

Law and Economics for Civil Law Systems

'In this book, Professor Mackaay provides a wonderfully lucid and insightful elucidation of law and economics concepts as applied to civil law systems. Professor Mackaay's new book will substantially advance the study of economic analysis of law in civil law jurisdictions, as well as substantially enhancing opportunities for comparative law and economics research by scholars in common law jurisdictions.'

– Michael Trebilcock, University of Toronto, Canada

This unique volume presents the core ideas of law and economics for audiences primarily familiar with civil law systems.

Ejan Mackaay offers a comprehensive look at the essential points of economic reasoning, the Coase theorem, and legal institutions such as intellectual property, extra-contractual civil liability and contracts. The book's structure mirrors the way law is taught in civil law countries, with structured presentations, references to civil code articles paired with non-technical explanations, and limited reliance on graphs. This English-language version builds on the success of the author's 2008 French-language textbook on law and economics from a civil law perspective.

This pioneering volume fills a critical gap in the literature of law and economics, and will be an invaluable resource for lawyers and law students working in civil law systems.

Ejan Mackaay is Emeritus Professor of Law at the Université de Montréal and Fellow, at CIRANO, Canada.

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Preface

In lecturing on law and economics in Argentina, in Brazil and in Chile (the ABC of Latin America) I discovered a rapidly mounting interest in this approach to law in legal communities that seemed until recently rather sceptical of it. The legal systems in these countries are based on the civil law tradition. This poses the challenge of presenting concepts and methods developed in English and in a common law context to audiences used to civil law concepts. For a first contact with law and economics, having to cope at once with an unfamiliar language and with unfamiliar legal concepts may be a bit much for those not already well disposed towards the approach.

With my colleague Stéphane Rousseau, we faced this very problem with respect to French-speaking audiences and responded in 2008 with a textbook on law and economics in French, using civil law concepts.¹ That book has been well received in French-speaking countries. Presenting the new approach with familiar concepts seems to make an essential difference.

The present book aims to provide civil law audiences elsewhere with an overview of law and economics in English, but using civil law concepts. Compared to its French predecessor, it focuses on core civil law areas and is documented less elaborately. Its aim is similar: to provide a first contact with law and economics by showing its core ideas and methods of reasoning on a representative sample of civil law concepts and rules. If the overview succeeds in demonstrating the power of the approach for lawyers in all walks of legal life, it will open the door to the very ample and more advanced literature on the field in English. Hints for further reading will help the reader along this path.

I should like to thank audiences in the ABC-countries and in Europe for making me realise that there is a niche market for a book like this and for raising questions about earlier drafts of different chapters; and Alain Parent for stimulating discussions on a multitude of law and economics questions; Mary Baker who translated most of the French book, and will

¹ Mackaay, Ejan and Stéphane Rousseau, *Analyse économique du droit*, Paris/Montréal, Dalloz-Sirey/Éditions Thémis, 2008, (2nd ed.).

not recognise much in this one as it has been entirely rewritten. May all of them find here a bridge to the land I promised.

Ejan Mackaay

Introduction

CAN THE LAW DO EVERYTHING?

‘[...] it is a fundamental principle with the English Lawyers, that Parliament can do every thing, except making a Woman a Man, or a Man a Woman’ de Lolme wrote in 1771.¹ He meant to express the supremacy of the English Parliament. Two centuries on, medical science has advanced on making a Woman a Man, or a Man a Woman, and the power of Parliament is no longer considered as absolute as it then looked, but is limited by fundamental rights defined in constitutions, charters and international conventions that the courts have the power to apply against acts of Parliament.

But de Lolme’s saying lends itself to a different reading as well: law can do everything. To bring about any desired social effect, on this view, it suffices to legislate it. To judge by the staggering pace at which legislation is being produced these days, modern governments appear to draw their inspiration from this second reading. A positivist approach to law handily complements this line of thinking. Yet the very fact that such massive amounts of legislation appear to be necessary suggests that citizens are not playing the game; that law cannot produce every effect considered desirable.

AN EXAMPLE: MINIMUM WAGE LAWS

Consider, by way of example, legislation setting the minimum wage. It proceeds from the distressing observation that some persons cannot decently live on the wages they are making. The remedy seemed simple enough: oblige employers to pay a minimally acceptable wage to anyone they wish to hire.

The intention appears generous: help the least well-off. Yet what is the effect? The contribution of some workers to a firm’s output – which sets the upper limit of what the employer can afford to pay a worker – may in some instances be less than the newly set minimum wage. Where this is so,

¹ De Lolme 1784.

those who now employ persons below the minimum wage will have to let some of them go and may hire fewer new workers. They may bring in more machines to replace labour that has become more expensive.

One can of course extend government control to cover layoffs as well, but this merely displaces the problem. Obstacles to firing persons will translate into a disincentive to hire them in the first place; no employer likes to be stuck with labour considered too expensive for the job. All in all, the effect of a minimum wage law will be to reduce the number of jobs available, but reserve them to persons who are better qualified and earn higher wages; and it will give incentives to employers to automate more than they would otherwise think apposite.

Which workers are affected? Principally the young who are entering the labour market and have no work experience yet, and in some cases, those who re-enter the labour market after a long absence, for instance to raise a family. The minimum wage increases unemployment amongst these groups. It may give them incentives to look for work in the grey or black market (including the distribution of drugs), where labour is not subject to the minimum wage.

These predictions can be empirically verified and this has been done in numerous studies covering many different countries. The results confirm the predictions: a 10 per cent increase of the minimum wage leads to an average increase of over one per cent in the unemployment rate amongst the young and those re-entering the labour market. Moreover, the poorest households are unlikely to benefit from the increase.²

Unemployment of 20 per cent and higher amongst young persons has dramatic long-term consequences, as it may prevent many from acquiring, whilst accepting modest entry wages, the experience that will allow them to climb the social ladder to more responsible and remunerative work. It may entail long term unemployment, which is particularly demoralising and may have dramatic social consequences, such as violent riots. There is a link between the minimum wage and welfare payments offered to the indigent. Welfare payments, presumably part of the same safety net as the minimum wage, would tend to rise along with the minimum wage. As welfare payments are raised, certain low wage positions no longer look attractive: why work if you can get virtually the same money without

² See for instance http://en.wikipedia.org/wiki/Minimum_wage and papers given at a June 2009 Conference organised by IZA (Institute for the Study of Labor) in Bonn, Germany: http://www.iza.org/index_html?mainframe=http%3A//www.iza.org/conference_files/EMW2009/viewProgram%3Fconf_id%3D1657&topSelect=events&subSelect=conferences.

working? Personal dignity and work ethic will not withstand this logic for very long. Certain jobs are 'priced out of the market'.

These are surely not the effects sought by the well-intentioned who hope to help the poorest by raising the minimum wage. But they are the foreseeable consequences of that policy. Why then do western governments regularly vote such increases? Ignorance cannot be the explanation.

In looking for an answer, it is worth asking who gains by these developments. Some groups may have an interest in making some low-paying jobs disappear. These groups are 'organised (mostly unionised) labour'. A minimum wage rise may reduce overall employment, but it will raise the wage level for the remaining jobs immediately above that level and may be used in collective negotiations as a benchmark. Moreover, for employers it becomes less attractive to hire unskilled workers; they will instead automate more and hire better-trained workers at higher wages. For these workers competition from unskilled workers is reduced, providing them with greater job security. In this light, increases of the minimum wage are in the interest of labour unions; in empirical studies they are shown to be staunch supporters of such increases.

The matter of the appropriate level of the minimum wage should hence be analysed not so much in the labour market as in the 'political market'. If some stand to gain and others to lose as a result of a policy, the question is whom the politicians are most likely to listen to. On this score, 'organised labour' is much better placed than the unorganised unemployed, who are the victims of the minimum wage increase.

To be sure, the debate is not couched in terms of opposing interests; everything is presented as a matter of social justice and solidarity. Knowing the foreseeable effects of raising the minimum wage, one may well wonder why we should feel solidarity towards organised workers and not towards the others. At all events, it is obvious that the 'general interest' serves here as a cover for the pursuit of particular interests.

UNDERSTANDING THE LAW

The example of the minimum wage reminds us that law, like language, is not a gadget that can be fashioned at will. Persons are not passive pawns being moved by changes in rules to which they are subject. On the contrary, a change of rule will lead everyone to consider whether to adjust one's behaviour and in the affirmative, how. For a legal rule does not directly control individuals' behaviour; it merely attaches consequences to their actions. Individuals remain free to react as they wish, not necessarily in the way intended by the legislature framing the rule, yet accepting the

consequences of their choice. Adam Smith saw this clearly, writing more than two centuries ago that ‘in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it.’³

To understand the law, one has to understand the logic of the ‘pieces’ the law is deemed to govern. That means understanding humans and their interactions. It would allow one, first, accurately to foretell the effects of a new piece of legislation and to grasp why it may fail to attain the objectives held out for it. Individuals engage in ‘offsetting behaviour’ to compensate for patterns the law imposes upon them, thus undoing some of the intended effect.⁴ In the example of the minimum wage, raising it would predictably lead employers to hire fewer persons and this would raise overall unemployment, particularly amongst the most vulnerable.

