
7. Provide accurate information to foreign merchants about relevant local practices and usage.
8. Treat all merchants at a fair or market equitably.
9. If a dispute cannot be resolved, call upon an arbitrator(s) or judge(s) who is either agreed to by both parties or chosen by the relevant group of merchants [e.g., those attending a fair]
10. Accept a reputable arbitrator(s) or judge (s) who is knowledgeable about the relevant customs, practices and usage.

11. Abide by the resolution proposed by an arbitrator(s) or judge(s) within the confines of the contract generating the dispute; the same dispute is not to be taken [appealed] to another adjudicator.
12. The terms of a particular contract and the resolution of a particular dispute do not impose rules that must be followed in future interactions.
13. Support reputable members of your community [guild, caravan, ethnic or national group] if called upon to protect property or assist in pursuit and collection,
14. Provide financial support to reputable merchants from your community, and if you receive such a surety loan, repay it in a timely fashion.

There probably were other universal rules, and the importance of some rules probably varied over time and space. Significantly, however, by accepting these kinds of fundamental general rules, many more specific behavioral requirements could be generated through negotiation and contracting, and observation and emulation of effective rules and procedures meant that over time different communities evolved in similar ways.

Custom Versus Authority

When most trade took place at temporary fairs, incentives for local powers to try to control commerce were relatively weak. However, as trade expanded, permanent market towns developed. Kings often "granted" legal authority to politically important urban governments just as they did for other local authorities. Market towns were governed by local merchant and craft guilds so many *Lex Mercatoria* rules were adopted in urban law. When coercive power is established, however, discriminatory rules can be imposed (Benson 1999, 2011, 2014a, 2014b). Many urban governments began discriminating against some foreign merchants while simultaneously granting others special privileges in exchange for similar privileges in the towns where those merchants were based (Holdsworth 1903, 302). Thus, as Coquillette (1987, note 21) explains, "surviving correspondence forms between one fair court and another, even fair courts of different countries, show a formula that clearly distinguishes between the law merchant . . . and the town customs." Kings also extracted revenues or political benefits from commerce by imposing Royal Law (Trakman 1983; Benson 1989). Thus, *Lex Mercatoria* was absorbed and changed in varying degrees over time and space. Nonetheless, it continues to apply within many trade associations (Benson 1995) and in most international trade (Trakman 1983; Benson 1999, 2014b).

Cross-Reference

▶ Customary Law

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Lex Talionis

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Definition

The classical formulation of the view that the guilty must be punished in exact proportionate to their crimes: "an eye for an eye, a tooth for a tooth."

The *lex talionis* is otherwise known as the view that punishment for crimes must exact "an eye for an eye, a tooth for a tooth." It dates at least to the law of Moses and the Code of Hammurabi, and the general idea is cited in modern times by both scholars and laypeople in support of punishment that "fits the crime." The *lex talionis* is sometimes used as a justification of *retributivist punishment*, which requires that the guilty receive their due punishment as a matter of right or justice, although it is less of a justification and more of a statement of the proper target of punishment (the guilty) and degree of punishment (proportionality).

The *lex talionis* is cited by key retributivists, including its leading proponent, Immanuel Kant, who asked "what kind and what amount of punishment is it that public justice makes its principle and measure? None other than the principle of equality. . .. Accordingly, whatever undeserved evil you inflict upon another within the people, that you inflict upon yourself. . .. But only the *law of retribution (ius talionis)*. . . can specify definitely the quality and the quantity of punishment"

(1797, p. 332). However, as modern retributivists and their critics alike realize – and as asserted definitively by Blackstone (1765–1769, bk 4, Chap. 1) – exact proportionality is either inhumane (such as in the case of rape), impossible (the case of multiple murders), or nonsensical (the case of attempted crime). Kant acknowledged this, asking "but what is to be done in the case of crimes that cannot be punished by a return for them because this would be either impossible or itself a punishable crime against *humanity* as such?" and moderated the *lex talionis* to prescribe instead that "what is done to [the wrongdoer] in accordance with penal law is what he has perpetrated on others, if not in terms of its letter at least in terms of its spirit" (1797, p. 363). Appropriately, it is the spirit of the *lex talionis* rather than its letter that has survived on in the form of modern retributivism, which emphasizes proportionality while recognizing its difficulties (Davis 1983, 1986).

The call for proportionality embodied in the *lex talionis* is often invoked against systems of punishment, such as deterrence, which focus on generating social benefits from punishment instead of enforcing the just deserts of the guilty. While optimally deterrent punishments – such as those recommended by the economic approach to crime – result in some degree of proportionality between crimes to create optimal incentives, they can also be disproportionately severe to compensate for high enforcement costs (Becker 1968). However, those who raise the *lex talionis* in argument are usually less concerned with disproportionately high punishment and more with disproportionately *low* ones, such as those resulting from plea bargains or judicial acts of mercy – the first of which can be justified as a regrettable compromise in the face of resource constraints (Cahill 2007) while the second is consistent with retributivism in general (Holtman 2009). At its worse, it can be used – incorrectly – to justify private acts of vengeance and "vigilante justice," which are distinct from state-sponsored punishment (Nozick 1981, pp. 366–368; Brooks 2012, pp. 16–18). Since more refined accounts of retributivism are available that acknowledge the subtleties of punishment in both theory and practice, the *lex talionis* is rarely invoked in scholarly debate today.

Cross-References

- ▶ Crime and Punishment (Becker 1968)
- ▶ Criminal Sanctions and Deterrence
- ▶ Retributivism

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Liability and Information

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Abstract

The allocation of information is of paramount importance for the efficacy of liability law as an instrument to address externalities. This entry discusses several possible repercussions of imperfect information, such as inefficient

caretaking resulting from the injurer's imperfect information about the standard of care under negligence or distorted decisions about buying liability insurance. In addition, the contribution presents results from the literature on the incentives to acquire information about risk induced by liability law. Decision makers usually have the opportunity to improve their state of knowledge at a cost, and liability law will impact on the incentives to actually do so and to possibly share this information. Starting from Shavell (1992), we discuss – inter alia – literature analyzing the incentive for accurate harm assessment and the use of hindsight information in court, the effects of disclosure rules, or adjustments in due-care standards to further the generation of information in a process of learning-by-doing.

Introduction

The availability of information about risks is critical to the performance of liability rules in terms of inducing the efficient outcome. In this entry, we first describe certain repercussions of taking imperfect information as given. In order to provide a full understanding of the functionality of liability rules, we also discuss the incentives that such rules create with regard to the acquisition of information – that is, we consider information allocation as an endogenous outcome that can be influenced by liability rules. This entry presents results from selected works in this field.

Liability and Exogenous Information

The repercussions of taking imperfect information as given have been described for a wide range of important aspects in the context of liability. For example, erroneous assessments of harm by the court ex post that can be anticipated by the tortfeasor ex ante necessarily distort both care and activity incentives under strict liability and may also do so under negligence (e.g., Endres 1989). In the case of negligence, the choice and communication of the due-care standard are important variables. In order to set the appropriate standard of care and to be able to compare actual care with the standard, the court needs to know all aspects relevant to the cost minimization and to observe care without error, as otherwise excessive or suboptimal caretaking may result (e.g., Craswell and Calfee 1986; Shavell 1987, Chap. 4). Moreover, when risk-averse tortfeasors are uncertain about the workings of the legal system or individual accident risk, this may affect their decision to buy liability insurance (see, e.g., Crocker and Doherty 2000; Shavell 2000). For the alternative care model, Dari-Mattiacci and Garoupa (2009) show that the least-cost avoider rule can lead to inefficient outcomes when there is imperfect information about the other party's cost of care. In the domain of product liability, how well consumers are informed about product risks is a key factor in determining which liability rule ought to be used (see, e.g., Daughety and Reinganum 2013; Miceli et al. 2015; Shavell 1987, Chap. 7). Liability rules also influence decisions about innovation and the adoption of technologies with differing characteristics in terms of the cost of care or expected harm. In this context, the policy-maker may not have all relevant information on hand (e.g., about the technologies available to firms or the level of firms' adoption costs); this means that the choice and design of the liability rule are decisive for the eventual outcome (see, e.g., Dari-Mattiacci and Franzoni 2014; Endres and Bertram 2006). In practice, when courts lack information about the relevant accident technology, they may refer to industry custom as the relevant negligence standard, potentially hindering innovation and favoring the replication of established technologies (Parchomosky and Stein 2008). For many innovations, the lack of experience will make it impossible to arrive at a reasonable estimate of the accident probability, which could, inter alia, undermine the insurability of risks (Skogh 1998).

Liability and Endogenous Information

The assumption that imperfect information is inevitable disregards an important factor in the

incentive effects of liability rules. Shavell (1992) provides a seminal contribution on the influence of different liability rules on the injurer's incentives to acquire information about risk and on whether they are aligned with social incentives. In his setting, information about whether or not the activity in question is risky can be acquired at a positive fixed cost. The social incentives to acquire information about risk depend on a comparison of the social value of information (stemming from the expected adjustment of care away from the level that is optimal based solely on expectations about the riskiness of the activity) and the social cost of information. When considering the performance of liability rules, Shavell (1992) employs the common assumptions that injurers are risk neutral, that the level of damage is equal to the level of harm, and that there are no issues regarding the establishment of causation. In such a scenario, strict liability results in the perfect alignment of private and social incentives to acquire information about risk, since the injurer's cost minimization problem is the same as that of the planner. For negligence, various versions of the liability rule may apply, as different behavioral dimensions may be included in the negligence standard. A comprehensive negligence rule – that is, one that holds injurers liable (a) when they did not obtain information even though it was socially desirable to do so or (b) when they did not exercise the level of care that minimizes social costs contingent on the socially optimal level of information – will induce the socially optimal outcome. Importantly, Shavell (1992) establishes that a negligence rule that uses only criterion (b) for the level of care also induces socially optimal choices by the injurer with regard to both care and information acquisition, demonstrating that one standard of behavior suffices for efficient incentives under negligence in his setup. In fact, the private value of information exceeds the social value of information, as a tortfeasor completely avoids paying the level of harm by being nonnegligent in the risky state. However, other due-care standards – namely, (i) the level of care that is optimal given the injurer's information or (ii) the level of care that is optimal when information is obtained – cannot align private and social incentives. Standard (i) provides insufficient incentives to obtain information about risk because the injurer can avoid any liability by choosing the appropriate care in view of expectations about the riskiness of the activity; standard (ii) may also lead to inadequate information acquisition and to inefficient care.

Bajtelsmit and Thistle (2015) extend the results of Shavell (1992) by considering risk-averse tortfeasors in a framework in which liability insurance is provided by perfectly competitive insurance companies. Insurance premiums can be contingent on the observable level of care and the injurers' information about the riskiness of their activity, implying that insurance premiums match expected harm as a function of care. Bajtelsmit and Thistle find that the resulting classification risk entails a significant cost of acquiring information about the activity's riskiness, potentially encouraging individuals to avoid becoming informed; it may also render the social value of information negative. This classification risk means that injurers who acquire information about risk may discover that their expected harm is either high or low, such that information acquisition is associated with an uninsurable lottery; the alternative of remaining uninformed and acting according to the ex ante expectation about risk precludes any variation in income. As is true in Shavell (1992), injurers' incentives to acquire information about risk are aligned with social incentives under strict liability, whereas the results for negligence are more complex.

Kaplow and Shavell (1996) explore the social justification for the accurate measurement of harm in court; this is often a key issue in litigation and is in all likelihood responsible for a significant share of litigation expenditures. As implied by the social value of information formulated in Shavell (1992), the accurate measurement of harm ex post may be socially valuable only when the information can be anticipated ex ante. Only in this case will an injurer be subject to strict liability increase (decrease) the level of care – relative to the benchmark level without information acquisition – in states in which the expected harm exceeds (falls below) the average expected harm. By implication, acquiring information

about the level of harm in court is not socially valuable when the injurer cannot or should not obtain such information before making the choice about the level of care. Significantly, the court's decision of whether or not to accurately assess the level of harm is relevant for injurers' decisions about the acquisition of information ex ante.

Related to Kaplow and Shavell (1996), Ben-Shahar (1998) explores the implications of using information about the harmfulness of products that was not available when the product was marketed in the court's assessment of producer liability ex post. The analysis focuses on how the use of hindsight information (in comparison to a state-of-the-art approach) alters incentives for safety investments before and after the product's release, incentives for developing new technologies, and incentives to become better informed about product risks ex ante. The author finds, inter alia, that hindsight increases incentives for remedial actions after product release but distorts ex ante safety decisions. The impact of hindsight on the incentive to invest in new technologies is ambiguous; generally speaking, neither a state-of-the-art regime nor a regime based on hindsight results in first-best decisions regarding the acquisition of information. For environmental law, Wagner (2004) argues that it actually weakens incentives to acquire information about product risk and instead motivates attempts to discredit public research on the matter, as the information is likely to be used in support of additional regulations or standards.

In Polinsky and Shavell (2012), firms with different products and heterogeneous information acquisition costs choose whether or not to obtain information about their product risks and – contingent on having obtained that information – whether or not to truthfully transmit it to consumers. Such information may be socially valuable because it allows consumers with heterogeneous consumption benefits to make informed choices. The policy issue analyzed is whether forcing firms to reveal any information they possess (i.e., mandatory disclosure) is socially preferable to leaving disclosure decisions to firms (i.e., voluntary disclosure). Because information costs are considered private information, the regulation of the acquisition of information is not included in the model (unlike Shavell 1992). Under the assumption that the firm's level of care must be decided before information about risk can be obtained, the authors show that mandatory and voluntary disclosure of product risks are equivalent under strict liability (as consumers' choices are not responsive to information in the case of complete compensation). In contrast, under negligence, incentives to acquire information are greater under voluntary disclosure, but the actual disclosure choice made given the information acquired is more desirable under mandatory disclosure.

Baumann and Friehe (2016) depart from Shavell (1992) by assuming that information about risk can only be acquired via learning-by-doing. In their two-period framework, the policy-maker has a prior about the true accident technology (i.e., the level of risk and how it responds to care) and uses the accident history in the first period to update the assessment of the accident technology in the second period. In this setup, because the signaling value of the accident history depends on care, the level of care taken in the first period plays a role in both the minimization of social costs and the acquisition of information about the accident technology. Accordingly, optimal care in the first period may deviate from the level that minimizes the sum of care and expected harm costs. There are circumstances in which strict liability and negligence both fail to induce the socially optimal level of care in the first period.

The idea of learning from an accident history is also explored in Feess and Wohlschlegel (2006). In their setup, some injurers know the true accident technology, whereas other injurers and the courts may be uninformed; moreover, actual injurer care is erroneously reconstructed by the court. Under these circumstances, the court will use actual injurer care as an informative signal about the true accident technology and will dynamically adjust the due-care standard accordingly. The planner thus transmits a better understanding of the accident technology (obtained from observed levels of care in negligence trials) to the uninformed injurers by adjusting the due level of care.

Most of the literature in law and economics uses the standard assumptions of rational choice theory – for example, that risk-averse subjects maximize expected utility and that future utility is incorporated using exponential discounting. Behavioral aspects may introduce other distortions with regard to what constitutes privately optimal information acquisition. For example, Chemarin and Orset (2011) discuss whether present-biased agents may acquire less information about risk than individuals with time-consistent preferences.

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Libertarian Paternalism

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Definition

In their famous book *Nudge*, published in 2008, Thaler and Sunstein popularize libertarian paternalism, one of the normative theories inspired by behavioral economics. Contrary to a large tradition in moral and political philosophy that dates back to John Stuart Mill, Sunstein and Thaler can see no inconsistency between paternalism and liberalism. We discuss this statement, and we illustrate libertarian paternalistic policies. Then, we deal with the descriptive, prescriptive, and normative consequences of libertarian paternalism for the law. Last, some of the main criticisms against libertarian paternalism are discussed.

Libertarian Paternalism and the Law: Taking Cognitive Bias Seriously

In an executive order dated September 15, 2015, and entitled "Using Behavioral Science Insights to Better Serve The American People," American executive

departments and agencies "are encouraged to [. . .] design public policies in line with the findings of behavioral academic theoretical and applied literature." And the executive order refers explicitly to one of the famous libertarian paternalistic nudges, the "automatic enrollment and automatic escalation in retirement savings plans."

Initiated at the beginning of the 2000s in several papers (Sunstein and Thaler 2003a, b), libertarian paternalism has been popularized by the famous book *Nudge* published in 2008 by Thaler and Sunstein (2008). In less than 15 years, libertarian paternalism has developed a large body of theoretical, applied, and experimental findings covering many fields of public policies (health, insurance, finance, fight against poverty, etc.) and became one of the inspiring thoughts for regulators and legislative bodies throughout the world.

The originality of libertarian paternalism relies on its constitutive so-called oxymoron: a normative theory according to which paternalism and liberalism are not contradictory anymore. For libertarian paternalism, the famous John Stuart Mill's warnings stating that "the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant. He cannot rightfully be compelled to do or forbear because it will be better for him to do so" (Mill 1869) are challenged by the recent findings of behavioral economics.

Thanks to behavioral economics, scientists and regulators know better the ways people respond to laws and regulation; they are aware of the bias people suffer, of their cognitive limitations, and of the weakness of their willpower. And the law should take people for who they are and be sensitive to the ways in which they depart from rational action theory predictions.

Libertarian Paternalism and Behavioral Economics

Libertarian paternalism elaborates on hypothesis, ideas, and methods raised in behavioral economics. First, people are humans, not econs. They are not fully rational, coherent, and optimizers. On the contrary, they make systematic mistakes, do not perfectly learn, and are bad – at least compared to the fully rational agent ideal – at assessing probabilities, events, or any other unknown facts (Thaler and Sunstein 2008). Kahneman used to employing a metaphor: mind is led by two systems, system 1 and system 2. System 1 "operates automatically and quickly, with little or no effort and no sense of voluntary control." System 2 "allocates attention to the effortful mental activities that demand it, including complex computations. The operations of System 2 are often associated with the subjective experience of agency, choice, and concentration" (Kahneman 2011). Explaining how the two-level process works and interacts with the environment is the basic agenda of behavioral sciences.

For Kahneman, Tversky, Thaler, and many others, it is possible to capture the process of system 1 and to display behavioral anomalies by using new empirical methods like laboratory and field experiments. Consequently, the scope of behavioral analysis for economics is to explain the ways people depart from rationality – the *bias* – and to draw the "maps" of bounded rationality. Among the main bias identified, overconfidence, loss aversion, status quo bias, anchoring, and representativeness are the most popular.

From Debiasing to Libertarian Paternalism

These new findings on how people actually behave have two normative consequences. First is debiasing: legal norms, laws, and regulations are expected to enhance individual rationality and to remove or to alleviate rationality failures. Second is libertarian paternalism. Rationality failures and bias are used to enhance people welfare. As Thaler and Benartzi state "Libertarian paternalism is a philosophy that advocates designing institutions that help people make better decisions but do not impinge on their freedom to choose. Automatic enrollment is a good example of libertarian

paternalism" (Thaler and Benartzi 2004). A benevolent policy maker, who is aware of the bias suffered by individuals, could decide to implement laws and policies which softly induce people to behave in lines with their true preferences. Under libertarian paternalistic institutions, systematic errors from system 1 are the best servant of system 2.

Let's consider the previous example of automatic enrollment, and let's take seriously that people suffer a status quo bias. Imagine two contexts (context 1, option A is chosen by default; context 2, option B is chosen by default). Last, suppose there is no economic or financial cost to change the initial option. In that case, because of the bias, people are more likely to choose the default option than the other. Such a mechanism is meaningful in a world where rationality is bounded. Because of the bias, the choice architect – the one who draws the default option – is able to induce people to behave in a certain way. The main issue of libertarian paternalism is to know how such a framing could be made. For Thaler and Sunstein, the choice architect should systematically select the default option which is in line with the best preferences of people: the automatic processes of system 1 are used to increase the savings, that is, what the long-term self (the far-sighted self) would have chosen. And this effect emerges without any intrusive policies and without depriving people of their rights and liberties: people stay free to choose any of the options. Here is the heart of the libertarian paternalist doctrine – also called *nudging* even though all nudges are not libertarian paternalistic (Mongin and Cozic 2017).

Libertarian Paternalism for the Law

A lot of nudges may be found in our daily life. One of the reasons why the eponymous book *Nudge* has been so popular lies in the examples provided by Thaler and Sunstein: the strives on a highway which induce people to operate the brakes before starting a dangerous turn, the alarm clock "clocky" that "runs away and hides you if you don't get out of bed" to struggle against lack of willpower, the default rule about your presumed consent for organ donation, etc. All these mechanisms have in common to use a bias in order to better achieve individuals' true preferences. And legal and institutional nudges are of particular interest.