Considering these effects, which are different from those apparently desired, may lead us, secondly, to ask why the increases are regularly voted. In the minimum wage example, this in turn would lead us to examine how legislation is adopted and to abandon the angelic view of the legislature as being moved exclusively by the general interest, without regard to factional interests.

Thirdly, the assessment of the foreseeable, yet sometimes deleterious, effects of a new rule would direct our attention to the role of existing institutions and make us realise the ‘collective wisdom’ they may embody. In the case of the minimum wage, this may mean looking at the role of wages and prices in general: they constitute signals, pointing workers to the interest of working in particular sectors at particular jobs, and employers to the cost of employing a particular worker to produce a particular good or service – as opposed to producing it differently or producing something altogether different. Intervening in the prices, as does raising the minimum wage, redirects the decisions of those relying on those prices as signals. The experience of the former socialist economies shows just how vast are the ramifications of setting prices arbitrarily and how disastrous the results can be for ordinary citizens. The process by which prices are arrived at in a market economy and the prerequisite institutions – public order; repression of fraud; protection of property rights and contracts; stability of money – embody a wisdom that lawyers would ignore at the peril of civil society in a free social order.

³ Smith 1790, 234 (Part VI, section II, chap. II, § 17, in fine).

⁴ Peltzman 2007, 188.

LAW AND ECONOMICS: NATURE AND METHOD

The economic analysis of law proposes to draw on economic concepts and methods to look at the law in this light. Is there not a danger in drawing on the social sciences to understand the law? Are we not letting the fox into the henhouse? It is worth pondering that question, considering some disastrous policies proposed to legal policy makers based on half-baked social science results. Consider the example of ‘bussing’ in the United States. That policy was adopted in the 1960s on the strength of sociological theory suggesting that learning in schools, especially for disadvantaged children, could be improved by having the proper social – in particular racial – mix in the classrooms. Bussing could help desegregation. Courts ordered School Boards to stop discriminating and adopt bussing programmes to accomplish it. By 1971, 77 per cent of Americans disapproved of the policy according to a Gallup poll; it intensified racial antagonism; and it did nothing to improve the scholastic results of young black students.⁵ By the 1990s the policy had generally been abandoned.

It is one thing to be alert to the dangers of borrowing from the social sciences, another to give up on it altogether. To be sure, one must seek assurances that the theories relied on are solid. Yet it would be foolish to deprive oneself of having recourse to them. The social sciences can provide lawyers with insights in human action and interaction; in many instances this will buttress their legal intuitions.

In this book we draw on economic concepts to produce such insights. The approach has come to be known as the economic analysis of law, or law and economics for short.

Linking law to economics will make some readers think of *economic law*. Economic law is a branch of law drawing together various strands of regulation of economic power: banks and money markets; competition; foreign trade; regulation of the professions; industry regulation; public utilities and state enterprises. To practise economic law, one has to draw on economic concepts, as the regulated subjects have a straightforward economic function.

Law and economics is quite different. It is not a field of law, but a *method* for understanding law through its social effects, teased out with the help of concepts and theory borrowed from economics. Its scope is much broader than that of economic law and in principle encompasses *all* branches of law. Law and economics seeks to uncover the underlying logic of all legal institutions. It holds that a uniform logic may underlie all fields

⁵ Sowell 1980, 300.

of law and offers the tools to recognise it in its different guises. This logic may be applied in fashioning rules for novel situations: the *dynamic* role of law and economics.

Law and economics brings to light a logic which decision-makers follow without necessarily expressing it in their reasons for judgement or even being aware of it, yet which constrains the results they can arrive at. It seeks to make this logic transparent to outside observers. In looking for transparency in the law, law and economics connects to what the best traditional legal scholarship aims to do: clarifying the underlying order of law as it is; offering tools for fashioning law to cope with novel situations.

Law and economics judges legal rules by their expected social effects, as opposed to their justice or fairness qualities. Legal rules affect the costs and benefits of particular courses of action open to individuals and as a result may change the attractiveness of some actions in comparison with others. Individuals may adjust their behaviour in response to those signals. Where a speed limit is imposed on a particular road, most drivers will reduce their speed to stay within the limit.

At the most basic level, the economic analysis of law can always help one spell out the main foreseeable consequences of a change in legal rules in terms of persons adapting their behaviour in response to that change; a second level of analysis aims to trace the rationale for existing rules; both of these uses were illustrated in the example of the minimum wage laws. A third use of law and economics is normative and focuses on the question of which rules we ought to have or whether existing rules are desirable or wise. Let us look briefly at each of these uses.

Level One: the Effects of Legal Rules

The first use of law and economics is to determine the main effects of a change of rule or, symmetrically, those of a rule that has been left unchanged. By way of example, for most of the 20th century, abortion was prohibited in nearly all developed countries, presumably in order to protect the sanctity of life. What were the effects of this prohibition? As the disturbing film *Vera Drake* sought to illustrate, for the well-off abortion was still available and could be performed under medically safe conditions, against suitable payment and a hypocritical procedure in which the operation would be justified as a medical necessity. For the poor, the story was altogether different; they only had recourse to back-street abortionists, operating under risky medical conditions with frequent mishaps, which could land one in hospital with potentially fatal infections. Abortionists were moreover subject to severe criminal sanctions if caught. The net effect of the prohibition was not to make abortion disappear, but

to drive it underground, leaving it less accessible, at greater human cost and above all with great discriminatory effect against the poor. Recent American studies observe a correlation between the permission to seek abortion following the 1973 US Supreme Court decision in *Roe v. Wade*⁶ and a subsequent drop in criminal behaviour in the latter part of the 20th century. They hypothesise that this may be due to fewer unwanted children being born and then raised in circumstances prone to lead to criminal behaviour.⁷

Another example – spoilt film. Imagine yourself living a half century or so ago, when photographs were still taken on film and developed at specialised stores. You organise a trip to the Canadian North to take pictures of the polar bears, which a popular monthly has agreed to buy from you. Upon your return you have the pictures developed at the local photo development shop. They mess up and spoil your pictures. Should you be able to claim the full cost of your trip to the North – Cdn \$100 000 or so – from them? Lawyers would reason here in terms of foreseeability and fairness. Since the development shop could not foresee damages of such magnitude, it would be unfair to hold them liable for them. Many Civil Codes reflect this principle by limiting damages in contract to those that were foreseen or foreseeable at the time of contracting, save cases of intention to cause harm or of gross negligence. The French Code says so in art. 1150, the Quebec Code in art. 1613.

Economists tackle the problem by examining the incentives flowing from holding one party or alternatively the other party liable. Let us look at this, leaving aside for the moment the possibility of shifting burdens between the parties through negotiation. If the development shop is liable, they may consider adopting elaborate precautions to avoid future mishaps of this sort and the ensuing liability. The cost of these precautions would have to be spread over all clients – all of them, because the store cannot distinguish – through the price of developing films. Since this liability is part of the law, one must presume that competing photo development agencies would adopt similar policies and hence that this would not change the nature of the competition. Alternatively the development shop may consider insuring itself for losses such as these, if this were the cheaper option. Again the customers would pay the cost in the form of higher prices. Whatever the shop's response, the customer gets off scot-free and need not take any special precaution against mishaps.

How do the incentives run if the customer is liable, that is, cannot claim

⁶ *Roe v. Wade*, 410 U.S. 113 (1973).

⁷ Donohue 2001 and 2004.

damages from the development shop? The customer now has a clear interest in exploring ways of reducing the risk. Knowing the legal rule before the trip, the customer is expected to consider options such as taking multiple shots with different cameras and having films developed at different agencies, as well as insurance for mishaps. The shop may not take any special precautions beyond what is necessary to ensure its good reputation with its client base in general.

What we have done here is to apply the idea of rational choice in individual decisions, in interactions with others and in markets to see what the foreseeable consequences of alternative rules are and to spot potential unintended side effects. Considering the practical implications of policies that look attractive at first blush but have unanticipated side effects may change one's views. Impact analysis of this sort can almost always be performed and is usually informative.

Let us look at the steps taken to perform the analysis. Different rules have different implications for the persons subject to them. The postulate of rational choice suggests that persons saddled with a risk or other potential burden the law places upon them in a contractual setting will undertake steps to reduce that burden, whereas their contract partners may do nothing. Depending on whether it is attributed to one party or to the other, the precautions either of them will undertake and the insurance they may underwrite will vary. A change of rule will cast its shadow on how parties will negotiate a deal or structure their long-term relationship and which persons they will want to deal with. All such effects are to be taken into consideration.

To trace these effects, it is usually helpful to contrast a rule with its opposite or with an earlier different rule: consider what the shop would do if liable for the risk, then what the customer would do. In proceeding as suggested, we implicitly build a basic *model* of the world in which individuals interact in the shadow of legal rules. The model abstracts, as all models do, from much practical detail of the real world in order to focus on what seems most relevant to the purpose at hand, here to understand the main effects of a legal rule. The model is suitable if it still captures the essence of what is being studied and provides insights not visible to the 'untrained eye'.