Regarding legal issues, three meanings of libertarian paternalism may be distinguished. First is a purely descriptive meaning. Libertarian paternalism makes sense of many existing legal provisions that would be meaningless if they were analyzed through the glasses of rational action theory: the cooling-off periods and delays in consumer law that protect people against their impulsive choices, the default rules that use inertia to better serve long-term self-interests, the legal framing that displays information by using salience bias, the legal self-constraints, etc.

Second, libertarian paternalism has a normative scope by offering a toolbox for new laws and public policy recommendations testable by experiments (Shafir 2012). For example, the randomized experiments designed by J-Pal experts (Poverty Action Lab) testing the best ways to struggle against poverty are sometimes explicitly driven by libertarian paternalistic views (Banerjee and Duflo 2011).

Third, libertarian paternalism is helpful to better understand adjudications by courts. This is becoming more important as more courts refer implicitly or explicitly to behavioral arguments. For example, in the famous antitrust case *Microsoft* vs. *Commission*, the European Court of First Instance extensively discusses the default rule and eventually considers that it is in the best interests of consumer to have a set of default options without Windows Media Player.

Is Libertarian Paternalism a New Paradigm for Law and Economics?

Libertarian paternalism is said to be a syncretic normative theory that liberals as well as conservatives could support. However, many criticisms

have raised. First, policy makers, legislators, and judges following libertarian paternalistic recommendations are assumed to be benevolent. What happens if they are not? Using behavioral sciences would give expertise in manipulation to public agents and contradict the neutrality of the State. Manipulation threats individual autonomy, and paternalistic views threat liberalism. Second, policy makers themselves suffer bias and are perhaps less competent than expected. One of the most important results of behavioral science is precisely to warn experts against their overconfidence and their illusion of validity and to show how experts' judgments may depart from rationality. Third, it is argued that market is able to deal with cognitive bias (Sugden 2008). But this point about the spontaneous debiasing of people by the market is still disputable in the empirical and theoretical literature (Gabaix and Laibson 2006).

These criticisms lead Sunstein to be more specific about political, ethical, and economic justifications of libertarian paternalism (see Sunstein 2014, 2015). Three arguments are of particular interest for the law. First, the choice architecture is inevitable. Any legal system offers choices under a specific frame. In that case, why not choosing the best frame for individuals? The argument is sound and convincing. Second, the threat of manipulation does not undermine libertarian paternalism as soon as libertarian paternalistic policies are under constant public scrutiny. According to Sunstein, transparency and democratic control are sufficient to avoid manipulative nudges. Third, libertarian paternalism could be considered as a set of devices enhancing autonomy because "we might identify autonomy with people's reflective judgements, and many nudges operate in the interest of autonomy, so understood" (Sunstein *in* Alemanno and Sibony 2015; Sunstein 2015).

To conclude, libertarian paternalism offers new smart insights on the role of the law in the economic system. But some further developments have to be made to know whether libertarian paternalism could be a general theory of the law and regulation.

Cross-References

- ▶ Cognitive Law and Economics
- ▶ Experimental Law and Economics
- ▶ Nudge

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Liberty

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Abstract

Freedom is the power to do what I want to do. The laws of nature and/or human laws limit this power. The laws of nature imposess necessities. I cannot choose the speed of my fall (law of gravitation). Here I can not has a physical meaning. Human laws limit also my power to choose, but in another meaning. They impose obligations. The law of adultery, for instance, forbids to have sexual relationships with its children. I must not in a moral sense. I do not have the right. So, human laws determine artificially the limits of my power to choose. They limit the infinite freedom of the will and leads to the study of conditions of concrete freedom possessed by human beings in society. Concrete freedom is limited by the will of others and expressed through law partially originates in a process of mutual recognition. Then, concrete freedom is based on consent.

Synonyms

Freedom

Definition

Freedom is "the power to do what I want to do."

Liberty, Laws of Nature and Human Laws

Freedom puts the question to the relationship between human beings and nature by means of a question concerning determinism and, similarly with the relationship between one human being and another, by means of a question concerning duty or obligation. The response of human beings to the constraint that nature places upon the will is exemplified in technology. The response of human beings to the constraints that can be imposed by other human beings is exemplified by law.

What Is a Free Action?

In order to understand why the notion of freedom or liberty involves such questioning, we must look at our experience of action and the distinction freedom makes between an action performed under constraint and a free action. Freedom is the power to choose what action one carries out. Freedom characterizes a type of action. Fundamentally, a free action is something done that could have been done in a different way. It is distinguished from a reflex action. Let's take an example. I can close my eyes in order to avoid something thrown in my direction. I can open my eyes in order to admire a landscape. When I open my eyes for that purpose, I make a choice. However, when I close my eyes to keep from getting hit in the eye by something thrown at me, the movement of my eyelids, i.e., the change in the initial situation in this case, is not the result of a choice. I never had to form the intention of closing my eyes, but my body is so constituted that it reacts automatically to the approach of such a projectile, and my eyelids close. Even if I had wanted to keep from closing my eyes, I would not have been able to prevent them from reacting, because the movement of my eyelids is determined by the way my body's nervous system works. The other situation, in which I open my eyes to admire a landscape, is different. My eyes open because I decide to open them. I decide to open them because I have good reasons to want to do so. The movement of my eyelids in reaction to the approach of a projectile is not a free act. To the contrary, the movement of my eyelids when I open them in order to admire a landscape is indeed motivated by the desire to admire the landscape. Thus, this is the description of an action that is experienced as conscious and as free. At

this point we can affirm that a free act or action has three characteristics: it is intentional (an act of will), it comes with a justification in the form of reasons for acting or motives (one wishes to enjoy looking at a landscape), and it is not the determinate result of some other act or action. This definition views human beings as responsible for their actions without requiring that actions all succeed in their purpose. Not all intentions are carried out.

Each of the three characteristics of free action calls for further explanation. Free actions are intentional. I open my eyes because I have the intention of admiring the landscape. My action is limited to carrying out this intention. My project, what I intend, is the "why" of me opening my eyes. In this sense an intention is part and parcel of reasons that justify or explain an action. Reasons for acting or motives for action are talked about in this explanation, instead of causes. An approaching projectile causes my eyelids to close together, but the beauty of the landscape is a motive or reason for my action, and not a cause. If we were speaking of final causes, beauty was the ultimate cause of my action. I can give myself a teleological explanation of the fact that I open my eyes to admire the landscape, but I give myself a physical (and ex post facto) explanation of the fact that I may be forced to shut my eyes in order to protect them from an approaching projectile. After the fact, I take note of the fact that something was flying toward my eye, which explains me flinching and closing my eyelids together. The explanation of a forced or determinate action is not like the explanation of a freely performed action. In one case a physical force moves a physical body. In the other case, a physical action that could not have been physically predicted is actually freely executed or motivated by a mental intention, which is further mediated by a predilection toward beauty. In the latter case, the free action is a cause of movement; in the former case, physical motion is the consequence of an external force. The cause of movement is the projectile, not the intention (Cowan 1994). The explanation of a reflex action is always ex post facto. I must have observed that something was going to hit my eye, and this caused me to react. The explanation of a free act is always ex ante. I justify my decision to look at the landscape ex ante, with reference to my taste in landscapes.

The difference between a physical (instrumental) cause and a teleological (final) cause indicates the singular nature of free actions. Free action is an action that has its own cause; it determines itself. The result of this is that one may impute an action to a person or assign responsibility for the action to its "author." This is the origin of the concept of free will as developed by Saint Augustine (Augustine of Hippo) in his treatise *De libero arbitrio*. God is not responsible for evil; human beings are, since "*Dieu a conféré à sa créature, avec le libre arbitre, la capacité de mal agir et par-là même, la responsabilité du péché*" (*De libero arbitrio*, I, 16, 35). In this regard, the will is what makes an action one's own, placing the burden of responsibility on the one performing the action (*De Libero Arbitrio* I.11). Human beings, on another hand, are not responsible for their eyes shutting when a projectile appears to be heading toward their heads. They are responsible for the act of opening their eyes to look at the landscape. In this sense, a free action involves the individual as moral person, the one who is able to respond by saying, I am the one who did this or that action. The individual is the subject who chooses or decides to look at the landscape. Freedom makes human beings into actors; they are not like stones, which cannot act but only be acted upon (Voltaire 1987, Chapitre 13, tome 62, p. 44). Voltaire makes use of Locke's theory of freedom. Freedom here is synonymous with power. This concept is distinguished from the freedom of the free will, which only has to do with the power of self-determination. A moral action is free if its consequences can be imputed to the person who chooses to do it. Inversely, an action under constraint makes human beings into objects that are acted on by forces they do not control.

In neither case is the success of the action guaranteed. Though my eyes shut reflexively, they may still be damaged by the projectile; the landscape I open my eyes is not guaranteed to be beautiful. Freedom does not protect individuals against errors in judgment that may involve the means chosen to carry out one's projects, in order to fulfill one's intentions. And the errors

committed in the one and the other case are quite different. I would not blame my own reflexes if something flew up and damaged my eye, but rather my own carelessness, or perhaps mere accident; the manner in which my body reflexively moves to avoid an external threat is not a matter of my free choice. It is a given. But a human actor can modify either a project or the means he or she mobilizes to realize the project, following an initial failure. Human beings learn from failure because they fear it. This may seem an obvious point, but it is important because it moves us away from any definition of freedom as the "maximum expansion of my personality" (Berlin 2002a, p. 179) or as itself a means for the realization of projects (Sen 1999, pp. 14–15, p. 37). Such definitions in fact confuse a free action with an action that is successfully performed or carried out. The result of a free action is not determined. This does not mean that I cannot judge freedom by its results. I can, for example, try to find out if a free society is more prosperous than the one that is not free. But such a judgment is not a definition of freedom itself or of the conditions under which it may exist.

Under What Conditions Can a Free Action Exist?

The Absence of Determinism

Regarding free action, as we have just characterized it: it is not immediately certain that it exists in reality. Human existence confirms intentionality, the existence of reasons for acting, the feeling of responsibility, and the possibility of failure. But it is not certain that the act of will that led me to open my eyes upon a landscape was not itself determined by some characteristics of the environment (of the action). Perhaps my reasons for acting or my motives in acting were after all determined by my conditions of existence. If I am not the master of my own actions, my acts are constrained in the sense that they have been determined by the conditions of my existence. Thus, human beings and their actions become again objects of nature, not subjects.

As an object, human action has the same status as a rock, a plant, or an animal. It is determined by the conditions of our existence as living beings. Genes have a desire to reproduce themselves (the law of egoistic genes, to sociobiological determinism of (Dawkins 1976)), human beings have physical needs (sleep, nutrition, etc., indicating physiological determinism), there is a law of natural selection operating (the social Darwinism of Herbert Spencer), the law of egoism or the maximization of utility (social physics), the nature of soils and climates (geographical determinism, Montesquieu, 3^{e} partie, Livre XIV, chap. X.; Diamond 1997), laws of the unconscious (psychological determinism, Plato and Freud), income levels (economic determinism or materialism), and/or membership in a social class (historical determinism). The free action would thus be an illusion, because the conditions of its being accomplished are not all present. This illusion stems from the fact that human beings are conscious of their actions, but not of the causes that determine that they will act. Thus, the only freedom human beings have is that they can know that they have acted in accordance with the necessity associated with their nature (Spinoza Ethica IV, Proposition 68). Freedom would be the recognition of necessity (Berlin 2002b, Chapitre Hegel). If I want to build an airplane, it would be suicidal to attempt to violate any of the laws of aerodynamics. Fatalism is the moral (prescriptive) consequence of this definition of freedom which associates determinism and freedom as the recognition of necessity.

Applied to the institutions of human societies, to morality and law, this may mean that human beings are able to want to change their society's institutions, but there is a natural order which is imposed on human beings by institutions. Human beings may desire to change their institutions and not be able to do it. They find themselves in the position of someone who would like to alter the speed at which he is falling. The universal law of gravitation discovered by Isaac Newton states that two bodies in the universe attract each other with a force that is directly proportional to the product of their masses and inversely proportional to the square of the distance between them. Human

beings do not choose the values of physical constants. In an analogous manner, all the laws of nature that are the basis of different forms of determinism (as mentioned above) place human beings in this world of necessity. The projects and intentions they conceive are always determined from outside. There is always something that motivates people to do what they do. In this sense, this position is fundamentally empirical. Reasons for acting are externally determined. There is a necessity attached even to the projects expressed in action. Freedom consists precisely in knowing this. Thus, it is only a single step, which takes us from the consciousness of our being subject to necessity, to cynicism.

The Consequences of Determinism With Regard To the Identification of the Conditions of Free Action

Freedom as the Power to Choose The first consequence of determinism is that freedom is defined as opposed to the absence of choice. I have not the choice of speed when I fall. Nor do I have the power to choose not to nourish myself or not to sleep, assuming I want to stay alive. In the world we live in, life only sustains itself by fighting against death (Boulgakov 1912, 2000, Chapter I, II). Basic needs (for sleep and food) must be satisfied; these are conditions of human beings' biological existence. Human beings are in a sense slaves to their own bodies, which have to be looked after. Staying alive is a choice that determines action. One must choose to live in order to choose a particular project of action. The project of survival is conditioned by work, labor, inasmuch as it is a condition of life from an economic point of view. Work is the result of the threat that nature poses to human beings. It is a necessity. It places human beings in a state of needfulness (poverty). This is Adam's curse. But since work allows human beings to get control of basic necessities, it is also the means of extricating oneself from it. Work is a source of redemption, not of enslavement.

The Power to Choose and Social Physics in the Economics of Institutions The second consequence of determinism is that it leads to the denial of the existence of non-necessitating purposes ("ends," as in Aristotle), in other words the fact that things might be otherwise than they are. In the economics of law and of institutions, this turns out to have important consequences with regard to the way institutional dynamics are modeled. At first, there is a tendency on the part of the theory of cultural evolution to accept a Panglossian economics (Whitman 1998). In such perspective, which is, is rational and what is rational is efficient. In such a world, there is no place for change or for the change agent, the entrepreneur. The same discussion can take place when we apply the law of egoism or the principle of the maximization of profit in order to explain law. Without law, human beings are not at liberty to desire something other than the maximization of profit. This is a given, but not a variable. That which varies is the manner in which individuals exercise their ability to calculate, rather than the objective aimed at by the calculation. The entire art of legislation, as Helvétius had already said (Berlin 2002b, Chapitre Helvétius), is therefore "*de faire que l'individu trouve plus d'intérêt à suivre la loi qu'à la violer.*" The entire contribution to the theory of inducements to the legislator is to suppose that the economist can furnish legislators with the means to predict what individuals will do if the rules of the game are changed, that is, if the incentive structure is manipulated, and the division of costs and benefits for each alternative. Such an ambition supposes that the law of egoism always applies and that altruism and disinterested acts are only illusions.

The theory of action teaches us to consider free acts as determinate acts. A free act is founded upon the existence of non-necessitating ends or purposes. Only ends of this type allow human beings to remain entirely free (Gilson 1997, p. 315). The law of gravitation cannot be broken, but human laws, moral or legal, can be involved in a choice. A human law, in fact, is obligatory without being necessary.

The Power to Choose and Nonempirical Approaches in the Economics of Institutions Affirming the existence of non-necessitating ends

has therefore several consequences. Each of these consequences explains the originality of non-empirical approaches to the law and institutions. (1) The existence of non-necessitating ends first of all restores the determination of the self by the self. This self-determination is a characteristic of the free act. It explains why a certain number of authors insist on the absence of domination (Petit 2001, p. 132) or noninterference (Carter 1999, p. 237) in the definition of freedom. (2) The existence of non-necessitating ends also has the consequence of restoring the entrepreneur to his place as a change agent in the analysis of the dynamics of institutions. The institutional entrepreneur (Yu 2001) does not react to the evolution of constraints (transaction costs), but is at the beginning of his own movement. He acts, he does not react. (3) Non-necessitating ends also rehabilitate human beings' responsibility within history. They modify people's attitude toward reality. When I believe I am responsible for my own destiny and develop a strong feeling of personal effectiveness (*self-efficiency*), I have a tendency to become a change agent (Harper 2003). (4) More generally, the entrepreneur now has space in which to maneuver regarding all the laws that do not establish necessitating ends. If human laws, that is, morality and law, have this characteristic, then human beings can liberate themselves from laws that constrain them by refusing to apply them. They have the power to stand apart from their conditioning. They can overcome internal obstacles to freedom, such as addictive behavior (to tobacco, alcohol, coffee, morphine, opium, cocaine, sexual activity, even tyranny (de la Boétie 1549)). To be free is to be capable of subordinating one's action to the law of duty (a non-necessitating end). In this world of duty, passions and emotions no longer enslave human beings. In the face of danger, a soldier necessarily has a feeling of fear. It is his duty to fight. He must overcome his fear and refuse to flee or hide. The will allows us to overcome inner constraints. The will also allows us to go beyond external constraints, that is, we are able to choose whether or not to have recourse to the formal or informal institutions that structure the social order. These institutions limit a world of possibilities, but they only define obligations. They are not necessary. It is always possible for people to avoid them or to disobey them (*civil disobedience*) (Thoreau 1849). (5) The last consequence of the existence of such ends is that law and moral rules are not similar to the laws of gravitation, although they claim to be as much in force. So laws that forbid stoning an adulterous woman artificially institute a necessity between two events that are not at all connected in nature. They artificially create determinations by instituting obligations. The fact that it is possible not to conform to them does not make them any less destructive of liberty. It is not because I can leave my own country to escape the oppression of a dictator or taxes that the law protects my power to choose. The word "power" changes its meaning here. In the case of the law of gravitation, "I can not" has a physical meaning. In the case of the law on adultery, "I must not" in a moral sense. I do not have the right. The law artificially determines the limits of my power to choose. It limits the infinite freedom of the will and leads to the study of the concrete freedom possessed by human beings in society (Hegel 1821, §4, §30).

Respect for the Principle of Self-Determination by the Self

The Ideal of Contractual Law

It is not only laws of nature that limit freedom. There are also human laws, morality, and the law of the courts. The origin of this limit has to do with a confrontation between two wills. The infinity of free will, that is, the possibility of willing, even the impossible becomes concrete freedom when two wills (Hegel 1821) or two individual claims (*pretesa*/*pretesa*n, Léoni 1961) oppose each other. This explains why possession becomes property and takes on a legal character to the extent that the other, or all others, recognize that a thing I have made mine is mine, as I recognize others' possessions as their own. Concrete freedom that is expressed through law partially originates in a process of mutual recognition (Facchini 2002), the other part dealing with connections of a contractual type. Law guarantees the conditions of the free will if it is the result of that confrontation of wills, which accept the task of mutually

limiting one another all in taking account of the wills of others. Law limits the power to choose. It exercises a constraint without for all that violating the principle of self-determination by the self. This represents the fact that human beings can limit their own power to choose through laws that they freely support and which they apply thanks to the implementation of trust rules and solidarity rules (Vanberg and Buchanan 1990). These laws constitute an order based on rules (order of rules, Hayek 1973) that change as a function of the relationships between the wills of different members of a group. Concrete freedom is based on consent. Outside the contract, law becomes the death of liberty, for it is imposed against the will of human beings.

Freedom, Tyranny, and Paternalism

In the great conflict of wills, the other may also decide on a constraint for me to labor under. The law, here, is chosen against my will by another will than mine. The principle of determination of self by self is no longer being respected. Law is no longer creating the conditions necessary for the existence of a free act recognized as such by everyone. Only the one who produces the law is free. For my own happiness, he subjects me to his will (paternalism) – or if it is for his own happiness, he is a tyrant.

The tyrant has the face of a bad person in Pascal's sense (1650, 1982, p. 125). The bad person has power and uses his force to impose his will on me. The confrontation of wills no longer can be solved through contracts, but only through the application of the law of strength, of the stronger party. The stronger party will oppress the weaker (Pascal 1650, 1982, p. 127). This transforms a factual situation into a law. What the strong possess is transformed into property rights. This means that at the beginning there is no agreement about the rights of each, but there is usurpation (Pascal 1650, 1982, p. 125). The law makes the strong free and places the weak in a situation of necessity, because freedom without power is impotent. Under these conditions the infinite freedom of the will of the weak will never receive a proper concrete expression in the law. The weak can band together to overthrow the strong and impose their own laws, but they will never be liberated unless they reverse the relationships of force, making yesterday's strong people the weak and the oppressed of yesterday the strong. The law is necessarily that of the strongest, if without force the will is powerless. The social and political conditions of a free society will never all be present. The infinite freedom of the will is therefore only an illusion, since law is always the law of the stronger. He supports the freedoms of some but oppresses the freedom of others.