Economists are taught to formulate models in a more precise fashion, using mathematical language. This allows them to spell out more precisely the implications of the model and prepare the ground for empirical testing. While this may seem daunting to lawyers, they should remember that this merely extends the logic just sketched for our simple model. Teasing out the effects of legal rules is an essential step in all forms of economic analysis of law.

Level Two: the Rationale of Legal Rules

The second type of analysis moves on to consider the reasons why we have the rules we do – their objective or purpose to correct failures, mismatches, miscoordination that would occur without them. Knowing the objective, we may ask whether the rule is an adequate, or indeed the best, means of pursuing it. The rationale of a broad area of law infuses the way we look at concepts or doctrines that are part of it. For instance, if the overall rationale of civil liability law is taken to minimise the cost of mishaps and their prevention, we can examine the component doctrines of fault (negligence), causality, damages as proven, faculty of discernment, contributory negligence or strict liability to see how they make sense in this light.

Consider, by way of a more detailed example, the rule establishing limited liability for shareholders of commercial enterprises. At first blush, this rule might seem to give an unfair shake to ordinary creditors, increasing the risk that they will not recover their debts. But consider the alternative rule of shareholders being liable without restriction for the debts of the enterprise. If you are a wealthy shareholder owning a large portion of the shares of the enterprise, you stand to lose a good bit of your personal fortune should the enterprise become insolvent. This has two important consequences. First, in order to invest, you will want to be sure that the return on the capital you invest is high enough to offset the risk you assume of having to cover debts of an insolvent enterprise; a shareholder owning only a small number of shares is not exposed to the same level of risk and hence may be satisfied with a smaller return. You will want to supervise those who may affect this risk: other shareholders and managers. Where the company seeks to attract more capital and hence more shareholders, you may want a say in how much additional capital and which shareholders would be acceptable (pursuing policies not increasing your risk). All of this would make investing risky and time-consuming for the investor. Fewer ventures would go forward and hence fewer business opportunities would arise for those who would be ordinary creditors.

Now let us see how these considerations play out under limited liability. Since shareholders know their liability to be limited to the capital they undertake to supply, the risk is circumscribed. Shareholders can acquire shares in different companies so as to diversify their holdings and thereby reduce the overall level of risk they are exposed to. The risk per share now being circumscribed, the value of the share depends mostly on the expected profit, given the riskiness of the particular line of business. This in turn facilitates the creation of a market in which shares can be traded: sellers and buyers may attach somewhat different values to them, given their desire to diversify and the other shares they already hold in their

portfolios (why else would they trade?), but prices at which the shares are traded would converge on values reflecting all public information about the success of the enterprise's business plan by comparison with the industry as a whole. If the enterprise performs poorly, the share price will go down and make a take-over bid – and subsequent reorganisation – attractive for potential buyers. It is not necessary for every shareholder to keep a watchful eye over the enterprise's activities; it is sufficient that some do and trade on what they learn by supervising: share price movements will alert all takers to the perceived quality of management. Poor managers, being sacked after a takeover, will find their reputation blemished and hence the salaries they can command limited as they seek employment elsewhere. This would give them an incentive to provide the best management they can come up with. Overall, the limited liability rule reduces the costs for investors of providing capital, or symmetrically, the cost of attracting capital for enterprises needing it. The reduction of the cost of capital will make possible the realisation of business plans that might not be viable under unrestricted liability; in other words it will tend to encourage innovation.

What about ordinary creditors? More innovation means more business for them. They will incorporate the risk of not being paid in the price of their ware or services, taking into account that that risk is circumscribed given the multilateral supervision and incentives for good management resulting from the structures just discussed.

Overall these structures allow a greater number of entrepreneurial initiatives to go forward than would otherwise be possible. It is plausible to think that welfare improvements in a society (growth) are positively related to the amount of entrepreneurial risk – and hence innovation – undertaken. To sum up, our analysis suggests that the rule of limited liability of shareholders could be rationalised as tending to reduce the cost of capital.

It is easy to conceive of variants of this approach. Many rules of enterprise law may be explicable as safeguards for the providers of funds against misuse and other forms of opportunism by the managers actually handling the funds (all of this would tend to reduce the cost of capital). This problem must surely have been known in earlier times and so one may surmise that the Romans also faced it and developed rules for it in projects requiring substantial input of capital, such as colonisation of far-away locales. But no such rules have been transmitted to us in the codifications of Roman law. From here it is only one step to a doctoral research project – undertaken at my University – to trace the presence of such rules through descriptions of cases of abuse and remedies developed against it described or alluded to in later public speeches and historical accounts.

What have we done here? Our initial analysis gave us a view of the effects of the legal rule we have and alternative rules in a greatly simplified world. We have moved on to consider what happens when we add the frictions that are part of the real world: uncertainty about the future and risk, transactions costs of various kinds, limitations of human rationality known as bounded rationality, the workings of the political process which may deviate from the pursuit of the general interest.⁸ Some moves that may look tempting in the simplified view of the world may not be undertaken because of these frictions. Legal rules can often be rationalised as seeking to reduce such frictions and thereby to increase the range of exchanges and interactions individuals are willing to undertake.

One source of friction is prohibitive *transactions costs* – the costs of finding partners; getting to an agreement, in particular in large groups; making sure that contracts will be performed as agreed, against the temptation by some of making a ‘killing’ by opportunistically renegeing on an earlier commitment. Information asymmetries between parties to a contract may open the door to other forms of opportunism, such as free riding, public goods, moral hazard, holdouts, and to their prevention.

Transactions costs may evolve over time. Advances in transportation and communication technologies may change them. A rule that might have made sense as a correction for substantial transactions costs in earlier times may cease to be justified when these costs change. Regulation of sewage disposal, water, electricity, telecommunications that appeared justified so long as these industries looked like natural monopolies cease to be apposite when technical advances make us realise that these services can very well be offered on a competitive basis. Or, by way of an historical example of a startling change in transactions costs, consider how in 1978 new communications technologies made it possible for the first time to organise widespread grassroots opposition to the proposal for a tax increase in California, known at the time as proposition 13. The proposition was rejected during the subsequent referendum.

Bounded rationality, which behavioural economists have drawn attention to, is another source of friction. It may prevent individuals from correctly perceiving a gain they might make or a trap they might fall into; the legal rule being analysed may be designed to help individuals overcome the effects of these misperceptions, by mandating the provision of relevant information or prohibiting transactions considered potential traps.

Adding these refinements may not always be sufficient to give us a

⁸ On the enriched view of the world one gets by introducing these considerations, see Arcuri 2008.

clear picture of why we have the rules we do, as we saw in the example of minimum wage legislation. We may then have to bring in a different kind of refinement, namely the trappings of the political market. Some persons or organised groups may succeed in using the political process to gain advantages they could not realise in open exchange. In the case of minimum wage legislation, this seemed to give us an explanation for the regular increase of the minimum wage in spite of the foreseeable deleterious effects.

In bringing in these various refinements, we draw on a 'tool kit' of economic theory, scenarios, sequences of events or templates: individual rational choice and the limitations brought to light by behavioural economics research, interactions amongst individuals as studied by game theory and in a more particular setting, microeconomic theory of markets and risk, slants introduced by recourse to the political process, appearance and traits of black markets, and so on. We can also use as 'templates' the analyses of particular legal institutions and the rationales discovered for their existence, set out in the second part of the book. These broad rationales, which are really, as we shall discover, expressions of efficiency in particular contexts, include: for civil liability rules, minimising the cost of accidents and their prevention; for property rights, providing incentives for good husbanding of scarce resources and for inventing new and profitable uses for them, so as to bring resources to their highest valued uses; for contract law, reducing transactions costs beyond what parties could themselves accomplish, by improving the allocation of risks between parties, discouraging strategic behaviour, encouraging exchange of information of various sorts, and so on.

The process of adding further detail to our model may have to be repeated once or several times before we reach a satisfactory analysis of the rule at hand. It may happen that different strands of the economic analysis of law point to opposite conclusions as regards the efficiency of a rule being analysed, as we shall see for instance later in the book in the case of intellectual property. If so, the controversy cannot be resolved by conceptual analysis and intuition alone. Only empirical analysis can then tell.

Empirical analysis is more complicated and time-consuming than the purely conceptual analysis referred to above. Keeping in mind what sort of data can be collected, one must spin out the theoretical model to state precisely what one should observe if the model were true, what if it were not. Where opposite predictions can be derived from different strands of the economic analysis of law, one should spell out what observations lend support to one thesis, what to the opposite one. An example of such an analysis in the field of consumer protection rules is provided by Wright, concluding that in most cases analysed consumers act more rationally

than behavioural economists predicted and hence that the protective rules studied turn out to be a cure costlier than the disease they were supposed to remedy.⁹

Empirical analysis requires a set of specialised skills: formulation of models, experimental (where one wishes to rely on laboratory experiments) or observational techniques (for field work), methods of data analysis, and so on. Current legal training in most places does not prepare lawyers for such tasks and hence lawyers will have to collaborate with economists for such research. Collaboration presupposes a common vocabulary in which to communicate objectives and results, and an understanding of what the other discipline is able to contribute.