The legislator can also assume the form of a benevolent father. The strong man ceases to be a tyrant. He places his power in the service of the Good. The original form of paternalism consists in helping individuals to keep their promises, that is, to make the will of the weak-willed strong. Let us suppose that a weak person does not permit himself to commit adultery, but through the weakness of his will, he succumbs to temptation just the same. Such a situation may justify intervention on the part of the strong man. His intervention will be like the chains holding Ulysses to the mast as the Sirens sing, in Homer (Elster 1984). A second form of paternalism consists in deciding on the extent of the means that individuals give themselves in order to realize their goals. A man who wishes to be in good health should not smoke. The strong person can justify constraint with reference to the incoherence of the weak person. The weak person will not be allowed to smoke, as a means of helping that person reach their personal goals. A third form of paternalism, *soft paternalism*, prohibits nothing and uses no force but tells weak or poorly informed people about the risks various behaviors are associated with. They remain free to do as they like. But they are obliged to hear out the morality of the strong. A fourth, hard paternalism, is moral. It determines the ends of action not because the strong man wants it that way, but because the good can be objectively determined. The strong man knows what is good and seeks to promote it through politics, in which the ultimate aim is the happiness of men in society (Humboldt 1851, III). In the name of this principle, this stance gives itself the freedom to act as a tyrant in the name of the Good. Thus, we have here to do with a benevolent tyrant.

The Ideal of Contractual Law and the Role of the State

The introduction of the figure of the strong person in a contest of wills is equivalent to a consideration of the role of the State in the formation of law and the protection of individual liberty (freedom).

The law that is generated by the benevolent attitude of the strong person changes as a function of the strong person's knowledge of that which is good. It establishes the strong person as a legislator and exposes society to two kinds of risk. Happiness from this perspective dominates the principle of non-domination of one individual by another. The legal conditions of a free act are not guaranteed. The law of the legislator then risks becoming unstable because it evolves as a function of what the legislator learns concerning what is to be done or not done in order to bring about the happiness of human beings in society. This instability of the law reduces the quality of what agents are able to anticipate and increases the cost of their coordination. It opens the door to higher costs for political transactions, since everyone is attempting to influence the decisions of the legislator and to impose their own conception of the Good. The law of the legislator, in addition, no longer mobilizes the group of kinds of tacit knowledge that agents have when they are constrained only on a contractual basis. The law therefore has a good chance of being poorly adapted to many particular situations and for this very non-applied reason.

The law of the tyrant serves the tyrant's will. It includes the tyrant's conceptions of the Good. Therefore, it also has an unstable, arbitrary, and incomplete nature.

The law of a contractual nature is to the contrary freely consented to and based upon the tacit knowledge of agents. It may nonetheless be unstable, because it is never certain that one of the parties to a contract may not decide at one moment or other to refuse to keep his or her promises. A person may in fact decide that he or she is in a position of strength and that it is no longer in that person's interest to continue to be bound by agreements that were freely agreed to in earlier negotiations. This risk is real. It is normally limited by the existence of rules involving confidence and solidarity that are made specifically to prevent such behavior by instituting dissuasive mechanisms such as guilt, shame, a bad reputation, exclusion, and/or ostracism. All the individuals of the group band together against the deviant, that is, the individual who does not wish to keep his or her word. If these rules are sufficient, the State has no role. Its existence is nothing but a useless fiction through which the freedom of some people is extended to the detriment of others' freedom, that is, through which "*tout le monde s'efforce de vivre aux dépens de tout le monde*" (Bastiat 1863, Tome IV, pp. 327–341). Only when the State arrogates to itself a monopoly on violence and the production of the law (Léoni 1961) does law become the law of the strongest. If risk is not obviated through the application of these rules and mechanisms for imposing sanctions, human beings may have recourse to force, in other words may make agreements so that power ensures the maintenance of law and order. The State is a regalian State. It ensures the enforceability of contracts against external enemies and/or internal strife (Humboldt 1851, 1969, IV, p. 45). This means taxation is one condition of a free society, for it is the condition for the financing of the operations of the police and for the defense of the State's boundaries. The financing of the police from this perspective is the single issue regarding political freedom. These freedoms guarantee to the individual the power to choose his level of taxation, his rules of allocation, and the people who will manage everything.

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Lies and Decision Making

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Abstract

Within the economics and law fields, many decisions must be based on what is reported by another person, who can deceive the decision maker by lying. Thus, discovering if our interlocutor is sincere or not is crucial in order to make good decisions. Research highlighted that the spontaneous strategies that we use to identify possible lies are often misleading. Our moods and personality, together with the level of trust between speakers, are all factors that can influence the detection of lies. However, the ability to discover lies may increase with appropriate training and experience of dealing with people in contexts where the probability of being deceived is quite high. Regardless of our actual skill in discovering lies, our attitude toward lying can influence the decision-making process. For example, when we are aware of the possibility that a lie occurs, a suspicious attitude can lead to a wrong judgment. Similarly, perceiving an alleged lie, whether it is real or not, can prompt the use of

emotional heuristics linked to the perceived feelings of antipathy, anxiety, or anger. This can lead to decisions aimed at creating disadvantages for the partner. Under these circumstances, it is necessary to take into account the variety of human behavior, not relying on stereotypes to identify a lie. Being used to interact in particular contexts where the risk of being deceived is high may definitely help to sharpen the ability to find out who is lying to us, increasing the likelihood of taking rational choices based on reliable cues.

Lying in the Field of Law and Economics

Within the economics and law fields, many decisions must be based on what is reported by another person. This happens, for example, when a judge has to issue a sentence on the basis of statements made by the witnesses or when a broker has to decide to invest money by evaluating the reliability of a company on the basis of what an analyst tells him about it. In these situations, it is generally assumed that the other party is sincere. However, people may lie, for various reasons: for personal interest, to defend the interests of others, for idealistic reasons, and so on. Therefore, it becomes important to know how to identify when a person is lying and manage the decisions accordingly.

Psychological knowledge can be helpful. Although there is no "truth machine" that is able to establish with certainty when one is lying, there are research data that provide guidance in this regard. The studies which have been carried out allow us to identify what causes people to lie, which are the situations when this is more likely to happen, what are the personal characteristics that distinguish liars, and how lying may affect ethical and economic situations. Being aware of these aspects may allow one to take appropriate decisions when other people lie.

Why People Lie

Lying occurs when there is no correspondence between what one says and what he thinks, knows, and feels. This can occur when the individual does not have full knowledge of how things really are or when his/her communication is not adequate. In these cases, the person tells a lie, but it is a falsehood due to ignorance or error. Lying, therefore, has more to do with the *truthfulness* (i.e., what the person believes to be truthful) than with the *truth* per se. We are lying, as we are discussing here, when people deliberately attempt to induce others to believe that things are different from what we believe they actually are.

All of us are aware of how we tend to lie during our everyday life. We lie for many different reasons, from the most trivial to the most important ones. Studies showed that during a normal conversation people make use of deceitful assertions in 61.5% of cases (Turner et al. 1975). In general, we tell minor or white lies, which require a limited mental commitment to be planned and communicated and do not cause excessive stress to the actor because, even if the lie is discovered, the consequences will be not heavy. In other situations, however, lying can have serious consequences on the decisions that are taken, and this happens quite often when economic or legal aspects are involved.

Despite some research supporting the notion that the number of lies told decreases with age (Jensen et al. 2004), other studies showed that lying is an essential part of communication among adults (Camden et al. 1984; DePaulo and Kashy 1998; DePaulo et al. 1996; Hample 1980; Turner et al. 1975). Actually, what changes with adulthood is the social desirability of a lie, which is less accepted as a suitable mean to achieve a goal. In addition, children are more naïve and believed to be always credible, even if their lies are less elaborated and complex. This is why it is usually much easier to discover a child lying, compared to an adult, who has many more resources and an advanced ability to lie. For this reason, we may wonder if children actually lie more or if they are simply discovered more often and have less fear of confessing.

Many theorists argued that deceitful communication is linked to survival: men used to lie to get what they needed when they were lacking of resources. Like other behaviors that are

maintained over time for this reason, lying has a different meaning today. We do not lie only to obtain the resources needed for our survival but also to obtain superfluous goods (tangible and intangible), to look better, to deceive others, to protect those we care about, and so on.

Survival is also used to explain why people believe the lies. If we had a cautious attitude toward what others say in every moment of our lives, we would run the risk of spending a lot of time and energy in order to assess the evidence of the communication of others, in order to determine the authenticity of what they are saying. People would be too suspicious, not allowing social relationships to be lived fully and peacefully.

Universally speaking, human beings tend to give credit to what others say. This trend presents two levels: on one hand, if the speaker does not have any particular reason to lie, he/she will say what he/she thinks is true; on the other hand, if the listeners do not have any particular reason to doubt the speaker, they will accept as true what the speaker communicates. These statements refer to Grice's principle of cooperation: according to this principle, you have to "make your contribution such as it is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (Grice 1989, p. 26). This truth bias is an important cognitive heuristic, i.e., a system that allows one to evaluate complex stimuli with a reduced cognitive commitment (Caldwell 2000). This is only one of a number of heuristics that humans commonly use. Another example can be the heuristic according to which it is easier to falsify facts than feelings: therefore it is more likely that people evaluate as false factual statements than emotional utterances.

Identifying Lies

Human beings tend to overestimate their ability to identify a false communication. In fact, decades of research have shown that humans are modest debunkers of the lies (Hartwig and Bond 2011). One main reason why humans have limited skills in detecting lies is related to the lack of certain, absolute, and universal hints that can be used to identify lies. The second reason is related to the high level of complexity of human communication. Even when we tell the truth, we use a wide range of communication strategies. This means that when we want to lie, we just have to slightly change part of the communication configuration. As a consequence, differences between truth and falsehood are difficult to be detected. Thirdly, people have stereotypical theories on liars. Since such theories are not based on empirical evidence, it is not surprising that they can easily lead people to errors of judgment (believing that one is lying when he/she is telling the truth or thinking he/she is sincere when in fact he/she is a liar). As a last point, as mentioned above, social conventions that guide interpersonal relationships induce individuals to not have a constant suspicious and inquisitive attitude. Doubting everything and constantly accusing others of being a liar would prevent any relationship of intimacy and trust to develop.

It is interesting to note that there are some categories of people who are better able at discovering liars. This is the case of criminals, spies, secret services' employees, and those who are well trained to lie or have to deal with lies on a daily basis, as well as those whose life depends on their lying skills (Vrij and Semin 1996). Moreover, some professionals are more experienced than others, such as police officers and clinical psychologists (Ekman et al. 1999). Different studies (DePaulo 1994; DePaulo and Pfeifer 1986; Ekman and O'Sullivan 1991; Kraut and Poe 1980; McCornack and Levine 1990; Rosenthal and DePaulo 1979) reported that the experience in dealing with lies increases the confidence in the ability to identify them. This, however, does not correspond to an actual accuracy of the assessment. The only exception seems to be the American secret services (Ekman and O'Sullivan 1991). The possible influence of a deep relationship – like the one between partners, family members, or close friends – in detecting lies has also been explored. However, even in this specific case, the only variable that changes significantly is the declared level of confidence in being able to discover the lies of those who are

close to us. Yet, this does not show any positive correlation with the accuracy of the judgment (McCornack and Levine 1990). Rosenthal and DePaulo (1979) also investigated possible differences due to gender. The only significant result they reported is that men tend to be more suspicious than women, even if this does not mean that they are more skilled at exposing a lie. Toris and DePaulo (1984) conducted a study in order to verify if people were better at spotting a lie if they were notified of the possibility that they were lied to. Results showed that individuals become more suspicious, believing more people to be liars. Once again, yet, they were not more accurate in their judgments.

Starting from this evidence, we can conclude that a direct discovery of falsehood is impossible, mainly because we do not have the ability to read the minds of other people. However, we are potentially able to detect lying in an indirect way, relying on more or less reliable indices, although this ability is very complex and is usually rare to possess without a specific training. It is important to remember that no tool and no method is foolproof and that the best procedure involves the integration of multiple systems (analysis of nonverbal behavior and of content and consistency of communication, attention to contextual and cultural cues as well as to speaker's personality, and so on). Along this line, it has been proved that even when there are clues that are sufficiently clear to detect lying, most people do not use them (O'Sullivan 2009). However, it is important to stress that a proper training can significantly increase the ability to recognize clues that are associated with lying and to discern between truthful and false discourses. Paul Ekman has been studying for many years the most relevant behavioral clues related to lying. His studies helped him in developing a program to teach people to be able to recognize the micro-expressions that, within a communication flux, provide information about how the other speaker is going to behave. The micro-expressions are particularly useful to predict threatening and/or dangerous behaviors (Ekman 2009). Micro-expressions are closely linked to emotions. Ekman himself, along with other authors, showed that aphasic patients are particularly sensitive to these clues and this allows them to detect more accurately a lie (Etcoff et al. 2000). Emotions can challenge the liar, too: he/she may be betrayed by his/her emotions or may fail in the construction of the lie because of the influence of emotions. These two errors lead to qualitatively different behavioral indices as they are linked to different emotions: fear of being caught rather than guilt (Ekman and Frank 1993).

Deciding When Exposed to Possible Lies

We can assume that when we are facing a situation where there is the possibility that the person we are talking with is lying, we must determine whether we can trust him/her before taking any decision (Riva et al. 2014). To do this, we have to make inferences about his/her intentions. This can be done either through an immediate and holistic process or through a slower and analytical one (Iannello and Antonietti 2008). In other words, this may occur either through a rapid intuition or through a detailed and systematic examination of the person and the situation at hand. In the first case, the process resembles the formation of impression, whereas in the second case, the process involves a more logical assessment (Iannello et al. 2014). In this respect, intuition and analysis are conceived as different decision-making approaches (Stanovich and West 2000).

Slovic and colleagues (2002) have proposed a decision model based on the presence of two interacting cognitive processes: the analytical system, which is based on rules and on the decision maker's explicit control, and the intuitive system, based on impressions that arise automatically, without any special effort or intention. This system is activated immediately, together with the first reaction to a stimulus, which is often an affective reaction. In this regard, it is relevant to point out how the intuitive-affective reaction plays a key role in the perception of risk and benefit: if the people "like" a stimulus, they tend to underestimate the risks and overestimate the benefits; if they "do not like" it, they will probably assess the risk as very high and while considering

the benefits as being quite low. The process of judgment based on the affect feeling associated with the stimuli has been called by Slovic *affect heuristic* and is considered the key component of an intuitive decision.

Kahneman (1994) is another author who distinguished the choices based on emotional feeling (choosing by liking) from the comparative analysis of options typical of the normative choices (choosing by dominance). Whereas the last typology of choices considers the nature of the different options, the first one, based on the pleasantness, is mostly determined by emotional feelings associated with the alternative choices. We activate this strategy especially when lacking information to perform an effective assessment of the value of the stimulus (Hsee et al. 2005).

Some studies have shown that the individual mood may influence the decision-making process (Schwarz 2002). When we experience a negative mood, the decision-making process takes longer and is characterized by a greater attention to each attribute. When we are in a positive mood, instead, we tend to evaluate with greater shallowness, increasing the use of intuitive strategies.

An Example of a Complex Approach to Decision Making and Lying

As we have seen, when we have to take a decision while we may be deceived because our partner is lying, we tend to use both the intuitive processes (through which we try, by relying on our impressions and emotions, to understand if our partner is trustworthy) and the analytical processes (through which we examine the information we have about our partner from a rational standpoint). Personal characteristics play a major role, since they lead an individual to rely more on the former or the latter of the two kinds of processes. This specific decision-making process is therefore a complex process that requires a complex approach to be appropriately investigated. As an example of a psychological investigation of this process run by applying a complex approach, we report the case of a recent study (Colombo et al. 2013).

The experimental study of the relationships between lies and decision making requires the use of simplified tasks with respect to the daily life situations. In this specific study, a variant of the Ultimatum Game has been used. The Ultimatum Game (Powell 2003) is a task where a subject A (proposer) is given a sum of money and is asked to split it with another subject B (responder). B has the choice to accept or reject the proposed division. If the proposal is accepted, the split of the money becomes effective; if it is refused, both players receive nothing. This task involves both moral (fairness of the split) and economic (maximizing personal benefit but also reciprocity) considerations. According to the theory of rational choice, B should accept any sum A proposes, following the logic "better than nothing." Actually, research shows that many unfair offers are declined according to the principle of aversion to inequality. B, therefore, generally does not accept an offer that falls below half the amount.

In the experiment we are discussing, the participants, playing as proposers, saw six videos where six different people (the responders), balanced by gender and age, gave information about themselves. Information sometimes was false. In addition to deciding how to split the amount of money with the different responders, subjects were asked to express an opinion on the truthfulness of what each partner said while introducing himself/herself. Each character gave the same amount of relevant (e.g., "I am person who does not compromise") and nonrelevant (e.g., "I believe in values such as friendship and family") information about himself/herself. Only half of the sample has been given prior information concerning the possibility that respondents may have been lying. While the subjects performed the task, eye movements were recorded using an eye tracker, a noninvasive tool that uses infrared technology to study the relationship between eye movements and information processing. Before the experiment, participants were tested to assess specific personality traits (such as impulsivity) and their preferred decision-making style (whether intuitive or analytical).

A first result concerns how people tend to consider information they receive. Participants

judged as true what partners said about themselves in the majority of cases, confirming what already reported in the literature. Another data that corroborates findings of previous research is the difficulty in identifying a false communication. The subjects failed in this task in about half the cases. The type of instructions received, however, affected the behavior. As mentioned above, half of the sample did not receive any information about the possibility that some of the respondents could lie, whereas the other half was aware of this possibility. As expected, the subjects who were aware of the possible presence of liars changed their behaviors: on one side, they seemed to be more suspicious, while on the other side, this awareness seemed to promote positive feelings toward the partner who has been considered sincere. In any case, however, knowing about the possibility of being deceived did not improve the performance in terms of accuracy of the judgment of truthfulness.

Data also showed that impulsivity activates stereotypes – as is also reported in other studies (e.g., Baldi et al. 2013) – or distracts from the search of clues of deception, leading to bid higher to the responders. More reflexive people are more meticulous and more responsive to information that they receive. In this specific experiment, this led to propose a lower sum of money to the respondents. The influence of personality seemed to result in a greater emphasis on the perception of similarity or difference with respect to respondents. When participants were able to "get into the shoes" of the respondent or somehow considered him/her similar to themselves (maybe for similar age and same gender), people adopted a more rational approach in splitting the money. From the opposite perspective, the greater the perceived distance from the responder, the greater the difficulty to make a logical decision.

Another hypothesis of this study concerned the fact that the visual behavior could be unconsciously influenced by the variables mentioned above. Data from the eye tracker highlighted that the main attentional focus was always on the "person" (eyes, mouth, face, and torso) when individuals were looking for a lie. They seemed to focus mainly on the eyes, probably because they are considered as a point of reference to test whether the communication addressed to them is genuine or false.

Summarizing the data obtained from this study, it can be concluded that human being is by nature inclined to believe a communicational partner to be sincere and that, even if he/she is alerted about the possibility of receiving a false communication, he/she does not become more skilled or accurate in spotting a lie. Specific characteristics linked to personality and decision-making style appeared to play an important role: a greater impulsivity leads to the activation of a more automatic reasoning, diminishing the possibility of using a logical and rational thought.

In the same study, Colombo and colleagues (2013) also tried to modulate the choice through a technique of noninvasive brain stimulation, using the transcranial direct current stimulation (tDCS), which was applied on the prefrontal cortex. This area is well known for being involved in decision making. In previous studies (Antal et al. 2007; Kuo et al. 2013; Lang et al. 2004; Nitsche and Paulus 2001), it was reported that the application of this kind of stimulation is associated with a modulation of cortical excitability, which leads to an inhibition or activation of the stimulated area. The prefrontal area is specifically linked to inhibitory mechanisms (Bembich et al. 2014; Ding et al. 2014; Lee et al. 2014), so it was expected that the stimulation of this area could induce a change in the level of impulsivity and, consequently, in promoting the intuitive rather than the analytical approach (Iannello et al. 2014). Indeed the subjects, as a result of the stimulation of the prefrontal cortex, exhibited significantly different behavior. To be more specific, they seemed to become more rational. In the control (namely, no stimulation) condition, irrational behaviors emerged, like offering no money to the respondent to "punish him" for being dislikeable, not considering that acting this way they would not get anything, since the responder would obviously reject this partition. The stimulation of the prefrontal cortex, instead, led participants to rely on the relevant data supplied by the respondents, making the most of each detail.