While law and economics draws much of its current attraction from the insights provided by Level One conceptual analysis, it ultimately stands or falls with how well its models account for the reality we observe. The quality of the fit will have to be settled in the last resort by empirical work. Most fortunately, empirical analysis is taking a steadily growing place in the law and economics literature.

Level Three: the Desirability of Legal Rules

As we ran through our last example of limited liability of shareholders, we imperceptibly reached the boundary of the normative use of the law and economics, that is a judgement whether particular rules are desirable or wise, or which rule is best.

To clarify the point, let us return to our earlier analysis of the spoilt film. Common sense suggests that over the broad run of conceivable circumstances customers, having more intimate knowledge of the value of the film, are in a better position to take the appropriate precautions than the shop is. They are, in Calabresi's terms, the *cheapest cost avoiders*. As a simplifying rule that promises to minimise costs of mishaps in most instances, it makes sense to place the burden of precautions on those persons, as the French and Quebec Civil Code rule in fact does. In economic terms, on average no further rearrangement would promise to bring gains to both parties involved. Economic reasoning in terms of efficiency coincides here with the lawyer's intuition of fairness.

Conceivably there are circumstances in which this division of liability between the parties is not the best they themselves can think of. The development shop may be able to assume certain risks at a price below the cost they represent to their clients. The parties may differ in their ability to

⁹ See Wright 2007.

insure the risks that cannot usefully be prevented. This points to a different way for parties to cope with the risk, which is for the store to ask customers if their film requires special care and in the affirmative, to charge a higher price, or alternatively for the customer to take the initiative and reveal the high value of the film and ask for special care, or at what price the store is willing to guarantee flawless development. The parties may even agree on an amount of liquidated damages in advance. The point is that where parties are free to negotiate, they will tailor the contract to provide the division of precautions and risks which best corresponds to their willingness and ability to assume them. The shop will now adjust the price according to services and risk the client asks it to undertake. By negotiating a different arrangement, parties signal that they expect gains beyond what the standard rule promised. Unless we suspect frictions that distort the process, this rule is the best we can come up with and we should let it stand, as in fact the Codes do under the doctrine of freedom of contract.

Let us now reconsider the example of the limited liability of shareholders. Our analysis led us to the conclusion that it has the apparent rationale of reducing the cost of capital, and moreover that all players whose situation we summarily looked at appear to be better off under this rule than under its opposite. There appear to be no losers, which makes it easy to judge that it is the best possible rule. But the absence of losers is unusual. Most often a change of rule creates gains for some, losses for others. If so, we have to compare the gains and losses associated with the various conceivable rules and determine which has the greatest net advantage for society as a whole.

How do we gauge the various consequences of a rule to arrive at a single judgment about the rule, so that we can compare it with others? This question has given rise to considerable debate amongst economists. One proposal is to consider desirable any change of rule that produces a gain for all persons affected or, at worst, leaves their situation unchanged, but not worse. Such a change is called a *Pareto gain* (after the economist Vilfredo Pareto, who proposed the idea). Judging a rule change desirable in these circumstances should hardly be controversial since there are no losers, unless jealousy at other persons' improving their lot is accepted as a loss – but in the latter case hardly any change would ever be judged beneficial. The disadvantage of the Pareto criterion is that it is not very powerful: any change producing even one loser could not be judged desirable. Like a unanimity rule in collective decision-making processes, for practical policy-making purposes, this would be stifling.

To escape this difficulty, a modified criterion has been proposed to which the names of the economists Nicholas Kaldor and John Hicks are

associated. It provides that where the gains of a change more than offset the losses, the change should be judged desirable. If compensation were paid, one would have a Pareto gain. But making the winners actually compensate the losers is itself, where large numbers of persons are involved, a costly and hence possibly stifling procedure. As a result the criterion has been further refined to provide that for a change to be judged desirable, it suffices for the gains to be large enough to offset the losses, even if no compensation actually takes place. Arguably, as more changes of this sort go forward, economic activity will pick up and in the long run all players stand to gain by this.

All the same, this *potential compensation criterion* leaves the problem of determining a common denominator into which all gains and losses can be translated for the purpose of the determining the balance. Values – of gains and of losses – are subjective and unless persons are seen to trade at a particular price, an outsider cannot determine the values they attach to particular options. Market values for items that are readily available are at best a proxy; for more unique items even this indicator may not be available. Of course, courts in deciding on the compensation to award for wrongdoing face this very problem of affording a specific compensation, indeed an amount of money, on various losses of subjective value – a personal injury, the loss of a pet etc. The legal community everywhere is well aware of the trickiness of such judgements.

In spite of these drawbacks, the Kaldor-Hicks potential compensation test is largely accepted as the criterion by which to judge policies. To evaluate a policy, all gains and losses are set on a common denominator – usually money – and resulting value is used to compare this policy to others, evaluated in the same fashion.

The Kaldor-Hicks test is related to the concept of efficiency: a set-up is said to be *efficient* if all moves that pass the Kaldor-Hicks test have been realised. When all profitable exchanges of this sort in the economy as a whole have been undertaken, the economy is said to have reached an optimum – the maximum welfare attainable within current knowledge and technology. Economists generally seek to investigate whether particular arrangements are efficient in this sense or whether a particular change could improve efficiency, i.e. provide gains that pass the Kaldor-Hicks test.

The interest of this discussion is that Posner, from the very first edition of his treatise on the economic analysis of law, has put forth the thesis that all, or at least most, rules of the classical common law can be explained as efficient, and moreover that it is desirable for legal rules to be formulated so as to be efficient, or at least that where they are not, that discrepancy should call for justification. The early research agenda of law and econom-

ics has been to examine in detail whether existing rules can be shown to be efficient and if not, to propose changes that would make them so.

In putting the research agenda in this manner, we are imperceptibly moving across the boundary between descriptive and normative propositions and back, between *is* and *ought*, to use David Hume's terms.¹⁰ Hume's point was that what is desirable cannot be derived – logically – from what is; it requires a separate moral judgment. In examining whether particular legal rules are 'efficient' are we merely describing one of their essential characteristics, or are we passing moral judgement?

In more traditional legal scholarship we might find that one rule applicable to a particular set of situations contradicts another equally applicable one. It is tempting to say that this is merely describing an important aspect of those rules – and one that might be exploited in pleadings before a court of law. Yet the absence of contradiction is such an overriding value in a legal system that lawyers are immediately moved to consider how the contradiction may be resolved – undoubtedly a normative viewpoint. Similarly if efficiency is indeed a pervasive trait of legal rules, its absence in particular rules triggers calls for questioning that rule.

Posner's thesis of the efficiency of the classical common law is controversial. The jury is still out on the extent to which it actually holds and as much for common law as for civil law systems based on the French civil code in particular.¹¹ All the same, most law and economics practitioners would no doubt agree that there is a point to examining legal rules against the efficiency standard. Legal scholarship has an essential normative component.

The efficiency-of-the-common-law thesis is controversial for several reasons. First, it is difficult to judge *all* rules by the efficiency standard since some basic rules, such as those entitling individuals to their own person and labour, have to be fixed for the concept of efficiency even to be determinate. This consideration should not stand in the way of judging 'at the margin' a particular rule of contract, let us say, whilst all other rules are taken as fixed.

Second, setting legal rules may have redistributive effects. If all countries implemented the TRIPS agreement, it would clearly lead to very substantial transfers of wealth – as royalties for intellectual property – from developing to developed nations. Whilst this might seem justified by the presumed incentive effect for developing the objects of that intellectual

¹⁰ Hume 1978[1740], 469–470 (Book III, part I, section I: Moral Distinctions not deriv'd from Reason).

¹¹ Garoupa & Ligüerre 2010.

property, it is hard to ignore the controversy the transfers will be – and are already – generating. Such a problem can be handled by the first and perhaps the second type of economic analysis sketched above (determining the effects, tracing the rationale of the rules) but the normative judgement may have to rely in part on criteria stemming from other sources. In a somewhat similar vein, it has been objected that whilst efficiency analysis would allow all values to be traded off to an extent, our moral intuitions seem to require certain fixed starting points (no slavery . . .).

A third problem with the efficiency thesis is that it presupposes individual agents to act fully rationally in their individual decisions and their interactions with others. Research in cognitive psychology and laboratory experiments suggests, as we shall see in the next chapters, that humans simplify decision problems in ways that deviate from what the rational choice model would require. Some economic actors may attempt to take advantage of these deviations from rationality to make individuals ‘fall into traps’. This prospect leads proponents of the Behavioural Law & Economics group to suggest various forms of state intervention to correct for the deviations. Yet the jury is still out on the extent to which individuals actually fall into such traps. It is costly to be irrational and individuals may learn from experience how to avoid it.¹² The rational choice model seems to us still to provide a good first approximation attributing to humans a predictable line of conduct.

All in all, whilst one must be wary of mechanically deriving normative judgements from efficiency considerations, there can be little question that lawyering involves normative judgements and that efficiency considerations usually point to meaningful aspects of such judgements. In many cases, as we shall see, efficient rules correspond to what we intuitively consider to be fair or just rules.

LAW AND ECONOMICS: A BRIEF HISTORY¹³

The idea of using economic concepts to understand the law is by no means novel. One can find traces of it in the work of Machiavelli, Hobbes, Locke and Scottish Enlightenment thinkers such as Adam Smith and David Hume. The example of the stag hunt Rousseau gives in his *Discourse On Inequality* has inspired much research on the problem of collec-

¹² For an example of one critical study, see Wright 2007.

¹³ In more detail: Mackaay 2000.

tive action.¹⁴ During the 19th century there was a movement in various European countries to join law and economics, of which Marx and Weber are well known representatives.¹⁵

The current movement started in the United States in the late 1950s and early 1960s. Law and economics was initially propelled by economists seeking to expand their science beyond its traditional boundaries to cover such topics as the political market, discrimination, the family, the environment, non-economic relationships. On the legal side, receptiveness to this approach in the United States may have been enhanced as a result of the legal realism movement of the first part of the 20th century, which had been extremely critical of traditional legal scholarship and in favour of applying social science methods to advance our understanding of the law.

Law and economics reached the law faculties in the 1970s, after the first publication by a lawyer surveying the results obtained by economists, in a language that lawyers could understand.¹⁶ It has since become the most significant intellectual current affecting American legal scholarship in the latter part of the 20th century, and in our view remains so in the early 21st century.¹⁷

It is helpful, though perhaps somewhat artificial, to distinguish several phases in the evolution of law and economics in the United States: take-off amongst economists (1957–1972); paradigm accepted in the legal community (1972–1980); debate about the foundations (1980–1982); widening the movement (from 1982 on). From 1975, the movement starts to have echoes outside the United States. We will look at this briefly for what it tells us about the movement of ideas within the legal community across national boundaries.

Take-off amongst Economists (1957–1972)

At the end of the 1950s, several economists tried – one is tempted to say, playfully – to extend their concepts and methods to matters until then considered to lie outside the reach of economics. In 1957 Downs put forth an economic theory of democracy¹⁸ and in the same year Becker published a doctoral thesis on the economics of discrimination.¹⁹ In 1962, Buchanan and Tullock published their *Calculus of Consent*, applying economic

¹⁴ Skyrms 2004.

¹⁵ Pearson 1997.

¹⁶ Posner 1972.

¹⁷ Kronman 1993, 166.

¹⁸ Downs 1957.

¹⁹ Becker 1957.

concepts to the functioning of parliament and showing how paradoxically it can be led to adopt programmes favoured by only a minority of citizens.²⁰ In 1965, Olson published his analysis of the logic of collective action.²¹ A collective action problem presents itself wherever a certain result can be obtained only if all or most interested persons participate, yet where the result once in place is available to all, even to those who did not contribute. The temptation in such circumstances is to take a 'free ride' on other persons' efforts. Examples abound. A strike will only produce effect if all workers take part; yet each of them would prefer to continue to work and be paid, in the knowledge that others would go through the discomfort of striking to obtain better working conditions. For another example, consider overfishing. Everyone agrees that fish stock can be saved from extinction only by everyone's limiting the size of the catch; yet once there is agreement on quota, everyone may be tempted to cheat, which will produce the very disaster all sought to avert.

Many of the initial steps of getting law and economics aloft took place at the University of Chicago. From 1958 on, a new journal was published, the *Journal of Law and Economics*, which was to become the principal vehicle for economists to publish their excursions into legal territory. One of the starting points was an article published by Coase in 1960, which earned him the Nobel Prize in 1991.²² It dealt with the problem of social cost. Where an action undertaken by a person A has undesirable consequences for person B, but A is not forced to take these into account in the decision to undertake that action, received wisdom amongst economists, as represented by Pigou,²³ had it that one was then faced with a 'spillover effect'. This would entail a discrepancy between the private cost A would take into account and the 'social cost', which would additionally cover the costs imposed on B. The discrepancy would lead to price distortions and hence to misallocation of resources: A would produce goods or services too cheaply. If the economy is to be moved to its optimum, the discrepancy should be corrected and that task would fall to government.

Coase held that this analysis does not go to the bottom of the matter. There is not necessarily a misallocation of resources, in as much as the persons affected by the spillover can contractually rearrange the burden if this is advantageous to them. B, faced with the prospect of having to pay for the spillover, can seek an understanding with A, paying him to

²⁰ Buchanan 1962.

²¹ Olson 1965.

²² Coase 1960.

²³ Pigou 1962[1932], 132.

prevent or absorb it, if A can do this more cheaply than B can. Such an understanding would be profitable for both parties. In undertaking the action, A always has to consider the potential deal with B, an opportunity cost, in economic parlance. The problem, in Coase's view, is one of competing uses of a scarce resource: provided the property rights on it are well defined, the most profitable use will prevail, whatever the initial allocation of rights.

Where no understanding is reached, even though it looks profitable to an outsider, one must trace the factors that prevent it, for which Coase proposed the term '*transaction costs*'. The study of transaction costs in all their forms has become a major part of the economic analysis of law.

As Coase's analysis had brought to light the essential role of property rights, all through the 1960s economists such as Alchian, Demsetz, Furubotn and Pejovich produced papers on the role and functioning of property rights, in the broad economic sense of rights to control some use of a scarce resource.²⁴ Manne extended these analyses to corporations.²⁵ Cheung looked at the nature and role of contracts in a world characterised by uncertainty.²⁶ Calabresi looked at accident law, presenting tort law (civil liability law) as if framed to minimise the sum of accident costs, prevention costs and costs of administration.²⁷

Altogether, this period leaves the impression of fascination amongst a small group of researchers with a new tool: benign anarchy. All of the participants, but for Calabresi and Manne, were economists.

Paradigm Accepted in the Legal Community (1972–1980)

Towards the end of 1960s, these efforts reached the legal community. Henry Manne organised seminars for law teachers and judges to acquaint them with the new ideas and with the microeconomics necessary to apply them. Books appeared presenting essential insights to lawyers: Calabresi with *The Cost of Accidents*;²⁸ Tullock with a wider study called *The Logic of Law*, but which did not really catch on.²⁹

The real breakthrough in the legal community came with the *Economic Analysis of Law*, published in 1972.³⁰ It covers essentially all areas of law

²⁴ Alchian 1965; see papers collected in Furubotn 1974 and Manne 1974.

²⁵ Manne 1965, 1966, 1967.

²⁶ Cheung 1969a, b, 1970.

²⁷ Calabresi 1961; 1965.

²⁸ Calabresi 1970.

²⁹ Tullock 1971.

³⁰ Posner 1972 (8th ed. 2011).

and is written so as to be accessible to law students. Its author, Richard Posner, at the time of the Faculty of Law of the University of Chicago, dominated the law and economics scene for the following decades.

Very quickly, the most dynamic law schools in the United States put the approach on their curriculum, integrated it into standard law courses, organised seminars and workshops on its potential. Various collections of reading materials designed for teaching law in this new light appeared in the 1970s.³¹ The approach was tried out in all areas of law. The American academic legal community appeared hypnotised by what looked like a simple and powerful analytical tool. Some thought that a new theory of law was seeing the light of day. A new journal was created, the *Journal of Legal Studies*, with Posner as its first editor in chief.

During the decade of the 1970s, a wealth of articles appeared in American law journals exploring the potential of the new approach. In ten years, there must have been over a thousand. There was broad agreement on the basic tenets of the approach. It reached core areas of law teaching, such as property law, contracts, civil liability, company law, where besides the black letter law it was now considered apposite to provide students with the economic tools to ask whether the legal rules make good law, fulfil their apparent social function. Several of the more prestigious law schools appointed economists to their staff (sometimes jointly with the economics departments).

Knowledge of law and economics appeared to be profitable outside the academic milieu as well. Governments relied on these insights in designing policies and new legislation, or reviewing existing institutions or legislation. Courts accepted policy arguments based on law and economics in the pleadings offered in the cases before them.

Debate about the Foundations (1980–1982)

The rapidly successful movement of law and economics could not fail to attract scrutiny by traditional legal scholarship and be called upon to explain what precisely it was doing and how it would affect traditional legal reasoning. Several public conferences were organised to debate those questions.³²

Is law and economics really a new theory of law? Posner was attacked on this score from all sides: philosophers; natural law advocates, classical

³¹ Furubotn 1974, Manne 1974, Ackerman 1975, Kronman 1979, Posner 1980.

³² (1980) 9 *Journal of Legal Studies* 189 ff, (1980) 8 *Hofstra Law Review* 485 ff and 811 ff, Posner 1981a; (1983) 33 *Journal of Legal Education* 183 ff.

liberals, economists of the Austrian School, neoclassical economists who consider Posner's conception to be simplistic.