Conclusions

Lying is something we deal with on a daily basis, even though most of the times we do not invest energy in order to discover either our interlocutor is sincere or not. Whenever we communicate with other people, sometimes we wonder if they are lying, because we are aware that lying is a characteristic of human beings. Nevertheless, the automatic and spontaneous hypotheses that we generate to assess the truthfulness of a statement are often misleading and do not lead to an accurate assessment. Our moods and personality, together with the level of trust between speakers, are all factors that can influence the detection of lies. Similarly, a careful assessment of information and how it is communicated does not guarantee the accuracy of judgment. Having said that, the ability to discover lies may increase with appropriate training and experience of dealing with people in contexts where the probability of being deceived is quite high.

In those fields – like law and economics – where the analysis of information received is critical, it is crucial to understand how the perception of lying can influence the judgment and, ultimately, the decision-making process. Regardless of the actual presence of a deceitful communication, when we are aware of the possibility that it occurs, a suspicious attitude can lead to a wrong judgment. Similarly, perceiving an alleged lie, whether it is real or not, can prompt the use of emotional heuristics linked to the perceived feelings of antipathy, anxiety, or anger. This can lead to decisions aimed at creating disadvantages for the partner. Under these circumstances, it is necessary to take into account the variety of human behavior, not relying on stereotypes to identify a lie. Being used to interact in particular contexts where the risk of being deceived is high may definitely help to sharpen the ability to find out who is lying to us, increasing the likelihood of taking rational choices based on reliable cues.

Cross-References

- ▶ Credibility
- ▶ Efficiency
- ▶ Good Faith and Game Theory

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Lighthouses

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Abstract

From being a symbol of the necessity for publicly financing public goods, since Coase's 1974 article "The lighthouse in economics" the lighthouse has instead become a symbol of the private sector's ability to provide public goods, and subsequently an archetype of a mistaken economic policy justified by "market failures." However, recent studies in economics, law, and history have uncovered different mixes of private and public finance in the provision of lighthouse services over time, exhibiting the practical problems involved in providing public goods.

Introduction

The lighthouse has long been cited as a locus for public intervention – at least since John Stuart

Mill (1848, p. 968), who referred to the difficulty of obtaining payments for such services. The example was taken up by Henry Sidgwick (1901, p. 406), who saw it as a free-rider problem (explained by a failure of appropriation). Arthur Cecil Pigou (1932, p. 184) reinterpreted it as a problem in which the social product is greater than the private product (nowadays called a positive externality). Paul Samuelson (1964, p. 159) cited the lighthouse as an example of external effect and public good (absence of exclusion and of rivalry). Kenneth Arrow (1969, pp. 146–147) added that even if these problems were solved, there would remain a problem of bilateral monopoly in the absence of competitive prices.

But in 1974 Ronald Coase described a system of lighthouse financing in England and Wales, from the sixteenth to the nineteenth century, in which private individuals embarked on financing, building, and maintaining numerous lighthouses, and obtained payments for this service. He thus laid claim to the lighthouse as an example of a standard, mistaken, approach in economic policy and, more generally, of economists' lack of concern for the real world. The lighthouse thus became the classic example of "the failure of market failure" (Zerbe and Mc Curdy 1999).

While widely repeated, Coase's conclusion was not totally accepted by Samuelson (who still cites the lighthouse as an example of a public good – see Samuelson and Nordhaus 2010), and it has systematically been called into question by lawyers, historians, and economists (Van Zandt 1993; Taylor 2001; Bertrand 2006): the old English system, it is argued, was neither truly private nor really efficient. This has renewed the debate over the nature and efficiency of the English lighthouse system among economists and historians (Barnett and Block 2007, 2009; Bertrand 2009; Block 2011; Carnis 2013, 2015; Lindberg 2013; Levitt 2016), and studies of other historical systems have flourished (Bertrand 2005; Lai et al. 2008a, b; Poder 2010; Lindberg 2015). This is a controversy about the different modes of financing and maintaining lighthouses that have actually existed (private, public, and other hybrid modalities) and their relative efficiency pursued in a truly Coasean spirit.

Coase and the Old Lighthouse System: A Possibility of Efficient Private Financing?

As related by Coase (1974), the history of English lighthouses is one of private entrepreneurs embarking on building and maintaining lighthouses in order to remedy public failures. Trinity House, a private charity in charge of lighthouses, was founded in 1514. At the beginning of the seventeenth century it was building very few lighthouses, and private individuals, supported by petitions from sailors and shipowners, obtained patents from the Sovereign allowing them to build lighthouses at specific places and collect corresponding payments (and excluding others from doing so). Similarly to the lighthouses of Trinity House, these "light dues" were collected by Customs officers in harbors on a ship's arrival, and their amount depended on the route and tonnage of that ship. From 1679 onwards, Trinity House itself, having obtained a patent, could grant its right to a private individual, generally on a rental basis. During the eighteenth century, it was mainly private individuals who built lighthouses. But as early as 1820, Trinity House began to buy "private" lighthouses at the request of the House of Commons; this process was completed in 1842. The House of Commons justified the centralization in the first half of the nineteenth century by the complexity of the system and the high level of dues that went into private pockets, damaging British vessels' competitiveness.

In the old English system, Coase sees the possibility for a private entrepreneur to finance and maintain a lighthouse with financial gain as his sole motive:

> The early history shows that, contrary to the belief of many economists, a lighthouse service can be provided by private enterprise. [. . .] The lighthouses were built, operated, financed and owned by private individuals, who could sell the lighthouse or dispose of it by bequest. The role of the government was limited to the establishment and enforcement of property rights in the lighthouse. The charges were collected at the ports by agents for the lighthouses. (Coase 1974, p. 375)

Reevaluation of the Nature and Efficiency of the Old English Lighthouse System

Coase's empirical material was subsequently reexamined, raising questions about his conclusions. His interpretation of the history of English lighthouses is marked by two forms of bias. First, Coase underestimates the role of public power in the old system of English lighthouses: this system was not strictly private but mixed. Van Zandt (1993, pp. 65–67) stressed that the patents granted by the Crown, or the leases granted by Trinity House, had three characteristics that distinguished them from a private system in which the Government's role is limited to the establishment and enforcement of property rights. The authorization to build and maintain a lighthouse (1) guaranteed a monopoly, (2) set the price of the service, and (3) involved the Crown in the collection of payments. These three aspects are interlinked, since price-setting was becoming necessary to protect users facing a monopoly, while the fixed price (as well as the contract duration and the sharing of the collected dues) determined the monopoly's rent and its distribution.

Second, Coase overestimates the efficiency of the direct relationship between producer and consumer. The service offered by this mixed system was considered expensive and complex, thus motivating the nineteenth century centralization (Taylor 2001). Moreover, the lighting provided by the lighthouses was often poor, and some were not even lit – since the fixed price meant that the only way to increase profits was to lower costs. In addition, the buildings themselves were sometimes erected by individuals who did not avail themselves of all the technical guarantees required. These problems were intensified by a certain form of corruption: patents were granted according to the Sovereign's goodwill, to those he or she favored or to those who offered him or her the greatest amount of money. It was even *because* the Sovereign obtained money when he or she authorized a private individual to build a lighthouse (money he or she would not have obtained if the authorization was granted to Trinity House) that he or she prevented Trinity House from building lighthouses (until 1679). The high cost of light dues is thus explained by its being a monopoly rent of which the Sovereign collected a share (Bertrand 2006; Carnis 2013).

The nationalization that occurred at the beginning of the nineteenth century was followed by a lowering of dues and an improvement in technology, mainly thanks to the fact that research on optics was now being undertaken by engineers (the Stevenson dynasty) at a national level. They worked in close cooperation with the French government and its engineers (Augustin, then Leonor Fresnel), and with French and English industrials (Soleil, which later became Sautter; and Chance Brothers) (see Elton 2009). In fact the centralization aimed at implementing the most recent innovations in lighting, which had been developed in France but were too expensive to be imported by private English owners (Levitt 2016).

The French Lighthouse System: The Advantages of Centralization

The French lighthouse system, which had been centralized at the end of the *Ancien Régime*, confirms the potential advantages of centralization when compared to the decentralized English system (therefore, in the period 1790–1830) (Bertrand 2005).

The French Revolution gave control of lighthouses and beacons to a service within the Ministry of the Navy, and the Empire then transferred this role to a Lighthouses Service, created in 1805 and falling under the *Direction des Ponts et Chaussées* (within the Ministry of the Interior). The control of this service was eventually granted to the Lighthouse commission, a "place of scientific and political deliberation" created in 1811 and composed of engineers, scientists, and naval officers (Guigueno 2001, p. 99; compared to Trinity House, which was made up of retired shipowners and honorary members). This commission explicitly thought of all the French coastal lighthouses as a system: its 1825 report planned a network of lighthouses along the French coasts. The French system was the source

from which the great technological innovations (like the Fresnel lens) were diffused. This technical superiority was linked to the administrative structure of the system, centralized and composed of engineers. Centralization opened the way to the testing of new techniques on several lighthouses before an authoritative application on all the coasts, which implied scale economies.

The two systems may therefore be opposed: on the one hand, the French centralized system, supervised by engineers and scientists, financed by general taxation, with building planned along the coasts according to a consistent national scheme; on the other, the pragmatic English system, more decentralized, supervised by honorary members, subject to favoritism, financed by light dues, and with the building of lighthouses determined by dramatic wrecks (Guigueno 2001, pp. 108–109).

While the French system of lighthouses is the archetype of the centralized model, it had not always been centralized. During the *Ancien Régime*, it was closer to the English dues system but with another mix of private and public that proved less efficient. We may take the example of the Cordouan lighthouse, in the Gironde estuary leading to Bordeaux, whose history is the best known (Bertrand and Guigueno 2016). This first French lighthouse was in fact the first *English* lighthouse: a tower was built there by the Black Prince, Edward of Woodstock, between 1360 and 1370. A document from 1409 testifies that dues were raised by a hermit to finance a reconstruction that had already become necessary. England would generalize the dues system for its lighthouses, as we have seen, and France would also retain it, but in a less efficient manner. During the fifteenth and sixteenth centuries dues were raised on ships entering the Gironde to finance a new lighthouse at Cordouan. Finally, after numerous complaints that dues were being raised although the tower was not being built, under the orders of the kings Henri III and then Henri IV, a new tower was designed by the architect Louis de Foix and completed in 1611: it was a Renaissance splendor, financed by dues and specific local taxes (at the municipal and regional levels). The situation rapidly deteriorated: dues were still being raised, but the tower was already in ruins at the beginning of Louis XIV's reign. Dues were then raised by a receiver in the name of a "governor of the tower of Cordouan" but apparently did not go to the lighthouse. An entrepreneur was commissioned to maintain the tower and the light; he obtained this charge by auction to the lowest bidder. To win it, he proposed too low an amount to cover the expenses linked to the maintenance of the tower and the furniture for lighting. This is why during the seventeenth and eighteenth centuries, the tower was often not lit. The lighthouses system began to be centralized at the end of the *Ancien Régime*: Tourtille-Sangrain then Teulère were sent by the King to improve the structure and the lighting of Cordouan. And dues were de facto abandoned in the last decade of the eighteenth century.

Conclusion

At the turn of the nineteenth century, lighthouses, which were more or less privately provided with the help of the state, were nationalized not only in England and France but also in Estonia (Poder 2010) and Sweden (Lindberg 2015). A change of lighting technology may explain this change. From local lights, made excludable because the harbor was a complementary good to the lighthouse service (Varian 1993), improvements in the technology of lights made coastal lighthouses possible: the lighthouse became nonexcludable, which accounts for its nature as a "public good." Finally, the existence of "private" (local) lighthouses in the old English system, as brought to light by Coase, does not refute the assertions of economists like Mill and Samuelson that (coastal) lighthouses could more efficiently be produced by the state (Levitt 2016).

Cross-References

- ▶ Coase, Ronald
- ▶ Market Failure: Analysis
- ▶ Market Failure: History
- ▶ Public Goods

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Limits of Contracts

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Synonyms

Behavioral law and economics of contract law

Definition

Limits of contracts refer to a number of exceptions in contract law to the rule that courts should fully enforce voluntary agreements between capable parties.

Introduction

Economic analysis and the rational actor model have dominated contract scholarship for at least a

generation. More recently, a group of behaviorists has challenged the ability of the rational choice model to account for contracting behavior. Numerous tests done by psychologists and experimental economics have shown that people often do not exhibit the kinds of reasoning ascribed to agents in rational choice models (Tversky and Kahneman 1974). Behavioral economics incorporates evidence of decision-making flaws that people exhibit to model consumer markets in which sophisticated firms interact with boundedly rational consumers. Behavioral law and economics uses existing scholarship in both cognitive psychology and behavioral economics to explain legal phenomena and to argue for legal reforms. For most of the legal scholars who apply behavioral approaches to contracts, evidence of cognitive biases provides at least a prima facie case for more paternalistic forms of legal intervention rather than strict reliance on freedom of contract. The premises of neoclassical law and economics push in the direction of freedom of contract: if parties are rational, they will enter contracts only when it is in their self-interest, and they will agree only to terms that make them better off; otherwise, they would not have voluntarily agreed to them (Posner 2003). Behavioral economics rejects the assumption that people are rational maximizers of their satisfactions in favor of assumptions of "bounded rationality," "bounded willpower," and "bounded self-interest" (Jolls et al. 1998). Bounded rationality refers to the fact that people have cognitive quirks that prevent them from processing information rationally, such as availability bias, overconfidence and overoptimism bias, the endowment effect, and status quo bias. The cognitive bias literature generally favors expanding the range of government regulation to address a wide variety of business practices that exploit the biases of consumers, or at least some consumers. Sunstein and Thaler (2003) advocate "libertarian paternalism," an approach that preserves freedom of choice, but encourages both private and public institutions to steer people in directions that will promote their own welfare. The new paternalist claim is that deliberate structuring of decision contexts – such as assigning appropriate default options, providing cooling-off periods for commitments, targeted disclosure, and so forth – can in principle enhance individuals' welfare. This contribution represents the behavioral account as well as the neoclassical economic account of a number of contractual practices, clauses, and rules. It includes the penalty clause, pro-consumer default rules, the cooling-off period, automatic renewal provisions, choice manipulation, add-on and multidimensional pricing, and contracts with deferred costs.

Penalty Clauses

One of the earliest applications of behavioral insights to contract law was made by Melvin Eisenberg (1995) who attributed the courts' reluctance to enforce penalty clauses to the limits of cognition. A penalty clause is a contractual provision that liquidates (fixes) damages in excess of the actual loss from contract breach. According to Eisenberg (1995), a special scrutiny of liquidated damages and penalty clauses is justified because such provisions are systematically more likely to be the product of limits of cognition. Parties at the bargaining stage are generally overoptimistic about their ability to perform and will sacrifice the detailed bargaining necessary to achieve an effective damage provision. The policy implication of this observation, according to Eisenberg, is that it is proper for courts to scrutinize these provisions more closely. Hillman (2000), however, argues that behavioral decision theory cannot resolve the puzzle of liquidated damages. Although some phenomena like overoptimism support the scrutiny of this provision, other cognitive heuristics and biases support strict enforcement of the provision. First, assuming that parties consider the default rule – here the award of expectation damages – as part of the status quo, contracting around the default and agreeing to liquidated damages suggest that the term must be very important for parties and that they bargained over the provision with care. Second, assuming that cognitively limited parties do not like ambiguity, they may prefer the safety of a liquidated damage provision over the uncertainty of expectation damages. Third, judges who exhibit

hindsight bias will overestimate the parties' abilities to calculate at the time of contracting the actual damages that would result from breach. Because judges will believe that the parties' remedial situation at the time of contracting was not ambiguous, judges will undervalue the importance the parties attach to the agreed-upon damage provision. For these behavioral reasons, courts should presume the enforceability of such provisions rather than making every effort to strike them out. Rachlinsky (2000) does not agree with these arguments. The status quo bias does not justify deference because the increased effort to bargain around the damage rule does not necessarily eliminate the effects of overoptimism. And although aversion to ambiguity justifies deference to liquidated damages, courts actually use this insight under the penalty doctrine by giving more deference to liquidated damages when damages are hard to calculate (and thus ambiguous). Eric Posner (2003) states that the behavioral account of the penalty doctrine cannot explain why the biases justify judicial scrutiny of liquidated damages but not other terms. If parties overlook low-probability events, then any contract term that makes obligations conditional on events that occur with a low probability could be defective on a behavioral account, but because they are not liquidated damages, actual courts do not subject them to scrutiny. The behavioral approach does not seem to explain existing contract law. It may also not provide a solid basis for normative recommendations for reforming contract law. Monumental floodgate problems would be created if courts were to police potentially all contract provisions to account for parties' irrationality in processing information. This would undermine contract law's goal of certainty and predictability (Hillman 2000).

The economic explanation for legal intervention rests on the argument that people tend to sign contracts without reading them (Goldberg 1974; Katz 1990). If contract drafters know that some parties will not read the document before signing, they can abuse that fact and incorporate clauses that benefit the drafter at the expense of the signers, with no corresponding welfare gains. Strict enforcement of contracts would imply a duty to read and understand contracts before signing. It is however costly to read, evaluate, and understand contract terms. There are costs of consulting an expert and costs of time spent in reading and trying to understand the small print. Since rational parties balance the costs and benefits from reading and understanding contracts, it can be rational not to read when the costs are higher than the expected gain that a person stands to reap from reading and understanding contracts. This is likely to be the case for reading and understanding the contract terms' implications for rare events. Research in psychology and behavioral economics which suggests that most people are poor at estimating probabilities correctly can enrich the analysis at this point. To the extent that they systematically underestimate the probability of a rare event, they are unlikely to invest in understanding what the contract stipulates for rare events. The signing-without-reading problem can be sensibly addressed by a legal prohibition of contract terms which rational and informed parties would never accept (De Geest 2002). Rational and informed parties would never accept a contract term of which the costs to the debtor are higher than the benefits to the creditor. The fact that such a term is nevertheless adopted in a contract is implicit evidence that one of the parties did not read or understand the contract (Rea 1984). De Geest and Wuyts (2000) have shown that penalty clauses are in most cases irrational, providing in this way an economic ground not to enforce them.

Pro-consumer Default Rules

Pro-consumer default rules are a consumer protection technique commonly employed in American contract law, but also in European contract law. Sticky default options are a growing trend in consumer protection law (Bar-Gill and Ben-Shahar 2013). Parties can opt out, but the procedure for these opt-outs is more rigorous and costly. For example, the Common European Sales Law (CESL) rules on product conformity set high warranty standards which can be circumvented, but any agreement derogating from the requirements to the detriment of the

consumer "is valid only, if, at the time of the conclusion of the contract, the consumer knew of the specific conditions of the goods or the digital content . . ." (art. 99 (3) CESL). The technique is also used in labor law to protect employees. The behavioral justification for changing default rules – and sometimes making the default costly to change – is that people are subject to framing effects. This means their decisions tend to be sensitive to seemingly irrelevant aspects of how the choice situation is framed. Probably the best known type of framing effect is the endowment effect (Kahneman et al. 1990), which refers to people's tendency to demand more compensation to give something up (their willingness to accept) than they would have paid to acquire the same thing (their willingness to pay). For rational agents, the default should not make a difference for choices (at least if transaction costs are low). But for less-rational agents, the default rule can matter. Employees, for example, might demand more compensation to eliminate a for cause termination clause than they would sacrifice to insert it. Sunstein and Thaler (2003) therefore suggest making "for cause" rather than "at will" the default employment termination rule. Yet behavioral theory does not provide policymakers with an answer to the question which default rule corresponds to the agent's true preferences.

According to Verkerke (2015), legislators may choose pro-consumer default rules for another reason: such defaults may be thought to serve the purpose of better informing parties about the legal rules which apply to the transaction. People often lack basic information about the legal rules governing particular transactions in which they are routinely involved. Abundant empirical evidence reveals widespread ignorance about many aspects of civil law. When people do not know important legal characteristics of the things they buy, their willingness to pay may not accurately reflect their true valuation of those products and services. Information-forcing default rules suggest a possible solution to this problem of legal ignorance. Lawmakers could determine whether one party has a comparative advantage in obtaining and communicating information about the law governing the transaction. Then they could select a default rule that disadvantages the better informed party knowing that the overwhelming majority of well-informed parties will opt out by drafting contract terms that meet certain standards for clarity. If so, a legal-information-forcing rule would force the comparatively better informed party either to reveal the relevant legal information or to accept a default rule that favors the less informed party. In order to escape the unfavorable default, the informed party must disclose information to her less well-informed contractual partner. Such a rule contrasts sharply with a conventional "majoritarian default" selected to mimic the terms that most parties would prefer for this type of transaction. However, if the purpose of these default rules is to convey legal information to all, or even many, unsophisticated parties, that objective is likely to be frustrated, according to Verkerke (2015). One salient fact about legal-information-forcing rules is that the targeted information is most often communicated in a standardized form contract such as a bill of sale, an employee handbook, a standard form insurance contract, a release of liability, or a rental agreement. Almost no one reads contracts carefully enough to digest the legal information that these default rules are designed to force, which may lead to the signing-without-reading problem. A legal requirement according to which opt-out is allowed only after the consumer expresses conscious, informed consent may be seen as procedural evidence (evidence about the circumstances of contracting) that there is no signing-without-reading problem (De Geest 2002). Ayres and Schwartz (2014) observe that consumers need not read to learn about prevailing contract terms. Instead, they form expectation about terms based on what they learn from store visits, read in the media, experience in their own transactions, and hear from friends. These beliefs may accurately correspond to the content of a particular contract. Or consumers may suffer from "term optimism" – a mistaken belief that a contract's terms are more favorable than the provisions actually included in its text. Ayres and Schwartz (2014) propose an elaborate contracting regime designed to combat term optimism. Their system would induce mass-market sellers to survey consumers periodically to

determine if those consumers correctly understood the terms of the seller's agreement – a process they call "term substantiation." Sellers then would be required to use a standardized warning box to disclose any terms that consumers mistakenly thought were more favorable. Terms that meet or exceed the median consumer's expectations would not have to be included in the warning box, to prevent overuse of the box. Behavioral support exists for targeted warnings instead of ever-expanding disclosures. People tend to read more when there is less to read ("less is more") and tend to take more relevant criteria for decision-making into account when there is less choice, a phenomenon called the "choice paradox."

Cooling-Off Periods

When cooling-off periods apply, contracts are not enforceable in the standard way, namely, from the moment the contract is concluded, but instead can freely be canceled within a certain time period after the conclusion of the contract. During the cooling-off period, consumers have the right to withdraw from the contract at no cost and for no reason, contrary to the general principle that contracts are binding (i.e., *pacta sunt servanda*). European law gives consumers the right to withdraw for a range of contracts for goods and services, such as doorstep selling transactions, time-share contracts, distance selling, and credit contracts (Eidenmüller 2011).

The behavioral support for cooling-off periods is the evidence that people make different decisions depending on whether they are in a "hot" or "cool" state (Loewenstein 2000). According to Sunstein and Thaler (2003), the essential rationale for cooling-off periods is that under the heat of the moment, consumers might make ill-considered or improvident decisions that they would not make if they were in a cool state. Both bounded rationality and bounded self-control are the underlying concerns. The legal provision of a cooling-off period allows the decision-maker to reconsider his decision once he is in a cooler mental state, but structures the decision context in other behaviorally relevant ways. The evaluation now takes place in a state where the decision-maker already possesses the goods. The endowment effect refers to the tendency of people to value things more when they own them (Thaler 1980). Status quo bias and the pervasive drive for consistency may render the cooling-off period inoperative (Hoeppner 2014). To create an optimal cooling-off policy justified on the basis of hot-state bias, policymakers need to know the extent of any given bias, the rate at which the particular hot state dissipates, and the self-debiasing measures adopted by individuals and have to deal with the problem of interdependent biases and heterogeneity in the population. Rizzo and Whitman (2009) argue that policymakers do not have access to all the knowledge needed to implement welfare-improving paternalistic policies.

There is also a plausible economic basis for the right to withdraw (Rekaiti and Van den Bergh 2000; Ben-Shahar and Posner 2011). The economic rationale for the right to withdraw is based on the fact that ex ante information costs (before the contract is concluded) may be higher than the information costs ex post when the consumer is able to inspect the goods he has in his possession. Faced with high ex ante information costs and immediate binding force of the contract, a consumer may rationally decide not to buy a good. This effect is unfortunate from the standpoint of both consumers and firms. Some welfare-enhancing transactions do not take place due to high transaction costs. The right to withdraw then exists to minimize information costs and will increase the number of transactions compared to the status quo ante. Buyers are more likely to buy a good if they have the right to return it if they do not like it. According to the neoclassical economic approach, a case can be made for making the right to withdraw the default rule for modern market transactions characterized by high ex ante information costs. There is however no need for legally mandated withdrawal rights since market parties have incentives to offer them voluntarily. As a matter of fact, many stores have return policies even when they are not legally required to have them. A legal mandate would remove the signaling-of-quality function that return policies may have.

Automatic Renewal Clauses

An automatic renewal clause is a contractual provision according to which a contract is automatically renewed for a new term unless it is canceled. From a behavioral perspective, an auto-renewal clause is considered to be a provision for automatic (default) enrollment in subscriptions and contracts whereby consumers are allowed to opt out, as opposed to the practice of manual renewal which is a practice of not enrolling consumers until they opt in. The behavioral case for default enrollment is based on inertia or status quo bias: the psychological tendency of people to maintain current arrangements, whatever they might be (Samuelson and Zeckhauser 1988). For example, adherence to pension savings plans has been found to increase dramatically when employees are enrolled automatically (Madrian and Shea 2001). That automatic enrollment leads to more enrollment is something which firms know when they adopt automatic renewal provisions in their contracts. Should the use of automatic renewal provisions in contracts be restricted on the ground that they may exploit behavioral biases? Not necessarily, because it may also be regarded as a genuine paternalistic measure to help overcome behavioral biases. Suppose that consumers often fail due to status quo bias to enroll under the manual renewal opt-in system, but they would choose to enroll if they simply took the time to think carefully; then, by offering an automatic renewal service, firms are acting paternalistically. However, strict enforcement of an automatic renewal provision implies the danger of renewal without notice. Consumers are not always aware of the fact that and when the contract will renew automatically. Therefore, they may fail to opt out when renewal is not in their best interest which results in allocative inefficiency. Firms may speculate on this fact when they include an automatic renewal clause in the contract. Legislators have addressed this danger of renewal without notice by requiring conspicuous disclosure of automatic renewal clauses and by requiring notice of renewal to be provided by firms a number of days in advance.

Choice Manipulation

An important finding of behavioral research is that values and preferences are not fixed, but depend on endowment, context, or the way in which a choice is presented – a phenomenon designated as "framing." The choices of a behavioral consumer can be manipulated. For example, due to anchoring bias, a particular choice might become much more attractive when placed next to a very unattractive one. It is well documented that many firms now hire consultants who advise them on how to better exploit behavioral biases of consumers. Such consultants may recommend, for instance, to use decoy pricing techniques. A decoy is a highly priced product that is not expected to be sold, but that only serves to make less-highly priced products look reasonable. Car dealers learn similar techniques to manipulate potential buyers. One such technique consists of asking a series of (irrelevant) questions to which customers are likely to answer "yes." Then customers are asked whether they would like to buy options for their new car. Apparently, more customers answer affirmatively when this technique is used. Consumers also are more likely to make a choice on buying extra car options when they were asked before to make a choice on an irrelevant matter. Apparently, once the brain is set into a choice modus, it is likely to continue to follow a pattern of choice while neglecting the possibility of not choosing (e.g., to not buy any extra options). These methods to mislead consumers would lose their effect if firms would have to reveal the fact that they try to exploit behavioral biases. According to De Geest (2014), modern law on information duties is best explained by the least-cost-information-gatherer principle. According to this principle, sellers should reveal information on all aspects of which they are the least-cost information gatherer, provided that the information is material. Information is material when the cost to produce and disclose the information is lower than its value to the buyer. Information is valuable when it can influence the recipient's decision to contract. Does this principle imply a duty to reveal the fact that one uses manipulative techniques? Clearly, the salesperson is the least-cost

information gatherer about her own use of manipulative techniques. But is this information material? Not in an ideal search process, where buyers can instantly see all products on the market, their features, their objectively tested quality, and their final prices. But in practice, search is often sequential or advice based. When search is sequential or advice based, much more information is material than price and quality, including information on the fact that manipulative techniques are used. De Geest (2014) concludes that sellers who use manipulative techniques should honestly reveal the fact that they use them. In the absence of such a duty, markets would be governed by the caveat emptor principle ("buyer beware"), which leads to allocative inefficiency, distributive distortions, wasteful precaution, and transaction avoidance.

Add-On and Multidimensional Pricing

In a wide range of plausible situations, firms systematically give the impression that the price is lower than it will in fact turn out to be. A common reason for this is that part of the service which many consumers will want is not included in the "headline" price used in marketing (Armstrong 2008). In many businesses, it is customary to advertise a base price for a product and to try to sell additional "add-ons" at high prices at the point of sale, such as extended warranties, shipping fees, and hotel phone and minibar charges in the hotel room. Add-on prices are not advertised, and they would be costly or difficult to learn before one arrives at the point of sale. For example, online, some auctioneers have tried to bury shipping costs deep in an item's description so that casual bidders will overlook the fee. A fraction of consumers (the "sophisticates") either observe or foresee the high price of the add-on product and can substitute away from it at little cost. They could decide in advance whether or not to buy the extended warranty, rather than have to make this decision under pressure from the sales assistant. Naive consumers do not consider that they may want the add-on product until they have purchased the main item. They fail to take add-ons into account when comparing product prices across firms. Gabaix and Laibson (2006) show that competition will not induce firms to educate the public about the add-on market, even when unshrouding is free. The reason for this is a phenomenon which they call the "curse of debiasing." Educating a consumer about competitors' add-on schemes effectively teaches that consumer how to profitably exploit those schemes, thereby making it impossible for the educating firm to profitably attract the newly educated consumers. From a policy perspective, they argue that regulators might compel disclosure or could warn consumers to pay attention to shrouded costs. The duty to disclose information in a conspicuous way (instead of shrouding information) can be supported on economic grounds. The practice of shrouding information is a violation of the principle that the least-cost information gatherer should disclose information in the most efficient way. The practice of hiding information and untimely disclosure artificially increases search costs for all consumers, not only the unsophisticated ones.

Oren-Bar-Gill (2004, 2006, 2008) points out that consumers face difficulties in assessing information about the true product price and quality in case of multidimensional pricing and bundling. Examples are rebates, credit card pricing, bundling of printers with ink, and intertemporal bundling in subscription markets like health clubs. In these cases, consumers need additional information about use patterns in order to assess the price and quality (value) of the contracts correctly. For example, in order to assess how expensive the combined purchase of printer and ink really is, the consumer needs to know the price of the printer and the price of an ink cartridge, but also how often he will need to replace the ink cartridge, which depends in turn on the frequency of his use. In order to assess the price and value of health club subscription, consumers need to know the subscription price and the quality of the club services, but also how often they will attend the health club. Consumers who misperceive their future use will make use-pattern mistakes. For example, consumers may overestimate their likelihood of redeeming their rebate, underestimate

the likelihood of paying their credit card bills late, underestimate the amount of printing, or overestimate the number of times that they will visit the health club. To the extent that these mistakes are systematic, they may be due to cognitive biases, like the overconfidence and overoptimism bias. Bar-Gill argues that the importance of use-pattern mistakes requires more and better use-pattern disclosure. In particular, sellers should be required to provide average or individualized use-pattern information. For example, the disclosure apparatus of credit cards should include the amount that an average consumer pays in late fees and how much the individual has paid in late fees over the last year.

Contracts with Deferred Costs

Bar-Gill (2012) shows how a firm that faces a market of myopic consumers can exploit this flaw. Firms can do this by stacking benefits of a contract at the beginning of the contract term and leaving the costs for later. Deferred costs exploit the intense preference that some consumer may have for immediate gratification. This myopia leads them to underestimate whether and how often they will fall prey to the deferred fees that many consumer contracts impose. When consumers evaluate agreements with up-front benefits and deferred costs, they may be tempted by the benefits – such as low introductory interest rates or a subsidized cell phone – while also believing that they will not have to pay the later costs. Bar-Gill adheres to disclosure as the most desirable means to remedy consumer myopia. Badawi (2014) is skeptical that disclosure will be an effective guard against myopia. More extreme measures may be necessary to prevent the harm that the weakness of the will might cause, just like Ulysses has asked his men to strap him to the ship's mast to prevent him from succumbing to the sirens. Bar-Gill points out that firms have little incentive to provide myopia-limiting products. Should legislators take paternalistic measures upon request? Any legal restriction on contract terms needs to be done cautiously, according to Badawi (2014). There are potentially welfare-enhancing reasons why firms might want to offer low introductory rates that increase substantially after a set period of time. A prohibition of the ability of firms to tantalize consumers with low introductory offers may harm the welfare of the rational, nonmyopic consumers. A behaviorist might see these marketing techniques as temptations to overconsume, while a pure rationalist might see them as attempts to induce an informed switch. How do we know what to do when theory can justify both intervention and the free-market status quo? According to Badawi, the lack of a clear answer to this question suggests that there is a pressing need for data that can discern whether rationality or myopia prevails. In the absence of such data, the decision to regulate or not will largely be a function of the strength of prior beliefs. In societies with a strong belief in the benefits of free markets, there will be more freedom of contract, but also more behavioral manipulation of consumers camouflaged as offering free choice (De Geest 2013).

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Liquidation Preference

▶ Absolute Priority

Litigation and Legal Expenses Insurance

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Abstract

Legal expenses insurance (LEI) covers all or a part of financial expenses occurring during a lawsuit, in exchange for the payment of a premium by the policyholder to the insurer. It makes access to justice less expensive by shifting the litigation costs from the litigant to the insurer. LEI covers many types of conflicts (labor litigations, consumer disputes, personal injuries, or medical malpractices), but some are generally excluded (divorces). LEI could have some significant effects on conflict resolution, not only for the litigants themselves but also for society. Thus, in the law and economics literature, three topics are generally studied: the consequences of LEI on conflict resolution and social welfare, the influence of the insurer in the litigation, and finally the access to justice by a comparative approach between LEI and legal aid and contingent fees.

Synonyms

Legal cost insurance; Legal insurance; Legal protection insurance

Definition

Legal expenses insurance (LEI) covers all or a part of financial expenses occurring during a lawsuit, in exchange for the payment of a premium by the policyholder to the insurer. There exist two types of LEI: on the one hand, before-the-event (BTE) which covers litigation costs that could be incurred in a future case, and on the other hand, after-the-event (ATE) which covers future legal expenses in a case that has already occurred (the economic literature only deals with BTE LEI, which is the most usual one). Insurers can propose a specific LEI policy or add this insurance to another one, for example, household insurance. This type of insurance covers many types of conflicts such as labor litigations, consumer disputes, personal injuries or medical malpractices, but some are generally excluded, such as divorces. In this respect, it does not constitute a perfect substitute for alternative financing for lawsuits (legal aid or contingent fees).

Introduction

Access to justice is costly for litigants (lawyers' fees, procedural costs, costs of appraisals, etc.). Some systems exist to make access to justice less expensive, among them legal expenses insurance that shifts the litigation costs from the litigant to an insurer. This system prevails in Europe whereas contingent fees, which are forbidden in most European countries, are the main alternative in the United States. Interest in LEI has risen with the increasing weight of legal aid in the budget of European States. Policymakers in many European countries (United Kingdom, France, Belgium, etc.) have tried to develop demand for LEI, which remains underdeveloped for several more or less relevant reasons: alternatives for access to justice (especially if legal aid is "relatively generous"), adverse selection if the insurer cannot identify the real risk of the policyholder, moral hazard if the insurance spurs the insured party to adopt a riskier behavior or to go to trial more frequently, positives externalities in terms of deterrence, and free rider problems for potential victims who have less incentive to be insured (Faure and De Mot 2012). Policies in favor of LEI attract the interest of law and economics scholars because LEI could have some significant effects on conflict resolution, not only for the litigants themselves but also for society. The law and economics literature can be divided into three parts: (1) authors who have developed economic models to study only the consequences of LEI on conflict resolution and social welfare, (2) authors who have studied the influence of the insurer in the litigation, and (3) authors who have adopted a comparative approach between LEI and alternative financing for access to justice, mainly legal aid and contingent fees.

Impact of LEI on Conflict Resolution and Social Welfare

Most authors study the consequences of legal expenses insurance on conflict resolution. Among them, Kirstein (2000) demonstrates that for the plaintiff LEI has a positive effect on his/her strategic position by making his/her threat to sue more credible, especially in cases with a negative expected value. More precisely, by decreasing the policyholder's legal costs, some cases with negative expected value might become positive and this makes the plaintiff's threat to sue credible. For cases with positive expected value, the negotiation gap widens (the plaintiff requests a higher amount while the defendant offers a lower amount because LEI covers their legal costs) and the amount of the agreement increases (the plaintiff's threat to sue becomes more credible).

Heyes et al. (2004) extend Kirstein's paper by studying the insurance decision of a risk-adverse plaintiff and the effects of this insurance on settlement amounts, settlement probabilities, volume of accidents and trials. They show that the plaintiff chooses to be insured if and only if he/she plans to refuse the defendant's offer. Conversely, he/she chooses to be uninsured if he/she plans to accept the agreement. The effects of LEI on the plaintiff's bargaining position explain this result. Indeed, LEI reduces his/her legal costs and thus increases his/her incentive to go to trial and to reject the defendant's offer. This higher bargaining power

can have a negative impact on settlement so that the probability of settlement decreases and the number of trials rises. Thus, LEI appears to encourage access to justice instead of alternative dispute resolution. But LEI could have a positive effect if these higher incentives to go to court increase the defendant's level of care. Finally, the overall effect is unknown and depends on the plaintiff's risk aversion. Consequently, LEI can increase or decrease social welfare.

Van Velthoven and van Wijck (2001) confirm that the effect of LEI on social welfare is uncertain because the deterrence is improved but at the same time, the number of trials increases. For liability cases, they explain that LEI makes the strategic position of the plaintiff stronger. The effect of LEI comes into play not only *ex post*, during the conflict, but also *ex ante*, where potential injurers will take greater care if they anticipate that plaintiffs are insured against litigation costs. Thus, LEI could have a preventive role and hence a positive impact on social welfare, but only if the expected prevention gains offset the losses of welfare due to the higher number of trials.

The Influence of the Insurer in the Litigation

Visscher and Schepens (2010) analyze the multiparty relationship in a conflict where the litigant has taken out a LEI policy. They explain that the specificity of this insurance lies in the joint presence of several actors: plaintiff, defendant, insurer, and lawyers. Interactions between these actors create conflicts of interest due to agency relationships where, for example, the plaintiff delegates the defense of his/her interests to a lawyer or an insurer. There could also be a specific relationship between the lawyer and the insurer, in particular if the insurer employs the lawyer (especially in the stage of bargaining in the shadow of the law). Visscher and Schepens (2010), like Kirstein (2000) and Heyes et al. (2004), confirm that LEI increases the credibility of the threat of trials by reducing the plaintiff's legal costs. The worst situation in terms of arrangement is where both litigants are insured: freed from their trial costs, both have more incentive to go before the judge. Nevertheless, the interests of the insurer have to be taken into account. The insurer's aim is to minimize the legal costs it covers. This is what is at stake in the agency relationship between the litigant and his/her insurer: the insurer may incite its uninformed client (on his/her rights or the actual compensation to which he/she is entitled) to accept an agreement, not always in his/her best interests but just to save legal costs. Visscher and Schepens add that the impact of this type of "disadvantageous" agreement for the insured on the reputation of the insurer may not constitute a safeguard against these practices.

Finally, Qiao (2013) takes into account the role of the insurer in the negotiations, studies the three-way relationship between the client, the lawyer, and the insurer, and determines the optimal LEI. He shows in particular that demand-side cost-sharing is necessary to design an optimal LEI. More precisely, the plaintiff is required to share the cost of the service received to mitigate his/her incentive to overuse the insurance.

Comparative Analysis Between LEI and Two Alternatives: Contingent Fees (CF) and Third-Party Litigation Funding (TBF)

Some other authors adopt a comparative and more normative approach. Their aim is to compare several systems whose aim is to allow access to justice and to determine which of them maximize social welfare.

In this perspective, to choose between two alternative systems, Baik and Kim (2007) compare the American practice of contingent fees with the European practice of legal expenses insurance. They introduce the role of the lawyer through the type of fees. They study the American system by considering that the plaintiff's lawyer works on a contingent-fee basis and the defendant's lawyer on an hourly fee basis. For the European practice with legal expenses insurance, the defendant may have to purchase a LEI policy and both lawyers work on an hourly fee basis. They show that the

plaintiff's expected payments are higher under a legal insurance system than under a contingent fee system but litigants' legal expenditures are also higher because the lawyers are likely to be more aggressive.