A central question in the debate is whether all rights can be allocated on the basis of efficiency considerations, or whether the very notion of efficiency becomes determinate only once at least certain basic rights have been set. The first branch of the alternative commits one to an outlook close to utilitarianism and exposed to the objections that have been formulated against it. In adopting moves that promise gains for the community at the expense of losses for some members, how does one avoid the arbitrariness of weighing these gains and losses, and of choosing winners and losers as a result? Posner tries to avoid the difficulty by adopting as the value to be maximised the social product, as measured by individuals' capacity and willingness to pay for it constituent parts. But this does not really resolve the problem since law and economics often consists in determining what rules would be apposite in cases where the interested persons have not been able to contract over them.

Civil liability cases (often accidents) may raise such problems. Imagine a swimming pool in which one swimmer, in diving into the water, hurts another. Who should have priority, who was negligent? Posner proposes to resolve the problem by guessing how the parties would have contracted if they had been able to: a hypothetical contract. Implicitly, the hypothetical contract puts us once more before the problem of valuing and comparing the utility of different persons.

If one opts for the second branch of the alternative – that there are some fixed starting points – one would have to hold that some rights may not be transgressed, save agreement by the rights holder. Such rights trump all other interests. This is the position taken by the libertarians (classical liberals) and, for different reasons, Dworkin. It does justice to the ultimately subjective nature of values. But it commits us to unanimity as to the rules by which all public institutions should operate and to consider as illegitimately coercive a public authority whose action is not based on the consent of all.

However attractive that conception may look from a moral perspective, it risks making numerous practical problems undecidable³³ and is not a faithful description of how modern societies function. In the law of modern societies, the exercise of any right, even fundamental, can be restricted to an extent in the name of other values, such as collective welfare. No right is absolute and entirely shielded from the trade-offs stressed in utilitarian

³³ Friedman 1987, 507.

thinking. The essential question is within what limits, by whom and under what constraints such trade-offs are to be performed.

Who won the debate? Difficult to say. But the naïve consensus of the 1970s on broadly shared premises for applying economic concepts to law appears to have gone.

The Widening Movement (from 1982 on)

The vigorous debates on the foundations opened the door to conceptions of the economic analysis of law other than the one put forth by what has been called the Chicago School, which had been dominant so far. Besides that mainstream approach, the institutionalists and neo-institutionalists, the Austrian economists, the social norms view (represented by Ellickson and Eric Posner) and the Behavioral Law and Economics approach came into view. Such a multiplicity of views might lead one to fear a break-up of the movement into competing schools and in due course, its disappearance. Some observers have indeed forecast the disappearance, in some cases accompanied by a rosy future for *Critical Legal Studies*.³⁴ Such forecasts lend themselves to empirical refutation. Duxbury in 1991 and Posner in 2007 present evidence on which the doomsday forecasts may be considered refuted.³⁵

Posner himself, appointed to the Federal Court of Appeals for the Seventh Circuit in 1981, has continued to produce a seemingly endless stream of papers and books. Beside his classical overview of the field, now in its eighth edition, appeared in 1988 an excellent introduction to law and economics by Cooter and Ulen, now in its sixth edition (2011).³⁶ A new law review, the *Journal of Law, Economics and Organization* was founded at Yale Law School in 1985, headed by Oliver Williamson.

Williamson has positioned himself on the path outlined by Coase to study in what sense organisations – business firms or other – are chosen because their features allow one to reduce transactions costs in particular circumstances.³⁷ The question is relevant because not in all circumstances is it wise counsel to use the market: there are costs – of uncertainty and of unavailability of actors, for instance – to using the market, as Coase had stressed, and in some circumstances these costs are higher than those of an organisation. Because of the emphasis placed on institutions as alter-

³⁴ Horowitz 1980, 905; Fiss 1989, 245.

³⁵ Duxbury 1991, 311; Posner 2011, xxii, n. 6.

³⁶ Cooter 2008.

³⁷ Williamson 1985, 1986.

natives to and constraints on markets, this approach is usually referred to as *neo-institutionalism*. It also appears to characterise the work of the economic historian Douglass North, who won the Nobel Prize in 1993.³⁸

The Austrian School of economics comprises such scholars as Menger, Schumpeter, von Mises, Hayek (Nobel Prize 1974), Kirzner. Of this group, it is no doubt Hayek who has mostly clearly made the link with law. The Austrian School emphasises the subjectivity of values (and hence the impossibility of making interpersonal comparisons of utility) and fundamental uncertainty inherent in all economic activity; these lead to the impossibility, or dysfunctionality, of planned economies and even of social democracies that borrow some of their logic. In analysing how markets work, the Austrians stress not equilibrium, which is the focal point of neoclassical economics, but rather its disturbance as a result of innovation (bringing novel ideas to market) and of entrepreneurs who have the insight to see them and the willingness to gamble on them. Some of the legal consequences drawn from the Austrian conception coincide with what the institutionalists propose; in other cases, they join the conclusions of the libertarians in an extreme wariness of state intervention in markets. Mario Rizzo, at New York University, has written much to flush out the legal consequences of Austrian views. A Dutch thesis compares them side-by-side with the neoclassical view.³⁹

Whilst Posner and Cooter focus foremost on how law helps markets to function, one cannot fully understand law as it exists without studying the agencies responsible for enacting much of it, the legislature and the courts. The study of the legislature or of the 'political market' started with seminal books by Downs, by Buchanan and Tullock and by Olson, and a further one by Niskanen on the bureaucracies that implement political policies.⁴⁰ They led to the creation of what was subsequently called the *Public Choice School*, public or collective choices being opposed here to private choices exercised in the market. Public Choice has been influential amongst political scientists, but less so amongst lawyers. It was only in the 1980s that the economic analysis of law and public choice were clearly linked.

Buchanan, who received the Nobel Prize in 1986, founded a group at George Mason University interested in *constitutional political economy*. The point is to determine, knowing the perverse effects brought to light by Public Choice, what constitutional structures would make the political machinery most faithfully translate the preferences of all citizens, rather

³⁸ North 1973, 1981, 1990, 1999.

³⁹ Teijl 1997.

⁴⁰ Niskanen 1971.

than those of special interest groups, be they majorities or minorities, into programmes and laws.

Towards the end of the 1990s, several publications appeared that were designed to consolidate law and economics knowledge in the form of encyclopaedias,⁴¹ dictionaries⁴² and collections of classic papers.⁴³ These publications could be taken as signs that law and economics had become part of accepted legal scholarship.

The different approaches to law and economics have not led to a scattering of the movement. In the first decade of the new millennium, one observes what looks like a progressive integration of the 'dissident' currents into the mainstream. *Behavioral Law and Economics* explicitly aims at explaining anomalies of individual decision-making and rules designed to prevent that persons fall victim to their own bounds of rationality.⁴⁴ To what extent such safeguards are called for – the mainstream would expect individuals to look after these themselves – is a matter for empirical research to sort out. *Behavioral Law and Economics* appears here as a source of enrichment for the mainstream approach rather than a dissident school. Similarly, the essential role of institutions in an economic analysis of law, as stressed by the neo-institutionalists such as Coase, North and Williamson, appears now to be part of the mainstream research agenda. The dynamic view of competition, the role of entrepreneurship and innovation, which had been stressed by the Austrians, have become part of the mainstream view, as we shall see in the chapters on the market and on intellectual property.

Also during the past decade, there has been a marked increase in historical⁴⁵ as well as empirical and experimental⁴⁶ studies. The number of publications that draw on law and economics continues unabated and at increasing speed, whereas competing currents, such as Critical Legal Studies, appear to be petering out.

⁴¹ Backhaus 1999, 2005; Bouckaert 2000.

⁴² Newman 1998.

⁴³ Posner 1997; Samuels 1998a and b.

⁴⁴ Jolls 2007.

⁴⁵ For instance, Aftalion 1990; Beito 2000; Bogart & Richardson 2010; Greif 1998, 2006; Karayiannis 2007; Landa 1981; O'Rourke & Williamson 2006; Ogilvie 2004; Parisi 2004; Rajan & Zingales 2003; Scherer 2004.

⁴⁶ For instance Beny 2006, 2007, 2008; Gwartney et al 1998; Landes & Posner 2003; Moore 2005; Wright 2007; for a survey of experimental work: Arlen & Talley 2008.

Law and Economics outside the United States

It has taken some time after its take-off in the United States for the movement to reach other countries. The first were other English-speaking countries: Australia, Canada and the United Kingdom, as well as, remarkably, Sweden, where signs of reception were visible from the mid-1970s. In 1981, the *International Review of Law and Economics* was founded in England, with Ogus and Rowley as editors.

In continental Europe, reception came later, no doubt because of differences in language and legal system. The first countries to show interest were the German and Dutch-speaking ones, in the 1980s. From the 1990s on, a series of publications in Italian indicate that interest was developing there as well. In France – and perhaps in its wake other ‘Latin’ countries – law and economics was controversial from the outset and continued for a long time to be met with indifference if not outright hostility. This may have started to change in the past few years.