Friehe (2010) compares contingent fees and LEI, two systems which help liquidity-constrained litigants to finance their case. He generalizes the previous results by introducing the defendant's degree of fault. He finds that the performance of both regimes (in terms of expected plaintiff payoffs, plaintiff and defendant expenditures, total contest effort, incentives for delegation, and justice) is highly dependent on the defendant's fault.

Ancelot et al. (2012) extend the analysis of Heyes et al. (2004) by studying the consequences of a substitution between LEI and legal aid on conflict resolution. Their results differ significantly from those of Heyes et al. (2004) who study only LEI and show that LEI is taken out only by plaintiffs who anticipate going before the judge, regardless of their risk-aversion. The introduction of the choice between legal aid and LEI modifies the analysis. Indeed, the plaintiff can take out LEI even if he/she anticipates an arrangement or, conversely, prefers legal aid if he/she expects to go to trial. But they show also that the agreements accepted by plaintiffs if they are covered by LEI are superior to those required if they are beneficiaries of legal aid, regardless of their risk-aversion. Accordingly, under the authors' assumptions, legal aid seems more favorable to agreements than LEI, because it makes the plaintiffs less demanding (they accept a lower offer under legal aid than under LEI). The development of LEI could then appear desirable for litigants (who would obtain better arrangements) but not for the legislator if its aim is to reduce access to courts.

Moreover, in the same way that insurers want to encourage an out-of-court settlement in order to reduce their own costs, the lawyer who is poorly paid in a legal aid system may encourage agreement instead of judgment to avoid additive costs. Thus both legal aid and LEI may encourage their clients to settle the dispute even if it may be worthwhile for these clients to go to court. Everything is then played out within the agency relationship between the lawyer and the beneficiary in the case of legal laid, and the insured and the insurer in the case of LEI.

In an empirical study in the Netherlands, van Velthoven and Klein Haarhuis (2011) examine the relationship between the decision to use the justice system, whether or not with LEI, and the income of individuals (divided into three classes: those who can benefit only from legal aid, those who are eligible for legal aid but can also take out LEI, those who can only take out LEI). They show that, all other things being equal, the likelihood of using a judge is 11% higher for litigants insured through LEI than for the others. There are two reasons for this. First, there appears to be a selection effect in that individuals who have already had a case brought before the courts are more inclined to take out LEI. Secondly, there is a moral hazard problem since insured individuals are more likely to go before the judge, because LEI covers their costs of litigation.

Finally, Faure and De Mot (2012) compare LEI and Third-Party Financing Litigation (TPLF) with the idea that LEI could be a barrier to the development of TPFL. The answer is negative, mainly because LEI is underused in the United States and many European countries. Their analysis shows that TPFL is not necessarily worse than LEI in terms of volume of litigation, quality of litigation, or timing of settlements. Moreover, in Europe there is hostility towards TPFL, because the trial is considered as a risk rather than a way to enforce the law.

Conclusion

The impact of LEI on litigation is complex because several effects interact. Some authors examine its impact on litigation in a positive light. Others adopt a more normative approach and compare the effects on litigation of LEI relative to the effects of other avenues of conflict financing (legal aid, contingent fees, TPLF). Empirical studies are still too scarce to highlight the theoretical results. Moreover, LEI ought to be more developed in Europe where it is still underused.

Cross-References

- ▶ Legal Aid
- ▶ Third-Party Litigation Funding

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Litigation and Marital Property Rights

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Abstract

The article examines the function of marriage and associated incentive properties in relation to ancillary relief (often referred to as "settling up") following divorce. Many countries have experienced growing divorce rates, a decline in marriage, increased unmarried intimate cohabitation, and the delaying of marriage and childbirth to a later age. There has also been a recent increase in the pressure to extend marriage formalities to same-sex couples. All of these changes raise questions concerning the incentive structures attached to marriage and divorce. Major incentive issues arise whenever there is public-policy debate about changing the law of marriage and divorce with associated implications for litigation. It is vital to understand the economics underlying the debate since there is a danger that well-meant reform might lead to adverse unintended consequences.

Introduction

Over the past 50 years, many countries have experienced growing divorce rates, a decline in marriage, increased unmarried intimate cohabitation, and the delaying of marriage and childbirth to a later age. That commentary would once have been restricted to western societies, but the trends have begun to appear in developing economies: for example, the Chinese divorce rate increased by almost 13% in 2013 (*South China Morning Post*, March 11, 2015, "Heartbreaking news: China's divorce rate jumps 13pc as more choose to untie the knot."). In the USA, the divorce rate per thousand population has fallen in recent years, although as a result of marriage rates falling; the divorce rate per thousand marriages continues to rise (See data collected by the US Center for Disease Control at http://www.cdc.gov/nchs/nvss/marriage_divorce_tables.htm). These trends have caused concern, not least because of the unsettling nature of the apparent social instability. Additionally, and one might say curiously since heterosexuals are avoiding marriage, there has been a recent increase in the pressure to extend marriage formalities to same-sex couples. All of these changes raise questions concerning the incentive structures attached to marriage. Major incentive issues arise whenever there is public-policy debate about changing the law of marriage

and divorce with associated implications for litigation. It is vital to understand the economics underlying the debate because there is a danger that well-meant reform might lead to adverse unintended consequences.

Underlying the incentive structures in intimate partnerships, we find a potential for exploitation by at least one of the partners: a hold-up problem. This can arise if long-term promises induce detrimental reliance, such as one partner's giving up work to become a homemaker, in expectation of long-term benefits such as shared ownership of property and nonpecuniary benefits such as marital consortium. Under weak enforcement of promises, one partner could opportunistically make promises and then subsequently renege on them. The economic analysis of marriage and divorce has tended to focus on problems associated with the post-WWII easing of divorce law. Failure to enforce promises or compensate for breach by the promisor can create an adverse incentive structure identified as a "greener-grass" effect (Dnes 1998, 2011; Dnes and Rowthorn 2002). The effect is often associated with relatively wealthy men abandoning older wives. However, there is a comparable incentive for a dependent spouse to divorce if settlement payments, based on dependency, allow the serial collection of marital benefits without regard to the costs imposed on the other party: encouraging a "Black-Widow" effect (Dnes 1998). Two related issues concern contemporary unmarried cohabitation: (i) whether a lack of legal support for long-term relationship-specific "investments" results in low-quality commitment where more commitment could be beneficial and (ii) whether assimilating same-sex unions into marriage or marriage-like structures creates high-quality commitment signals, or whether these signals are irrelevant in such relationships (Dnes 2007).

Marriage and Opportunism

Becker's (1973, 1991) seminal work on the family is based on specialization and the division of labor within the household (Grossbard 2010) and does not really give a clear reason for the emergence of a state-sanctioned standardized marriage contract. One could just as well cohabit with a grandparent and achieve economies of specialism. The theory is based on a neoclassical approach to rational decision-making (Dnes 2009). It is possible that the hostility toward Becker's work exhibited by some sociological writers might be reduced by moving to a context-dependent, ecological view of rationality (Smith 2008), in which individuals use heuristics to economize on decision-making capacity. Becker's work has led to more recent bargaining theories of the family, which, however, could still relate to cohabitation as much as marriage (Friedberg and Stern 2014).

Cohen (1987, 2002, 2011) pioneered a contractual view of marriage that is firmly anchored in institutional economics and does give a distinctive reason for marriage rather than mere cohabitation: the suppression of opportunistic behavior connected to asymmetries in the life cycles of men and women. Divorce can then be seen as analogous to breach of contract, although it should be noted that marriage predated the development of modern contract law and that fault-based divorce is not exactly the same as breach of contract. For example, no-fault divorce is consistent with legally sanctioning one spouse's desertion, a breach. Furthermore, fault encompasses criminal and tortuous behavior such as assault that is subject to separate legal penalties (Ellman and Lohr 1997) likely to add to deterrence of the behavior. A purely contractual starting point for ancillary relief in divorce litigation would be very modern, although contractual elements can be found in the case law (Cohen 1987, p. 270). A contractual approach is also capable of considerable sophistication, particularly where inherently economic issues like asset division are at stake, or when examining signaling aspects of marriage (Dnes and Rowthorn 2002; Probert and Miles 2009). Finally in this regard, one could base the enforcement of marital obligations on quasi contract, i.e., recognizing the absence of a formal contract and using *equity* rather than *law* as the approach, and still reach much the same results.

Cohen (1987) notes that spouses exchange unusual promises of support where the value of

the support is affected by the attitude accompanying it. In a traditional marriage, domestic services provided by the wife frequently occur early on in the marriage, permitting the husband to concentrate on employment. The wife typically makes nonrecoverable, i.e., sunk, investments in child-rearing and homebuilding early on in the marriage. The traditional male's support will typically grow in value over the longer term. If the opportunities of the parties change, one of them may develop an incentive to breach the "contract." Divorce usually imposes costs on both parties, but costs are asymmetrically distributed in dissolving traditional marriages: the husband typically finds it easier to remarry or repartner (Cohen 1987; Kreider and Rose 2006), whereas the wife has incurred many sunk costs at an earlier stage.

There are both pecuniary and nonpecuniary benefits to marriage. A spouse's willingness to commit is satisfying evidence of love. Marriage also gives a means of protecting long-term investments in marital property. Spouses may be regarded as unique capital inputs in the production of a new output, namely, "the family." In particular, children are important marital outputs. A further instrumental gain is insurance: parties mutually support each other through the ups and downs of life forsaking the freedom to seek new partners, which is rational if the net gains from marriage are sufficiently high (Posner 1992). However, the gains from marriage are surpluses that arise after sunk investments have been made, which can tempt the less-tied-down spouse into opportunistic behavior, specifically into attempts to appropriate the product of the sunk investments. One spouse's incentives to appropriate the gains from marriage may well operate similarly to the incentives arising within joint business ventures (Klein et al. 1978).

Marriage-specific benefits such as the prospect of losing association with children are "hostages" (Raub 2009) that may suppress opportunistic exit from the marriage in some cases. However, judicial approaches to obligations like long-term support can easily lead to too much or too little divorce. This observation brings in the idea of an optimal level of divorce, which might be encapsulated in a rule like "let them divorce when the breaching party (the one who wants to leave, or who has committed a "marital offence") can compensate the victim of breach," but not otherwise. The underlying welfare perspective in the last sentence is the Kaldor-Hicks *utilitarian* approach of allowing a change when it will increase joint (i.e., social) welfare.

Marriage promises revolve around direct and instrumental benefits, bargaining influences (Lundberg and Pollak 1996), joint goods, marriage-specific investments, and incentives for opportunistic restructuring. Divorce law needs to suppress opportunism, or it may end up creating incentives for litigation and destabilizing marriage. Perceived instability in the marriage contract may then deter some from marrying: fewer marriages will occur than otherwise, and there may be less investment in activities such as child raising (Stevenson 2007).

The preservation of a very clear signal of commitment is particularly important in marriage, which may already be destabilized by inappropriate laws (Rowthorn 2002). Well-meaning legal reforms have tended to decouple obligations from fault in divorce cases, and in doing so have overlooked the importance of enforcing promises that support "investments" in the family. Rationally, it will be the economically weaker spouse who would alter behavior in the face of lower promissory enforcement, for example, increasing the time spent searching for a reliable spouse. Such a search-time effect has been observed empirically (Mechoulan 2006; Matouschek and Rasul 2008): introducing no-fault divorce settlements (as opposed to no-fault divorce rules per se) into US jurisdictions is statistically linked to increases in the age of first marriage. Some US states have responded to the perceived weakening of marital commitment with a "covenant marriage" movement, providing an option for alternative marriage rules making the exit rules tougher.

Divorce Litigation and Liability Rules

It is well known that breach of contract can be optimal, providing that the breaching party pays

compensation for the victim's lost expectation (Posner 2014; Parisi et al 2011). How far does this analogy carry over in a contractual view of marriage? Expectation damage, as the standard common-law remedy for breach of commercial contracts, has the characteristic of requiring the breaching party to pay compensation that places the victim of breach in the position they would have attained had the contract been completed (see Dnes 2005, p. 97). This requirement meets the Kaldor-Hicks welfare criterion since the gainer must gain more than the loser loses to be willing to make the change; the loser is as well off as before. The usual approach to a commercial contract breach also requires the victim to mitigate losses and does not compensate for avoidable losses. For the victim of marital breach, modeling ancillary relief on expectation damages would imply awarding the value of lost pecuniary support and lost nonpecuniary elements of promise such as consortium while making an allowance for the value of alternative occupations that may open up as a result of dissolution. The nonpecuniary elements do not present the inherent difficulties that might be anticipated since courts already make such calculations, for example, in tort cases involving the loss of a spouse.

Basing ancillary relief on court-imposed compensatory damages for lost expectancy applies just one kind of liability rule, in the terms used by Calabresi and Melamed (1972), and it is instructive to consider alternatives. In particular, the same welfare effects, in terms of deterring inefficient breach, could follow from awarding restitution damages aimed at disgorging the breaching party's gains back to the victim of breach. For simplicity, consider a case where the gains exceed the victim's lost expectation. Logically, the breaching party would still make the move if left with just enough of the gains to be slightly better off from divorce. The victim of breach could therefore be overcompensated, but, ignoring for the moment possible strategic considerations affecting the victim, the incentive to divorce for the breaching party would be just the same as under the expectancy liability rule. Therefore, a liability rule requiring compensation of at least the victim's lost expectancy and no more than the breaching party's gains can support efficient breach.

Awarding anything less than expectancy damages risks making divorce too "cheap" for the breaching party, and, indeed, depriving the victim of the value of promises. Undercompensation is likely to result from approaches based on compensating detrimental "reliance," which would follow from limiting ancillary relief to compensating for lost opportunities such as career options forgone through entering the marriage. The expectancy must have exceeded the reliance, or the spouse would have remained single. Similarly, restitution of "contributions" or combinations of contributions and reliance would tend to undercompensate.

Another approach to settling up after divorce could be based on specific performance, which is generally not favored in relation to commercial contracts mainly because of difficulties of supervision. However, Parkman (1992, 2002) has suggested basing divorce law on a specific-performance requirement for spouses to remain married unless they mutually agree to divorce, whenever they could bargain at low cost. The spouse wishing to leave would have to offer the other at least expectation damages to obtain consent. This approach follows a property rule in the terminology of Calabresi and Melamed (1972) and (Ayres 2005). Parkman claims that an advantage of the specific performance requirement is the avoidance of coercive divorce, although coercion would in fact also be avoided by a (superefficient) court able to carry out precise liability rule calculations. The bargaining might extract the equivalent of restitution damages ("how much can you part with to leave?") rather than expectancy, but would still lead to an efficient result (gainer still gains something after compensating loser). The economics literature on bargaining in the presence of incentives to appropriate gains from trade opportunistically does support the need for the vulnerable party to have complete bargaining power (Rosenkranz and Schmitz 2007).

Bargaining may be impeded by indivisible elements such as the value to parents of contact with children, described by Zelder (1993, 2009) as a marital public good. During marriage, both

parents can enjoy the company of their children, and one parent's enjoyment does not in general reduce the value of the other parent's contact. From a welfare perspective, we should add up both parents' enjoyment (heuristically assuming directly measurable welfare) in valuing the marital public good. Once they divorce, the value of parental contact with the children becomes separable and contact times change. It is possible that the intact marriage has a positive value because of the public good, but a parent without court-awarded child custody may not be able to transfer assets to the other to prevent the divorce. There may be few other assets in the marriage, and the parent with custody retains private enjoyment of the marital public good. This reflection leads to the Zelder paradox: the more the family invested in children, products of love rather than market-valued labor, the more likely is inefficient dissolution. Indivisibilities are also problematic in the more general analysis of suppressing opportunistic bargaining (Rosenkranz and Schmitz 2007).

Consideration of the autonomous welfare of children is not commonly undertaken in the literature on divorce, notwithstanding the UN Convention on the Rights of the Child and national legislation such as the UK's Children Acts. An exception is Bowles and Garoupa (2003), which treats the welfare effects of the divorce on the children of divorcing parents as an externality. As might be expected, a marriage that is no longer efficient from the point of view of the parents' joint welfare may still generate net social benefits if there is enough harm to the children from divorce. That comparison does however beg a nontechnical question that should actually be addressed more frequently in economics: whose preferences are to count? If, as in the common-law world traditionally, minor children are not recognized as possessing mature mental capacity, then the externality cannot be said to arise.

In family law, children's preferences have not typically been *generally* recognized (Cretney 2005; Ellman and Ellman 2008; Ellman et al 2014). It is easy to be misled by the UN Convention, adopted by all countries except the USA and Somalia, which appears to require courts to give primary consideration to children's welfare, but does this in a restricted sense falling far short of conferring autonomous enforceable rights. Similarly, the UK's Children Act 1989, which is good exemplar of national legislation, requires paramount consideration to be given to the welfare of children in matters relating to their *upbringing*. As Reece (1996) and Potter (2008) both point out, the primacy or paramountcy is required over a very narrow area and is to be sought by a court acting in the interests of the child, a somewhat indirect "voice." The UK Children and Families Act 2014 removed a residual power retained in the Matrimonial Causes Act 1973 under which the court could previously refuse a divorce decree if the court felt the harm to the family's children to be intolerably high. Family law tends not to regard children as fully autonomous "minds" and continues to acknowledge their general lack of capacity. Legal recognition of greater children's rights in divorce proceedings would require a showing, not only that there is an effect on children but also that we should recognize their capacity more.

Types of Intimate Cohabitation

Traditional Marriage

A traditionalist view of the marriage contract sees an exchange of lifetime support for the wife, in which she shares the standard of living of the *marriage*, for typically feminine domestic services such as housekeeping and child-rearing. Could the contract view easily include less traditional frameworks, such as modern marriages where the parties are more economically equal? The marriage contract appears to be a good example of a contract where performance of the parties is interdependent, and where consideration for performance remains executory (Parisi et al. 2011).

Consider first a lengthy traditional marriage that ends in divorce. The parties met early in life, and after some years the wife gave up work to have children and care for them. When she returned to work it was at a lower wage than previously. Then, after 20 years of marriage, the husband petitions for divorce on the grounds of

separation. Their assets have always been held jointly. On a contract approach to breach, the husband would be expected to share property and income to maintain the standard of living his ex-wife would have enjoyed for the *remainder* of the marriage (subject to any mitigation of loss that may be possible).

Expectation damages are identical to the minimum needed to buy the right to divorce under a system where divorce is only available by consent. The court would assess what that standard of living was and determine who had breached the contract by focusing on proximate causes. The fact that the divorced wife gave up work for a while, or now earns less than might have been the case without child-care responsibilities, is immaterial in finding expectation damages. Her own income would contribute to that expectation, as would her own share of the house and other assets and the combined decision-making of the spouses. The divorcing husband would be expected to contribute from his income and his share of the assets to provide that support for his ex-wife, regardless of the impact on his own lifestyle. Any requirement to maintain the standard of living of the children of the marriage could be dealt with separately by the court.

Under a contract approach, the courts would recreate the expected living standard of the wife by adjusting the property rights and income distribution of the parties at divorce. Fault would matter because the court would need to establish who the breaching party was, but this would not rule out calling some dissolutions "no-fault divorce," which is simply a compensable breach. Fault would be irrelevant in a system of mutual consent, where both parties negotiate a settlement stating that neither was at fault; where bargaining would safeguard expectations. The classical-contracting approach preserves incentives for the formation of traditional families, if that were considered important.

Classical contracting is also consistent with the simultaneous existence of separate legal obligations for the maintenance of children. However, it would only be consistent with a literal interpretation of the clean-break principle favored in much recent family law if sufficient property rights can be transferred to avoid the need for subsequent periodic payments. A classical-contract view would not be consistent with ultratraditional views emphasizing the sanctity of marriage, requiring specific performance, and creating *inalienable* rights.

Alternative approaches to expectation damages in ancillary relief tend to be based on partial views of social welfare. Feminist writers reject divorce rules that reinforce the dependency of women on men. Unfortunately, there is a real danger of lowering the welfare of women as a consequence of the push for independence. Of course, if one wanted to deter traditional marriage, undercompensating divorced traditional wives would do just that (Cohen 1987; Cohen and Wright 2011). Not all feminist writers in family law share the same views. Kay (1987) argues for measures to increase equality between males and females in their social roles. Others (Gilligan 1982) argue that men and women are different (women's art, women's ways of seeing, women's writing, and so on). Moves in divorce law to compensate spouses for career sacrifices have been sympathetically received by these groups, but actually give less-than-expectation damages, such as reliance or restitution (Trebilcock 1993). Such moves have been influential in the case law and legislation of several countries (Ellman 2007).