A boost to law and economics came from the creation, in 1991, of an Erasmus programme funded by the European Commission to stimulate teaching and research in the field. It brought together a number of universities, including Hamburg, Rotterdam, Ghent, Bologna, Manchester, Aix, Paris-Dauphine, Oxford, and resulted in a joint Master’s programme students would complete by studying at different universities. What is known as the ‘Ghent Encyclopaedia’⁴⁷ put together under the inspiring leadership of Bouckaert and De Geest, both then at the Faculty of Law of Ghent University, is one of the significant spin-offs of this programme.

CONCLUSION

Law and economics continues to attract significant interest in many countries. A new generation of scholars has taken over from the founders and they are pursuing the research agenda with what looks like equal enthusiasm. Law and economics now appears to be a mature discipline, giving rise each year to a significant number of conferences, papers, books, theses, teaching programmes throughout the world. It appears to be gaining acceptance as a significant tool for legal scholarship – indeed in the eyes of one scholar as the default method of it – in many parts. Yet nowhere has it been as widely accepted as in the United States: American exceptionalism. Why this should be so (is it the openness to academic

⁴⁷ Bouckaert 2000.

competition and hence innovation? Ample funding for research? The particular intellectual history of American law (legal realism?) is a matter of conjecture.⁴⁸ Whatever the explanation, Law and economics has much to tell the legal community everywhere, in civil-law countries as much as in common-law countries.

Law and economics clearly offers tools to handle the policy questions that must be addressed in designing new legislation or in adapting existing provisions to novel situations. It helps lawyers see the unity underlying much of private law in particular, but in other areas of law as well. This is valuable for legal scholarship. Practitioners have reported that it helps them more directly to grasp the interests of both parties in a negotiation and thereby facilitates reaching agreement. Does Law and economics have something to contribute to what seems the lawyer's traditional preserve, which is the interpretation of the legal texts? To the extent that Posner's efficiency thesis is correct, Law and economics captures the sense that lawyers relying on other criteria give to legal provisions. Law and economics often parallels our sense of justice. If so, it also offers useful insights for traditional lawyering activities, helping lawyers to interpret legal texts sensibly.

This book seeks to provide a first contact with Law and Economics for those in civil-law countries who can cope with English but like to see the approach explained and illustrated with examples drawn from a legal culture based on the French Civil Code tradition. The first Part provides the economic tools required; the Second delves into the core institutions of civil law: property and real rights; intellectual property, civil liability and contractual obligations.

FURTHER READING

Elster 2007 gives a good integrated overview of what the social sciences currently have to offer for understanding human behaviour. Farnsworth 2007 presents a toolkit for legal reasoning in a language aimed at lawyers. Most of the tools are derived from law and economics. A more technical introduction to the tools of law and economics, including some statistics and formal modelling techniques, may be found in Georgakopoulos 2005 and in Ippolito 2005. To complement the historical overview by a more detailed look at the work of the American founders, Cohen & Wright 2009 is an excellent bet.

⁴⁸ Garoupa & Ulen 2008.

BIBLIOGRAPHY

- Ackerman 1975:** Ackerman, Bruce A. (ed.), *Economic Foundations of Property Law*, Boston, Little Brown, 1975
- Aftalion 1990:** Aftalion, Florin, *The French Revolution – An Economic Explanation*, Cambridge, Cambridge University Press & Paris, Éditions de la Maison de l'Homme, 1990
- Alchian 1965:** Alchian, Armen A., 'Some Economics of Property Rights', (1965) 30 *Il Politico* 816–829
- Arcuri 2008:** Arcuri, Alessandra, 'Eclecticism in Law and Economics', (2008) 1 *Erasmus Law Review* 59–81
- Arlen & Talley 2008:** Arlen, Jennifer H. and Eric L. Talley (eds), *Experimental Law and Economics*, Cheltenham, UK, Edward Elgar Publishing, 2008
- Backhaus 1999:** Backhaus, Jürgen G. (ed.), *The Elgar Companion to Law and Economics*, Aldershot, UK, Edward Elgar Publishers, 1999
- Backhaus 2005:** Backhaus, Jürgen G. (ed.), *The Elgar Companion to Law and Economics – Second Edition*, Aldershot, UK, Edward Elgar Publishers, 2005
- Becker 1957:** Becker, Gary S., *The Economics of Discrimination*, Chicago, University of Chicago Press, 1957
- Beito 2000:** Beito, David T., *From Mutual Aid to the Welfare State – Fraternal Societies and Social Service 1890–1967*, Chapel Hill, NC, University of North Carolina Press, 2000
- Beny 2006:** Beny, Laura N., 'Insider Trading Laws and Stock Markets Around the World: An Empirical Contribution to the Theoretical Law and Economics Debate', University of Michigan Law School, Law and Economics Research Paper No. 04-004, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=193070
- Beny 2007:** Beny, Laura N., 'Do Investors Value Insider Trading Laws? International Evidence', University of Michigan Law & Economics, Olin Working Paper No. 06-003; William Davidson Institute Working Paper No. 837; Journal of Law, Economics and Policy (Symposium on Insider Trading), 2007, available at <http://ssrn.com/abstract=296111>
- Beny 2008:** Beny, Laura N., 'Do Investors in Controlled Firms Value Insider Trading Laws? International Evidence', (2008) 4 *Journal of Law, Economics and Policy* 267–310
- Bogart & Richardson 2010:** Bogart, Daniel E. and Gary Richardson, 'Property Rights and Parliament in Industrializing Britain', NBER Working Paper No. w15697, 2010
- Bouckaert & De Geest 2000:** Bouckaert, Boudewijn and Gerrit De Geest (eds), *Encyclopedia of Law and Economics*, Cheltenham, UK, Edward Elgar, 2000, available at <http://encyclo.findlaw.com/tablebib.html>
- Buchanan & Tullock 1962:** Buchanan, James M. and Gordon Tullock, *The Calculus of Consent – Logical Foundations of Constitutional Democracy*, Ann Arbor, The University of Michigan Press, 1962
- Calabresi 1961:** Calabresi, Guido, 'Some Thoughts on Risk-Distribution and the Law of Torts', (1961) 70 *Yale Law Journal* 499–553
- Calabresi 1965:** Calabresi, Guido, 'The Decision for Accidents: An Approach to Nonfault Allocation of Costs', (1965) 78 *Harvard Law Review* 713–774

- Calabresi 1970:** Calabresi, Guido, *The Cost of Accidents – A Legal and Economic Analysis*, New Haven, Yale University Press, 1970
- Cheung 1969a:** Cheung, Steven N.S., *The Theory of Share Tenancy*, Chicago, The University of Chicago Press, 1969
- Cheung 1969b:** Cheung, Steven N.S., ‘Transaction Costs, Risk Aversion, and the Choice of Contractual Arrangements’, (1969) 12 *Journal of Law and Economics* 23–42
- Cheung 1970:** Cheung, Steven N.S., ‘The Structure of a Contract and the Theory of a Non-Exclusive Resource’, (1970) 13 *Journal of Law and Economics* 49–70
- Coase 1960:** Coase, Ronald H., ‘The Problem of Social Cost’, (1960) 3 *Journal of Law and Economics* 1–44
- Cohen & Wright 2009:** Cohen, Lloyd R. and Joshua D. Wright (eds), *Pioneers of Law and Economics*, Cheltenham, UK, Edward Elgar, 2009
- Cooter & Ulen 2008:** Cooter, Robert D. and Thomas Ulen, *Law and Economics International Edition*, New York, Pearson Addison Wesley, 2008, (5th ed.)
- De Lolme 1784:** De Lolme, Jean-Louis, *The Constitution of England*, London, Robinson & Murray, 1784, (4th ed.) (Book 1, c. X, p. 134)
- Donohue & Levitt 2001:** Donohue III, John J. and Steven D. Levitt, ‘The Impact of Legalized Abortion on Crime’, (2001) 116 *Quarterly Journal of Economics* 379–420
- Donohue & Levitt 2004:** Donohue III, John J. and Steven D. Levitt, ‘Further Evidence That Legalized Abortion Lowered Crime: A Reply to Joyce’, (2004) 39 *Journal of Human Resources* 29–49
- Downs 1957:** Downs, Anthony, *An Economic Theory of Democracy*, New York, Harper & Row, 1957
- Duxbury 1991:** Duxbury, Neil, ‘Is There a Dissenting Tradition in Law and Economics?’, (1991) 54 *Modern Law Review* 300–311
- Elster 2007:** Elster, Jon, *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences*, Cambridge, Cambridge University Press, 2007
- Farnsworth 2007:** Farnsworth, Ward, *The Legal Analyst: A Toolkit for Thinking about the Law*, Chicago, University of Chicago Press, 2007
- Fiss 1989:** Fiss, Owen M., ‘The Law Regained’, (1989) 74 *Cornell Law Review* 245–255
- Friedman 1987:** Friedman, David D., ‘Comment – Problems in the Provision of Public Goods’, (1987) 10 *Harvard Journal of Law & Public Policy* 505–520
- Furubotn & Pejovich 1974:** Furubotn, Eirik G. and Svetozar Pejovich (eds), *The Economics of Property Rights*, Cambridge, MA, Ballinger Publishing Cy, 1974
- Garoupa & Ulen 2008:** Garoupa, Nuno and Thomas S. Ulen, ‘The Market for Legal Innovation: Law and Economics in Europe and the United States’, (2008) 59 *Alabama Law Review* 1555–1633, available at <http://works.bepress.com/nunogaroupa/17/>
- Garoupa & Ligüerre 2010:** Garoupa, Nuna and Carlos Gómez Ligüerre, ‘The Evolution of the Common Law and Efficiency’, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1674170
- Georgakopoulos 2005:** Georgakopoulos, Nicholas L., *Principles and Methods of Law and Economics – Basic Tools for Normative Reasoning*, Cambridge, Cambridge University Press, 2005
- Greif 1998:** Greif, Avner, ‘Informal Contract Enforcement: Lessons from Medieval Trade’, in Newman, Peter (ed.), *The New Palgrave Dictionary of Economics and the Law*, Vol. 2, London, MacMillan, 1998, 287–295