Modern Marriage and Unmarried Cohabitation

Separating awards of ancillary relief in divorce litigation from the issue of breach of contract is highly likely to encourage opportunistic behavior. However, for some commentators (e.g., Ellman 2007), expectation damages in marriage contracts imply lifetime support, which conflicts with a modern emphasis on equality between spouses. Another concern is encouraging costly protracted arguments over the identification of breach, although this concern may be relevant only when the court system is run largely from public funds. Would a more contractual approach to marriage resolve or amplify these issues?

The social norms surrounding intimate relationships have clearly changed in favor of serial

marriages and, indeed, unmarried cohabitation (Almond 2006). A 2015 report shows that 40% of childbirths are now outside of marriage in the USA, split 59% to 41% in favor of unmarried cohabiting parents compared with noncohabiting mothers (US Sees Rise in Unmarried Births, *Wall Street Journal,* March 10, 2015 access at http://www.wsj.com/articles/cohabiting-parents-at-record-high-1426010894). Marriage rates are falling, cohabitation rates are rising, and divorce rates are rising in many countries, suggesting that the view of marriage as a lifelong commitment may not correspond with the wishes of the population at large. Legal liberalization of divorce allows people to change their minds as circumstances change and to modify marriage promises. Is a more flexible view of marriage useful?

The evolution of marital law, at least in common-law jurisdictions, shows marriage to have been heavily influenced by surrounding social norms, in a manner consistent with modern legal scholarship on "relational" contracts, which are shaped by a surrounding minisociety of norms (Macneil 1978; Williamson 1985 and Macaulay 1991; Ellman et al 2014). Brinig (2000) has developed the idea of wider governance of the family into an approach emphasizing marriage as a covenant with wider society, in which family ties do not end with events like divorce but become modified as an ongoing franchise. That is a view that allows some elements of promise to persist separately when other elements are rescinded.

One approach to flexible marital covenants might be to encourage the use of clearer marriage contracts with the possibility of enforceable modifications that could be substitutes for divorce (Jones 2006; Brown and Fister 2012). The literature on contract modifications is extremely pessimistic over the prospect of welfare gain from enforcing *mutually agreed* modifications (Jolls 1997; Dnes 1995; Miceli 2002). It is difficult to distinguish good-faith revisions from those resulting from opportunistic behavior. Consider the difficulty in marriage contracts in distinguishing between a good-faith modification reflecting changing conditions underlying the marriage and the case, with no underlying change, where a party threatens to make a spouse's life difficult unless new terms are agreed. Contract modifications are more likely to be welfare enhancing if, in the context of unforeseen events, (i) there was a risk and it is not clear who is the lowest-cost bearer of that risk, (ii) the events were judged of too low a value to be worth considering in the contract, or (iii) neither party could possibly have borne the risk (Dnes 1995, p. 232). Generally, the view that supporting all requested modifications is desirable is unsound: there may be undesirable long-term instability as a result. Fewer people will make contracts when they cannot be protected from opportunism.

The court can determine whether some change was foreseeable and whether the attendant risk would have been clearly allocated: for example, one's spouse's aging is not a reason for scooting off without making compensation. On the other hand, mutually tiring of each other would have been hard to allocate to *one* party. Generally, the focus of family litigation can be expected to remain the division of benefits and obligations on divorce. Thus, there is some interest in matching ideas of relational contracting with practical rules for courts (Scott and Scott 1998). Macneil (1978) has suggested that complex long-term contracts are best regarded holistically in terms of the promissory relation as it has developed over time. An original contract document (e.g., marriage vows) would not necessarily be of more importance in the resolution of disputes than later events or altered norms.

A relational contract may be of limited help in designing practical solutions to divorce issues unless it is possible to fashion legal support for the relational contracting process. It is a fascinating challenge to put the idea of contractual flexibility together with the persistent caution of this article over the dangers of opportunistic behavior. Many problems of dividing marital assets arise because social norms have changed but the individual marriage partners failed to match the emerging marital norm. One major issue concerns marriage-dependent older wives who are likely to have specialized in domestic activities but will now be expected to be more self-reliant upon divorce. A possible approach to settling litigation would use expectation damages to guard against

opportunism but allow the interpretation of expectation to be governed by differing "vintages" of social norms. Consideration could also be given to making prenuptial, and postnuptial, agreements between spouses legally binding, which they are not in all jurisdictions. Some tailoring of marriage might be allowed, with couples choosing between *several* alternative forms of marital contract (e.g., traditional, partnership, or embodying restitution damages on divorce). A more flexible system of marriage and divorce could operate around a statutory obligation to meet the needs of children.

Cohabitation as an Imperfect Marriage Substitute

It is still early days in relation to explaining the growth in unmarried intimate cohabitation that has occurred in many societies (Almond 2006). One line of inquiry emphasizes the lower risk of loss of lifetime welfare following out-of-wedlock pregnancy that takes effect after the 1950s as birth control improved (Akerlof et al 1996). This change may have caused dominant female behavior to switch to taking more risks in unmarried relationships, and life-cycle asymmetries may have also become less marked relative to men. The obvious increase in female labor-market participation since WWII would also tend to lower the relative benefit from being insured within a traditional marriage.

Cohabitation is treated quite distinctly from marriage across all countries. The distinction is maintained in proposals from the American Law Institute to increase the protection afforded to unmarried partners in quasi-divorce litigation. The traditional common-law position is revealed in *Marvin v. Marvin* (122 Cal. Rptr. 815 [App. 1981], which is a case in a community property state), which holds that property settlements after cohabitation depend on discernible contracts and explicit or implied trusts. The position is similar in England and other countries that derive their legal systems from English common law. Statutory reforms in Canada, Australia, and New Zealand have edged the common-law world toward the continental European position of extending elements of family-law jurisdiction to the property settlements of unmarried cohabitants.

Is it appropriate to intervene in cohabitation arrangements that have been freely entered into by apparently rational adults (Probert and Miles 2009)? Questions can be raised about how rational or informed the parties are, and there is some evidence that many cohabitants have an erroneous view that cohabitation over a period of time leads to similar rights in law as those enjoyed by married couples (Brinig 2000). It is not clear that it is welfare enhancing as a general rule to intervene ex post in arrangements that resulted from unilateral mistake (Rasmussen and Rasmusen and Ayres 1993). If intervention were to protect relationship-specific investments, then the state would effectively be prohibiting unmarried cohabitation: it would simply be creating a further form of marriage. If the general problem is really ignorance, rather than intervene in arrangements, the state might limit its efforts to providing better information flows – as in a pilot scheme operated in 2007 in the UK. If men and women really are more equal in society, such that the life-cycle asymmetries discussed above are now much weakened, then it would be appropriate to worry less about imposing the protections of marriage upon cohabitants, who, after all, could have chosen to marry. Jones (2006) has gone so far as recommending the privatization of marriage - that is, recognition of individually tailored marriage contracts - given modern developments.

There may be firmer ground under concerns that adverse impacts on children follow from less stable relationships. Cohabitation typically dissolves more frequently than marriage. Suppose that cohabitation has grown because men can be held to marriage less easily by women, given all the social changes since the 1950s. Then choices are freely made, but subject, as ever, to constraints that alter the results of choice. It is legitimate to ask whether the characteristics of the resulting equilibrium are acceptable. Scholars such as Popenhoe (1996) and more general commentators such as Bartholomew (2006, p. 249) argue that some of the characteristics, particularly the results of growing fatherlessness for children, are not acceptable. Consideration of the external effects

of less stable relationships would lead to policies encouraging marriage rather than cohabitation: not really a basis for extending marriage-like ancillary relief rules to cohabitants.

Same-Sex Marriage

The litigation-related discussion surrounding marriage and cohabitation can be extended to same-sex relationships (Fandrey 2013). One important difference is that, whereas the heterosexual has always had a choice between marriage and cohabitation, the same-sex couple has not generally had this choice. Recently, many jurisdictions have extended marriage and divorce rights to same-sex couples. From an economic perspective, the recent extension raises the question whether same-sex marriage has the same functionality as heterosexual marriage, which seems unlikely. The question comes down to whether the spouses are subject to similar life-cycle asymmetries as those identified by Cohen (1987) for traditional couples There must be some probability that domestic investments are made asymmetrically by one partner in some same-sex unions, just as in heterosexual union, which, if true, would suggest extending something like marriage rights to same-sex couples (Dnes 2007). However, same-sex relationships appear to be characterized by considerably greater equality compared with traditional marriage (Kurdek 2004; Weisshaar 2014). In fact, equality is positively related to relationship commitment for same-sex couples (Kurdek).

It may therefore be a reasonable objection that there are very few same-sex couples with life-cycle asymmetries comparable to those of heterosexual couples in traditional marriages, which are anyway in decline. In jurisprudence, an argument that few people are affected by a condition is not in itself dispositive of a principle. We might still wish to protect even a small number of possible victims of opportunistic behavior, and support welfare-enhancing institutions even if they just affected a few. However, standing alone, that consideration would appear to open up further extensions of marriage, for example, allowing polygamists to marry.

A strong argument for caution over extending marriage rights to same-sex couples is given by Allen (2006, 2010), who notes the possible externality involved. The welfare of large sections of the population may be lowered by the existence of marriage forms of which they do not approve, and their welfare does count. Nonetheless, same-sex marriage may be becoming increasingly acceptable, which would weaken the effect of the externality as a limit on extending marital protection. From a welfare perspective, one can coherently argue that a loss of welfare across the population may outweigh the benefits of marital protection likely to affect very few same-sex spouses. Also, Allen's argument gives a plausible limit on extending marriage rights further. Even though some participants in polygamous relationships may be very vulnerable to opportunism from an economically dominant "spouse," there are so few polygamists that a widespread revulsion would indeed dominate as a welfare effect.

Conclusions

Sophisticated contract thinking suggests a case for an expectation-damages approach to divorce litigation encompassing ancillary relief (support obligations and asset division). This conclusion is founded on controlling the incentive for opportunistic behavior set up by the asymmetric life cycles of males and females in traditional marriages. Current divorce laws may encourage opportunistic behavior in both males and females that is predatory in nature.

The contractual view of marriage and divorce explored in this article is really a perspective that proceeds by useful analogy. Different vintages and varieties of marriage would need to be recognized in practice since few marriages are now of traditional type. The approach is also consistent with a separate system of liability for child support. Contract thinking also illuminates recent trends toward unmarried cohabitation and new forms of marriage.

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Litigation Decision

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Abstract

This entry provides an overview of the main economic models of settlement and litigation decisions. Starting from the basic models, as developed by Landes (J Law Econ 14:61–108, 1971), Posner (J Leg Stud (0047–2530) 2:399, 1973), and Gould (J Leg Stud, 279–300, 1973), we describe the evolution in literature toward the application of bargaining theory. Scholars, recognizing the existence of private information and strategic behavior, increasingly modeled the process of settlement negotiations.

Economic Modeling of the Decision to Sue or Settle

Literature concerning the economic analysis of settlement and litigation has been constantly evolving since the early 1970s of the past century. Prompted by the development of the first economic decision-making models by Landes (1971), Posner (1973), and Gould (1973), law and economics scholars have persistently researched the causes of litigation. Intuitively, one might expect that all disputes will be settled rather than litigated due to the desire to avoid substantial legal costs. Although the vast majority of disputes is resolved through settlement, a small proportion still ends up in court. By means of economic modeling, scholars have tried to identify the determinants of settlement failure.

Initially, scholars focused on the outcome of the decision-making process of rational disputants. Landes (1971) focused on criminal cases, Posner (1973) applied his framework to administrative proceedings, and Gould (1973) suggested

other applications such as labor-management disputes. The existence of a "settlement range" is at the heart of this research, which applies cooperative game theory to settlement and litigation decisions. According to this approach, a necessary condition for disputes to be settled out of court is a positive settlement range, which means the defendant's expected loss from trial exceeds the plaintiff's expected benefit from trial. However, this is not a sufficient condition since settlement negotiations can still break down because parties cannot agree on dividing the surplus.

Subsequently, Shavell (1982) described the two-stage nature of litigation. Before parties decide whether they will settle or proceed to trial, the plaintiff has to decide to file suit. According to Shavell (1982), a rational plaintiff will only file suit when his expected value of a trial is positive. Although the earlier articles assumed that the latter condition was always satisfied, more advanced models include strategic behavior. Even in case of a negative expected value of the lawsuit, plaintiffs may still extract a settlement offer from their opponent, due to informational asymmetries which may cause the defendant to wrongly believe that the plaintiff has a credible threat. The nature and existence of these "frivolous lawsuits" has been examined, for example, in Bebchuk (1987, 1996) and Katz (1990).

Initially, the analysis was restricted to the likelihood of disputes ending in court, rather than the successful settlement amounts. The main finding was that the critical component of settling is agreement on the likelihood of success. Although divergent estimates of the latter explained the occurrence of litigation in these models, the possible sources of divergence were not discussed. This was the purpose of the next bulk of papers, which abandoned the cooperative nature of the game. Law and economics scholars, such as Salant and Rest (1982), Ordover and Rubinstein (1983), and P'ng (1983), started including private information. While these first incomplete information models solely examined the determinants of the likelihood of settlement, Bebchuk (1984) expanded the analysis to the settlement amount.

The first asymmetric information models assumed one-sided information asymmetry and a take-it-or-leave-it offer by the uninformed party (i.e., a screening model). Subsequently, the framework was expanded by assuming that the informed party makes the first offer (see, e.g., Reinganum and Wilde (1986)). Successively, the assumption of a take-it-or-leave-it offer was abandoned by Spier (1992), who allowed for a sequence of offers. Other authors, such as Schweizer (1989) and Daughety and Reinganum (1994), considered a two-sided information asymmetry, where both the plaintiff and the defendant are privately informed about a certain element of the game.

Most litigation models take a positivistic approach and focus on the circumstances in which settlements break down, the amount for which parties settle, how procedural rules influence the likelihood of settlement, etc. Alternatively, the normative approach of other scholars examines whether litigation *should* occur (Sanchirico 2007). At the heart of this literature lies a distinction between the social cost of litigation and the private incentive to file suit. Externalities occur, on the one hand, because the plaintiff does not take into account the defendant's legal costs (negative externality), and, on the other hand, he does not consider the socially valuable precedents that the adjudication of his case creates (positive externality). The normative approach is considered, among others, in Posner (1973), Shavell (1981), Menell (1983), and Kaplow (1986).

The following section starts with the basic model of the decision-making process of (1) a plaintiff to file suit and (2) both plaintiff and defendant to settle or litigate. When a plaintiff files suit, disputants choose between settling the case out of court (at any time preceding a judgment) or to proceed to trial when negotiations break down. In the latter case, the dispute is resolved through a court verdict (Priest and Klein 1984).

Basic Decision-Making Model

This paragraph presents the basic economic decision-making model of litigation, as first

discussed by Landes (1971), Posner (1973), Gould (1973), and Shavell (1982). Section "Decision to Sue" elaborates on the decision to sue, while "Decision to Settle" focuses on the decision to settle.

Decision to Sue

Consider the example in which a pedestrian claims that injury was inflicted by an allegedly negligent car driver. First, the pedestrian has to decide whether or not to assert a claim. Following Shavell (1982), a rational plaintiff will decide to file suit based on the outcome of a recursively solved sequence game that weighs present costs (i.e., legal costs) against expected future benefits. When the expected value of the trial is positive (i.e., benefits outweigh costs), a rational plaintiff will file suit. For a risk neutral plaintiff, the expected value of the trial (EVT) is determined by the value of a judgment in his favor (J) discounted by the probability of winning (P) minus his legal costs (C_p):

$$EVT = (P * J) - C_p \quad (1)$$

This model assumes that the plaintiff can perfectly assess the value of the parameters included. Suppose that the plaintiff has a 60% chance of winning 20.000 euro, which equals the damages endured, such as health-care expenditures (most authors assume that in case of a verdict favoring the plaintiff, the award will be equal to his damages, which are known by the judge after trial). Furthermore, the plaintiff expects to pay 2.000 euro of legal costs (e.g., court fees and costs of legal advice). The plaintiff thus expects to gain 10.000 euro from going to court, i.e., his expected benefits (20.000 euro * 0.6) minus his expected costs (2.000 euro). Given that the expected value of trial is positive, the plaintiff has a credible threat and will therefore sue. After the plaintiff has filed suit, disputants will have to decide whether they will settle the case out of court or proceed to trial.

Decision to Settle

During the bargaining phase that elapses between the filing of the suit and the start of the trial, parties can still decide to settle. This decision depends on the "threat values," i.e., the plaintiff's minimum settlement demand and the defendant's maximum settlement offer.

The defendant's highest settlement offer equals his expected loss from a trial minus his settlement costs (S_d). In turn, the expected loss consists of the value of an adverse judgment (J) discounted by the probability of losing (i.e., the plaintiff's winning probability (P)) and his legal costs (C_d).

$$ELT = (P * J) + C_d \quad (2)$$

Logically, the plaintiff's minimum settlement demand equals the expected value of a trial (see Eq. 1) plus his settlement costs (S_p). Consequently, a necessary condition for reaching settlement is $EVT + S_p < ELT - S_d$, or in other words:

$$(P * J) - C_p + S_p < (P * J) + C_d - S_d \quad (3)$$

Let us assume that settlement and litigation costs are, respectively, 500 euro and 2.000 euro for each party. Obviously, the settlement and litigation costs need not be identical for both parties, but we assume this for reasons of simplicity. The plaintiff's minimum settlement demand will then be 10.500 euro. Faced with an expected loss of 14.000 euro at trial ((0,6 * 20.000 euro) + 2.000), the defendants' maximum settlement offer is 13.500 euro. Consequently, parties can avoid a trial by settling for any amount between 10.500 and 13.500 euro, which is referred to as the settlement range. Logically, all the values comprised by the settlement range represent mutually beneficial outcomes.

The conditions for settlement (assuming perfect information) in Eq. 3 can be reformulated as follows:

$$S_p + S_d < C_p + C_d \quad (4)$$

Equation 4 shows that under perfect information (i.e., agreement of parties on the expected value of the judgment and the plaintiff's likelihood of prevailing), a settlement will always be reached.

In other words, $S_p + S_d < C_p + C_d$ will always be satisfied since trials are undeniably costlier. Note that it is not necessary that parties correctly estimate the expected value of the judgment and the plaintiff's likelihood of prevailing. Rather, their estimations must be consistent. Moreover, many scholars make the assumption that settlement costs are nonexistent because they are negligible compared to litigation costs (Cooter and Rubinfeld 1989).

Divergence in Expectations

Both the decision to sue and subsequently to settle or litigate depends on litigants' expectations. The previous section demonstrated that rational and risk neutral parties will not proceed to trial since the underlying condition ($C < S$) will not be satisfied. Nonetheless, many conflicts are brought to trial. One of the reasons for the occurrence of trials stems from the assumption made in section "Basic Decision-Making Model" that litigants have equal expectations about the probability of winning (P) and the value of the judgment (J). This assumption is relaxed in the following section. We start with diverging estimates of *winning probabilities* and proceed with deviating assessments of the *value of the judgment*.

At this point, we solely focus on diverging estimates of P and J as a cause of litigation, without explaining discrepancies. These reasons for diffuse distribution of lawsuit valuations are discussed in section "Causes of Divergent Expectations."

Plaintiff's Likelihood of Prevailing

As discussed in section "Basic Decision-Making Model," settlements will always occur when parties agree on the plaintiff's probability of prevailing and the value of a judgment. However, in reality, the plaintiff's assessment of winning a trial (P_p) might and, most likely will, differ from the defendant's (P_d).

In case of divergent estimates of winning probabilities, the condition for settlement in Eq. 3 that assumed $P_p = P_d$ becomes

$$\left(P_p * J\right) - C_p + S_p < \left(P_d * J\right) + C_d - S_d \quad (5)$$

or

$$\left(P_p - P_d\right) * J < \left(C_p + C_d\right) - \left(S_d + S_p\right) \quad (6)$$

Two situations may occur. First, if the plaintiff's estimation of prevailing is smaller than the defendant's ($P_p < P_d$), the left-hand side of Eq. 6 necessarily becomes negative. In this case, the condition for settlement is always satisfied, since litigation costs ($C_p + C_d$) are higher than settlement costs ($S_d + S_p$).

If, however, the plaintiff's estimated chance of winning exceeds the opponent's ($P_p > P_d$), his likelihood of going to trial enhances (Landes 1971). Whether this will eventually lead to a trial depends on the value of the judgment and the legal costs. Ceteris paribus, a higher award by the court will narrow the settlement range and increase the likelihood of trial. Higher litigation costs and lower settlement costs, however, have the opposite effect. Assume that the plaintiff estimates the likelihood of a judgment in his favor at 80% (i.e., P_p), while the defendant estimates the likelihood of a judgment in the favor of the plaintiff at 30% (i.e., P_d). In this case, the plaintiff's minimum demand is 14.500 euro, while the defendant's maximum offer is 7,500 euro. Hence, parties will be unable to reach a settlement agreement.

Value of the Judgment

Not only winning probabilities (P) can diverge but also valuations of the judgment (J); for reasons, we will discuss in section "Causes of Divergent Expectations."

Ceteris paribus, divergent estimates of J result in the following condition for settlement:

$$\left(P * J_p\right) - C_p + S_p < \left(P * J_d\right) + C_d - S_d \quad (7)$$

or

$$\left(J_p - J_d\right) * P < \left(C_p + C_d\right) - \left(S_d + S_p\right) \quad (8)$$

Similar to diverging estimates of P, two scenarios are analyzed when parties have different estimates

of damages. First, if the plaintiff expects to gain less than the defendant expects to lose ($J_p < J_d$), the left-hand side of Eq. 8 becomes negative. It follows that the necessary condition for settlement will always be met, since litigation costs ($C_p + C_d$) are higher than settlement costs ($S_d + S_p$). In the opposite case ($J_p > J_d$), the plaintiff is relatively optimistic about the expected judgment and thus trial becomes a more favorable option. The occurrence of trial is dependent upon the likelihood of a plaintiff win and legal costs. Ceteris paribus, when the likelihood of a plaintiff win increases, the settlement range narrows and hence the likelihood of settlement decreases. Higher litigation costs and lower settlement costs have an opposite effect.

Causes of Divergent Expectations

The previous two paragraphs show that optimism ($J_p > J_d$ and $P_p > P_d$) can obstruct settlement. Naturally, the question remains *why* parties' estimations of trial outcomes may diverge, in other words, why optimism occurs. Recent models explicitly include the bargaining process. In contrast to the earlier models, they show that settlement negotiations may break down, even in case of a positive settlement range (e.g., because parties cannot agree on the division of the surplus). Three different models with perfect, imperfect, and asymmetric information are distinguished. Perfect information models (such as the basic model described in section "Basic Decision-Making Model") assume that there is no uncertainty concerning the value of damages, winning probabilities, legal costs, etc. As literature shows, deviations are possible even with perfect and identical information. This will be discussed in section "Perfect and Imperfect Information." Nonetheless, diverging assessments are usually considered a consequence of private information. Imperfect information models assume, on the one hand, that parties attach probabilities to uncertain parameters in the model. However, they have analogous insight into the distribution of these probabilities, indicating the symmetric character of uncertainty. On the other hand, asymmetric information models acknowledge that disputants assess probability distributions based on private information, meaning that uncertainty applies to these distributions as well. Section "Asymmetric Information" elaborates on asymmetric information as a cause of optimism.

Perfect and Imperfect Information

With perfect and imperfect (or symmetrical) information, causes of divergence cannot be attributed to informational considerations. In perfect information models, there exists no uncertainty, while under imperfect information, some symmetrical uncertainty occurs about the distribution of parametric probabilities (i.e., information is incomplete). The imperfect information models assume, for instance, that neither party knows the amount a judge would award. It follows that parties will use a probability distribution function to assess the likelihood of different values of damages awarded. While some simplified models assume that J can take on two values ("high" or "low"), others consider a range of possible values. As mentioned above, the uncertainty is assumed to be symmetric, meaning that parties have the same estimate of *expected* damages because they have the same information about the judge (Daughety 2000).

Perfect and imperfect information models assume that parties' expectations can still differ due to, for instance, a self-serving estimation bias. Hence, the divergence is a consequence of a difference in opinion, *given identical information* (Lederman 1998). In this case, a trial becomes a more favorable option for the plaintiff who is relatively optimistic about either a judgment in his favor (P) or the value of the judgment (J) (Landes 1971).

The drivers of self-serving estimation bias are of a psychological rather than economic nature. In general, individuals overestimate positive outcomes attributed to personal factors (e.g., the share of credit for a collaborative task or their own driving capabilities). Accordingly, parties of a dispute are likely to estimate their winning probabilities and the value of the claim in a self-serving manner (Loewenstein et al. 1993). In their experimental study, Loewenstein et al. (1993) examine parties' divergent estimates of winning probabilities and damages, while controlling for

the information about the case (i.e., there is no private information). The authors assign the self-serving bias mainly to the concept of fairness: disputants systematically overestimate parameters in their favor because they are concerned with reaching a fair settlement, rather than predicting estimates based on actual facts. Hovenkamp (1991), among others, attributes the cognitive bias to the concept of endowment, which states that individuals are willing to pay less to obtain some entitlement compared to what they are willing to accept to forsake that same entitlement.

Self-serving estimation bias aside, other factors can explain divergent assessments in the absence of uncertainty. Examples are disputant's risk preferences or discount rates. Although most studies assume risk neutrality and identical discount rates for both plaintiff and defendant, relaxing these assumptions can cause divergence of estimates. The most important assumptions that crucially impact the outcome of the decision-making model are discussed in section "Assumptions of the Decision-Making Model."

Asymmetric Information

The absence of informational structures and bargaining processes led the early models to conclude that the occurrence of optimism is the most important reason of settlement failure. A later bulk of papers expanded the original models by including the bargaining process and accounting for asymmetrical information, which in turn led to a better understanding of settlement breakdown (Bebchuk 1984). Interestingly, many predictions based on these advanced models contradict the outcomes of earlier nonstrategic studies.

In asymmetric information models, the existence of private information causes the assessment of probabilities to differ among parties. Most models apply one-sided information asymmetry, which involves one uninformed party who attaches probabilities to different values of one unknown parameter. The other party, on the contrary, is perfectly informed. Most authors state that damages (J) are known to the plaintiff but not to the defendant, while liability (P) is known to the defendant but not to the plaintiff (Daughety 2000; Salant and Rest 1982; Spier 1992). Furthermore, divergence in J does not only depend on the expected value of damages but also on private information about the judge, future performances of witnesses, etc. (Spier 1992). Last, some models apply asymmetric information to the aspect of legal costs (C) since the amount the opponent is prepared to spend is usually unknown.

Finally, private information does not only exist between defendants and plaintiffs but also between clients and their lawyers. This agency problem causes the attorney to maximize his own utility instead of his client's (Miller 1987; Hay 1996). For example, although a rapid settlement may be in the best interest of the client, an attorney may want to establish the reputation of a tough bargainer (Spier 1992). Furthermore, lawyers could be eager to maximize their own income by overestimating winning probabilities in order to persuade clients to go to court. The impact of fee structures plays a significant role in this agency problem (see, e.g., Emons 2000).

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Assumptions of the Decision-Making Model

The goal of modeling litigation decisions is to determine under which conditions disputes are settled. Obviously, results are very dependent upon the underlying assumptions. In this section, we elaborate on the most important assumptions that can crucially affect the results of the analysis.

Bargaining Games

The first models, which were based on perfect or imperfect information, applied non-Bayesian game theory to analyze settlement decisions (Polinsky and Shavell 2007). In a cooperative game, parties explicitly or implicitly commit themselves ex ante to reach an efficient solution ("no money is left on the table") (Daughety 2000). Although these models generally focus on the decision to settle instead of the settlement amount, some authors state that the surplus, which is determined by the settlement range, is evenly divided. This bargaining solution is used in, for example, Gould (1973), Landes (1971), and Posner (1973).

A cooperative game setting suffices in the perfect information case. However, under private information, the game is characterized by strategic behavior, such as deception and bluffing, since it is in the interest of the better informed party to exaggerate its claim (Salant and Rest 1982). A later flow of papers therefore applied a noncooperative game theory approach to allow for strategic behavior and inefficient outcomes (Cooter et al. 1982; P'ng 1983; Bebchuk 1984). In these cases, settlement negotiations may break down even though the settlement range is positive. Instead of one single cooperative solution, multiple equilibriums can be reached.

While some scholars have used simultaneous bargaining games, others have suggested a sequential game, in which the second mover is aware of the opponent's first offer. Indeed, "the process of bargaining, however, reveals information. In particular, the uninformed disputant may try to deduce the true state of nature from the actions of his informed opponent who, in turn, may attempt to exploit his initial advantage by manipulating the flow of information" (Salant and Rest 1982). Therefore, bargaining games with multiple periods allow for a learning effect and acknowledge that the uncertain parameters are determined endogenously (Salant and Rest 1982).

Furthermore, these sequential bargaining models also differ in which party moves first. In a signaling game, the informed party makes the first offer, whereas the uninformed party moves first in a screening game. Most authors assume information asymmetry concerning the likelihood of success at trial. The defendant can assess this parameter more accurately than the plaintiff, because he holds more information about his alleged liability. Consequently, the plaintiff is the uninformed party. However, when there is uncertainty about the damages, the plaintiff is usually the better informed party.

Risk Preferences

Most models assume risk neutrality of disputants. Gould (1973), however, showed that under risk aversion, settlement will always occur if disputants agree on winning probabilities. In case one party is risk averse and the other is a risk seeker, the solution depends on the relative curvature.

Value of the Judgment

In most litigation models, the stake of a trial, i.e., the amount awarded, is symmetrical. However, parties may anticipate different expected damages, even under perfect information, if, for example, they apply different discount rates. Furthermore, a certain judgment may have precedential value to one of the disputants (Posner 2014). Whenever there are long-term considerations (e.g., reputation), the outcome of trial does not solely consist of the monetary value of the damages (Daughety 2000).

Likelihood of Trial and Legal Costs

Basic litigation models often assumed that legal costs are fixed and exogenous. However, this assumption appears unrealistic since "[. . .] parties expend resources on legal research to produce arguments or favorable facts to a court or other decision-making body such as a jury or administrative agency" (Katz 1988). Furthermore, legal costs are more likely to be endogenous since parties' trial expenditures are dependent upon, among others, the stakes of the trial, their belief about winning the trial, their initial wealth, and their opponents' trial expenditures (Braeutigam et al. 1984; Choi and Sanchirico 2004; Posner 2014). In other words, the amount of money parties spend is itself the result of a noncooperative game in which they maximize the net benefits of trial (Polinsky and Shavell 2007). Analogously, estimates of winning probabilities are endogenous as well. As Gould (1973) described, winning probabilities are a function of the stakes of the case and the resources spent by each party.

Discount Rates and Court Delay

Court delay enters the settlement model since it obliges disputants to discount the expected damages. Basic models, only taking into account discounting by the plaintiff, assumed that delay decreased the value of the judgment and thus enhanced the likelihood of a settlement. However, the effect of delay on the value of J depends on the discount rate of each party. In case the defendant

invokes a higher discount rate than the plaintiff, the settlement range is impacted the most (Posner 1973). Furthermore, delay increases the plaintiff's winning probability as a consequence of diminishing quality of evidence (Vereeck and Mühl 2000). Consequently, the settlement range increases and litigation becomes less likely. Although delay increases the likelihood of settlement by reducing the stakes and the quality of evidence, an opposing effect exists because it increases uncertainty about the judgment (Posner 2014). In bargaining models, the impact of delay on the decision to settle is examined, as well as the timing of a possible settlement (Spier 1992).

Procedural Rules

Settlement models can also be used to analyze the effects of legal rules, such as trial cost allocation, on the likelihood of settlement. Under the "American rule," as applied in basic models, each party bears its own costs, whereas the loser pays all costs in a "British indemnity system" (Shavell 1982 (Shavell also discusses a system "favoring the plaintiff" and "favoring the defendant"); Bebchuk 1984; Braeutigam et al. 1984; Miller 1986; Cooter et al. 1982). "Offer-of-settlement" rules, on the contrary, allocate costs based on settlement offers: if a disputant refuses a settlement offer and is granted a lower award afterwards from judgment at trial, a compensation of the opponent could be imposed (Hay and Spier 1998; Daughety and Reinganum 1994). The effect of other procedural rules on the settlement decision has been examined as well. For example, the effect of discovery requirements and disclosure rules aimed at reducing information asymmetry (Bebchuk 1984; Cooter and Rubinfeld 1994; Hay 1994), rules on the burden of proof, and rules on alternative dispute resolution (Hay and Spier 1998).

Cross-References

- ▶ Choice Under Risk and Uncertainty
- ▶ Good Faith and Game Theory
- ▶ Legal Disputes
- ▶ Signalling

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Litigation Expenditures Under Alternative Liability Rules

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Abstract

For a long time there was a widespread consensus in the literature that a comparative negligence standard imposes higher administrative costs than a simple negligence standard and a contributory negligence standard. However, in a setting where the parties can choose their level of litigation expenditures and the litigation expenditures influence the outcome of the case, it can be shown that none of the negligence rules unambiguously leads to higher expenditures. Which rule creates larger expenditures strongly depends on the quality of the case (taking into account both the defendant's negligence and the plaintiff's negligence).

Introduction

Law and economics scholars have long debated the efficiency benefits of different negligence standards, mainly simple negligence, negligence with a defense of contributory negligence, and negligence with a defense of comparative negligence. Under a simple negligence rule, the injurer is liable if and only if his/her level of precaution is below the legal standard regardless of the precaution level exercised by the victim. Under a rule of (negligence with a defense of) contributory negligence, the negligent injurer escapes liability by proving that the victim's precaution fell short of the legal standard of care. Comparative negligence divides the cost of harm between the parties in proportion to the contribution of their negligence to the accident. A lively debate exists even to date as to whether comparative negligence or contributory negligence provides better incentives to adopt optimal care (see, e.g., Artigot i Golobardes and Pomar 2009; Bar-Gill and Ben-Shahar 2003). Whereas the efficiency-promoting aspects of various tort standards remain a controversial matter, for a long time there was a widespread consensus that a comparative negligence standard imposes higher administrative costs than a simple negligence standard (Landes and Posner 1987; White 1989) or a contributory negligence standard (Shavell 1987; Bar-Gill and Ben-Shahar 2001). White (1989), for instance, argues that a comparative negligence standard likely generates higher litigation and administrative costs than contributory negligence because courts must assess the degree of

negligence by both parties and not just whether the parties were negligent. Recently, De Mot (2013) has argued that this wisdom clearly applies to settings involving fixed litigation costs but does not hold in a more realistic setting where the parties can choose their level of litigation expenditures and the litigation expenditures influence the outcome of the case (recent contributions to the economic literature on litigation stress the importance of treating litigation expenditures as endogenously determined. See Sanchirico (2007)). In the next sections "Expenditures Towards Establishing Negligence on Behalf of the Defendant," "Expenditures to Determine Negligence on Behalf of the Plaintiff," and "Total Expenditures and the Merits of the Claim," I compare the influence of the three negligence rules on expenditures in an intuitive, nonformal way. I first compare the expenditures towards establishing negligence of behalf of the defendant (section "Expenditures Towards Establishing Negligence on Behalf of the Defendant") and the plaintiff (section "Expenditures to Determine Negligence on Behalf of the Plaintiff"), after which I examine the total expenditures and how these vary with the quality of the case (section "Total Expenditures and the Merits of the Claim"). Section "Conclusion" concludes.

Expenditures Towards Establishing Negligence on Behalf of the Defendant

The litigation investments in determining negligence on behalf of the defendant are the highest under simple negligence, the lowest under contributory negligence, and somewhere in between for comparative negligence. Legal expenditures are highest under simple negligence because, unlike under contributory and comparative negligence, the plaintiff does not run the risk of being held liable himself. By contrast, when contributory and comparative negligence standards apply, the possibility that the plaintiff will be held liable reduces the expected benefit of the expenditures devoted to establishing negligence on behalf of the defendant. Intuitively, the value of spending additional resources on determining negligence by the defendant is lower under contributory and comparative because some (or *all* in the case of contributory negligence) of the damage is shifted to the plaintiff if the latter is held liable as well.

Next, the expected value of expenditures on determining the defendant's negligence is lower under contributory negligence than comparative negligence. There are two reasons for this. First, (only) under contributory negligence, expenditures into establishing negligence on behalf of the defendant have absolutely no value when the plaintiff is also found negligent. Second, additional investments may convince the court to conclude that the defendant's negligence is relatively large (or small). Under contributory negligence, the degree of negligence doesn't matter for the ultimate division of the loss. Under comparative negligence, however, it matters a great deal, because the relative degree of negligence influences the division of the loss.

Expenditures to Determine Negligence on Behalf of the Plaintiff

The expenditures to determine negligence on behalf of the plaintiff are obviously lowest under simple negligence. Under this rule, expenditures towards establishing negligence on behalf of the plaintiff equal 0 – since a simple negligence standard does not inquire into the care level of the plaintiff. The expenditures can be either larger or smaller under comparative negligence than under contributory negligence. Because the expected value of expenditures to establish or rebut a plaintiff's negligence is lower under comparative negligence than contributory negligence, the expenditures can be smaller under comparative negligence. That is because, if the plaintiff is held liable under contributory negligence, he or she bears the entire loss; whereas under comparative negligence, a plaintiff who is held negligent only bears part of the losses (if the defendant is also held negligent). On the contrary, the expenditures can also be larger under comparative negligence because under that rule additional investments can lead the court to conclude that the plaintiff's fault is relatively small (or large).

Total Expenditures and the Merits of the Claim

In a model with fixed expenditures, legal expenditures will always be larger under contributory negligence than under simple negligence since there are more issues for the court to decide under the former rule. However, in a model where litigation expenditures are endogenous, the total costs may be either lower or higher under a contributory negligence standard. While under simple negligence there are no expenditures to determine negligence on behalf of the plaintiff, the expenditures to determine negligence on behalf of the defendant are larger under this rule than under contributory negligence. Similarly, total trial expenditures can either be higher or lower under comparative negligence than under simple negligence.

Finally, are total trial expenditures always lower under contributory negligence than under comparative negligence? Whether the total expenditures are smaller under a comparative negligence standard than under contributory negligence depends on the relative strength of the issues. The stronger (weaker) the plaintiff's claim (taking both the defendant's and the plaintiff's behavior into account), the more likely it is that the expenditures will be smaller (higher) under comparative negligence than under contributory negligence. The intuition is the following. First, when the actual degree of fault of the defendant increases, the importance of the outcome of the issue of the plaintiff's negligence increases under both rules but more so under contributory negligence than under comparative negligence (because of the all-or-nothing character of contributory negligence). Second, when the actual level of fault of the plaintiff decreases, the importance of the outcome of the issue of the defendant's negligence increases under both rules but more so under contributory negligence than under comparative negligence (due to the sharing element of comparative negligence). Third, the greater the difference between the true levels of fault of the parties, the smaller the value of investing in trying to convince the court that one's level of fault was more modest. The effects of such investments are more heavily discounted when the difference between the levels of fault is relatively large. A simple example can illustrate this. Suppose we can represent the level of fault of the plaintiff by the number 0.2 and the defendant's level of fault by the number 0.8 and that the court uses the following formula to determine the plaintiff's share: $0.8/(0.8 + 0.2) = 0.8$. Now suppose the defendant can make an investment i that will reduce his level of fault (as ultimately perceived by the court) with 0.1 $(0.8-0.1 = 0.7)$. Then the plaintiff's share would equal $0.7/(0.7 + 0.2) = 0.78$. Now we look at a case in which the levels of fault are more close: 0.5 for the plaintiff and 0.8 for the defendant. The plaintiff's share will be $0.8/(0.8 + 0.5) = 0.62$. Clearly, the investment i, which again reduces the level of fault of the defendant with 0.1, has a greater payoff for the defendant in such a closer case: $0.7/(0.7 + 0.5) = 0.58$. So here we get a reduction of 0.04, while in the previous case the reduction was only 0.02. Clearly, there will be more investment in the latter type of cases.

Conclusion

When litigants can choose their level of litigation expenditures and these expenditures influence the outcome of the case, none of the negligence rules unambiguously leads to higher expenditures. Which rule creates larger expenditures strongly depends on the quality of the case, taking into account both the defendant's negligence and the plaintiff's negligence.

Cross-References

- ▶ Judicial Decision-Making
- ▶ Litigation Decision
- ▶ Rent Seeking
- ▶ Strict Liability Versus Negligence
- ▶ Tort Damages

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► Piracy, Modern Maritime