- Greif 2006:** Greif, Avner, *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*, Cambridge, Cambridge University Press, 2006
- Gwartney et al 1998:** Gwartney, James D., Randall Holcombe and Robert Lawson, 'The Scope of Government and the Wealth of Nations', (1998) 18 *Cato Journal* 163–191
- Horwitz 1980:** Horwitz, Morton J., 'Law and Economics: Science or Politics?', (1980) 8 *Hofstra Law Review* 905–912
- Hume 1978[1740]:** Hume, David, *A Treatise of Human Nature*, Oxford, Clarendon Press, 1978[1740], (2nd ed.)
- Ippolito 2005:** Ippolito, Richard A., *Economics for Lawyers*, Princeton, Princeton University Press, 2005
- Jolls 2007:** Jolls, Christine, Behavioral Law and Economics, in Diamon, Peter A. and Vartiainen, Hannu (eds), *Behavioral Economics and Its Applications*, Princeton, Princeton University Press, 2007, 115–155
- Karayiannis & Hatzis 2007:** Karayiannis, Anastassios and Aristides N. Hatzis, *Morality, Social Norms and Rule of Law as Transaction Cost-Saving Devices: The Case of Ancient Athens*, Report, 2007, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1000749
- Kronman & Posner 1979:** Kronman, Anthony T. and Richard A. Posner (eds), *The Economics of Contract Law*, Boston, Little, Brown and Cy, 1979
- Kronman 1993:** Kronman, Anthony T., *The Lost Lawyer – Failing Ideas of the Legal Profession*, Cambridge, MA, The Belknap Press of Harvard University Press, 1993
- Landa 1981:** Landa, Janet T., 'A Theory of the Ethnically Homogeneous Middleman Group: An Institutional Alternative to Contract Law', (1981) 10 *Journal of Legal Studies* 349–362
- Landes & Posner 2003:** Landes, William M. and Richard A. Posner, 'Indefinitely Renewable Copyright', (2003) 70 *University of Chicago Law Review* 471–518
- Mackaay 2000:** Mackaay, Ejan, 'History of Law and Economics', in Bouckaert & De Geest 2000, vol. I, p. 65–117
- Manne 1965:** Manne, Henry G., 'Mergers and the Market for Corporate Control', (1965) 73 *Journal of Political Economy* 110–120
- Manne 1966:** Manne, Henry G., 'In Defense of Insider Trading', (1966) 44 *Harvard Business Review* 113–122
- Manne 1967:** Manne, Henry G., 'Our Two Corporate Systems: Law and Economics', (1967) 53 *Virginia Law Review* 259–284
- Manne 1974:** Manne, Henry G. (ed.), *The Economics of Legal Relationships – Readings in the Theory of Property Rights*, St. Paul, MN, West Publishing, 1974
- Moore 2005:** Moore, Kimberly A., 'Worthless Patents', (2005) 20 *Berkeley Technology Law Journal* 1521–1552
- Newman 1998:** Newman, Peter (ed.), *The New Palgrave Dictionary of Economics and the Law*, London, MacMillan, 1998
- Niskanen 1971:** Niskanen, William A., *Bureaucracy and Representative Government*, Chicago, Aldine Press, 1971
- North 1981:** North, Douglass C., *Structure and Change in Economic History*, New York, W.W. Norton & Cy, 1981
- North 1990:** North, Douglass C., *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, 1990
- North 1999:** North, Douglass C., *Understanding the Process of Economic Change*, London, Institute of Economic Affairs, 1999

- North & Thomas 1973:** North, Douglass C. and Robert Paul Thomas, *The Rise of the Western World – A New Economic History*, Cambridge, Cambridge University Press, 1973
- Olson 1965:** Olson, Mancur, *The Logic of Collective Action – Public Goods and the Theory of Groups*, Cambridge, MA, Harvard University Press, 1965
- O’Rourke & Williamson 2006:** O’Rourke, Kevin H. and Jeffrey G. Williamson, *Did Vasco da Gama Matter for European Markets? Testing Frederick Lane’s Hypotheses Fifty Years Later*, Report, NBER Working Paper No. W11884, 2006, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875735
- Ogilvie 2004:** Ogilvie, Sheilagh, ‘Guilds, Efficiency, and Social Capital: Evidence from German Proto-Industry’, (2004) 57 *Economic History Review* 286–333
- Parisi 2004:** Parisi, Francesco, ‘The Origins and Evolution of Property Right Systems’, in Colombatto, Enrico (ed.), *Elgar Companion to the Economics of Property Rights*, Aldershot, Edward Elgar, 2004, 64–84
- Pearson 1997:** Pearson, Heath, *Origins of Law and Economics – The Economists’ New Science of Law, 1830–1930*, Cambridge, Cambridge University Press, 1997
- Peltzman 2007:** Peltzman, Sam, ‘Regulation and the Wealth of Nations: The Connection between Government Regulation and Economic Progress’, (2007) 3 *New Perspectives on Political Economy* 185–204
- Pigou 1962[1932]:** Pigou, Arthur C., *The Economics of Welfare*, London, Macmillan 1962[1932], (4th ed.)
- Posner 1972:** Posner, Richard A., *Economic Analysis of Law*, Boston, Little, Brown and Cy, 1972
- Posner 1980:** Posner, Richard A., ‘The Ethical and Political Basis of the Efficiency Norm in Common Law Adjudication’, (1980) 8 *Hofstra Law Review* 487–507
- Posner 1997:** Posner, Richard A., ‘The Future of the Law and Economics Movement in Europe’, (1997) 17 *International Review of Law and Economics* 3–14
- Posner 2011:** Posner, Richard A., *Economic Analysis of Law*, New York, Wolters Kluwer Law & Business, 2011 (8th ed.)
- Rajan & Zingales 2003:** Rajan, Raghuram G. and Luigi Zingales, *The Emergence of Strong Property Rights: Speculations from History*, Report, NBER working paper no 9478, 2003, <http://www.nber.org/papers/w9478>
- Samuels 1998a:** Samuels, Warren J. (ed.), *Law and Economics: The Early Journal Literature*, London, Pickering & Chatto Ltd, 1998
- Samuels 1998b:** Samuels, Warren J. (ed.), *European Economists of the Early 20th Century; v.I: Studies of Neglected Thinkers of Belgium, France, the Netherlands*, Cheltenham, UK, Edward Elgar Publishers, 1998
- Scherer 2004:** Scherer, F.M., *Quarter Notes and Bank Notes. The Economics of Music Composition in the Eighteenth and Nineteenth Centuries*, Princeton, Princeton University Press, 2004
- Skyrms 2004:** Skyrms, Brian, *The Stag Hunt and the Evolution of Social Structure*, Cambridge, Cambridge University Press, 2004
- Smith 1982[1790]:** Smith, Adam, *The Theory of Moral Sentiments*, Indianapolis, LibertyClassics 1982[1790]
- Sowell 1980:** Sowell, Thomas, *Knowledge & Decisions*, New York, Basic Books, 1980
- Teijl & Holzhauer 1997:** Teijl, Rob and Rudi W. Holzhauer, *Wisselende perspectieven in de rechtseconomie [Changing perspectives in law and economics]*, Arnhem, Gouda Quint, 1997

- Tullock 1971:** Tullock, Gordon, *The Logic of the Law*, New York, Basic Books, 1971
- Williamson 1985:** Williamson, Oliver E., *The Economic Institutions of Capitalism – Firms, Markets, Relational Contracting*, New York, The Free Press, 1985
- Williamson 1986:** Williamson, Oliver E., *Organization – Firms, Markets and Policy Control*, New York, New York University Press, 1986
- Wright 2007:** Wright, Joshua D., ‘Behavioral Law and Economics, Paternalism, and Consumer Contracts: An Empirical Perspective’, (2007) 2 *NYU Journal of Law & Liberty* 470–511