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The Principles of European Tort Law: The Right Path to Harmonization?*

ROGER VAN DEN BERGH AND LOUIS VISSCHER**

Abstract: The goal of the *Principles of European Tort Law* is to serve as a basis for the enhancement and harmonization of tort law in Europe. This paper takes a critical look at these *Principles* from a Law and Economics perspective. The first part of the paper questions the traditional arguments in favour of harmonization, such as the need to achieve a 'level playing field' for industry and the reduction of legal uncertainty which may hinder cross-border trade. There are several economic arguments in favour of diverging tort laws: the possibility to satisfy heterogeneous preferences and the learning processes generated by competition between legal orders. Economic arguments in favour of harmonization are weak. There is no need for central rules to internalize externalities; a race to the bottom is unlikely and the amount of transaction cost savings may be low. The second part of the paper examines whether the *Principles* may contribute to 'better' tort law. Large parts of the *Principles*, such as the fault standard and some of the rules on causation, are in conformity with economic insights. According to Article 10:101, damages serve the goal of compensation but also the aim of preventing harm. However, it is shown that several provisions of the *Principles* are not in conformity with the goal of prevention. The analysis focuses on the limitation of damages to normal losses, the different levels of protection in function of the nature of the safeguarded interests, the narrow strict liability rule for harm caused by abnormally dangerous activities and rules for assessing damages. The concluding remarks provide an overall assessment of the *Principles* for the future development of tort law in Europe.

Résumé: Le but des *Principles of European Tort Law* est de servir comme base pour l'amélioration et l'harmonisation du droit de la responsabilité civile. La première partie de cette contribution examine la nécessité d'une harmonisation de la perspective de l'analyse économique du droit. Les auteurs critiquent les arguments traditionnels en faveur d'une intervention législative européenne, comme la nécessité d'établir des conditions égales de concurrence et la réduction de l'insécurité juridique qui empêcherait les transactions entre Etats Membres. Ils soulignent les arguments économiques en faveur des lois divergentes: la possibilité de satisfaire des préférences hétérogènes et les processus d'apprentissage qui résultent d'une concurrence entre systèmes juridiques. Par contre, les arguments en faveur d'une harmonisation sont faibles. La centralisation n'est pas requise pour internaliser les externalités entre Etats Membres; le danger d'une *race to the bottom* est improbable et les avantages résultant d'une réduction des coûts de transaction ne semblent pas importants. La seconde partie de la contribution examine si les Principes peuvent contribuer à un 'meilleur' droit de la responsabilité civile. Une grande partie des *Principles*, comme l'appréciation de la faute et certains règles concernant la cause, sont en harmonie avec l'analyse économique. Partant de la définition du concept de dommages

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intérêts (Art. 10:101), qui stipule non seulement le but de la compensation mais aussi celle de la prévention, les auteurs indiquent plusieurs règles qui ne sont pas conformes avec le but préventif. Ils discutent la limitation des dommages intérêts aux pertes normales, les différents degrés de protection en fonction de la nature des intérêts protégés, la règle très restrictive de responsabilité objective pour des activités anormalement dangereuses et les règles concernant l'estimation des dommages intérêts. Les remarques conclusives fournissent une appréciation globale des *Principles* pour le futur développement du droit de la responsabilité civile en Europe.

Zusammenfassung: Die *Principles of European Tort Law* haben zum Ziel, einen Beitrag zu leisten für die qualitative Verbesserung und Harmonisierung des Haftungsrechts in Europa. Der Aufsatz unterwirft die *Principles* einer kritischen Analyse von der Perspektive der ökonomischen Analyse des Rechts. Der erste Teil des Aufsatzes formuliert Einwände gegen die traditionellen Argumente für eine Harmonisierung. Kritisiert werden das Ziel der Schaffung einheitlicher Konkurrenzbedingungen im Binnenmarkt (*level playing field*) und die Reduzierung der Rechtsunsicherheit, die den zwischenstaatlichen Handel beeinträchtigen würde. Es gibt wichtige Argumente zugunsten eines Wettbewerbs zwischen Haftungsregeln: die Möglichkeit zur Befriedigung heterogener Präferenzen und die Lernprozesse, die durch einen Regulierungswettbewerb ermöglicht werden. Demgegenüber sind die Argumente für eine Harmonisierung schwach. Zur Internalisierung externer Effekte ist eine Zentralisierung des Deliktsrecht nicht nötig, die Gefahr eines *race to the bottom* ist unwahrscheinlich und der Umfang der Transaktionskostensparnisse ist eher niedrig. Der zweite Teil des Aufsatzes untersucht inwieweit die *Principles* dazu beitragen können, ein ‚besseres‘ Haftungsrecht zu schaffen. Ein großer Teil der *Principles*, sowie die Verschuldenshaftung und einzelne Regeln mit Bezug auf die Ursachlichkeit, ist in Einklang mit der ökonomischen Analyse. Nach dem Artikel 10:101 verfolgt der Schadensersatz nicht nur dem Ziel der Kompensation sondern auch der Vermeidung von Schäden. Der Beitrag kritisiert zahlreiche Regeln der *Principles* die nicht mit dem Ziel einer Prävention in Einklang sind. Die Autoren diskutieren die Beschränkung des Schadensersatzes auf normale Schäden, die Abhängigkeit des gewährten Rechtsschutzes von der Natur der geschützten Interessen, der sehr enge Maßstab der Gefährdungshaftung, die sich auf abnormal gefährliche Tätigkeiten beschränkt und die Regeln zur Messung von Schadensersatzleistungen. Zum Abschluss bietet der Beitrag eine Gesamtwürdigung des von den *Principles* geleisteten Beitrags für die Entwicklung des Haftungsrechts in Europa.

Introduction

Recently, the European Group on Tort Law published its *Principles of European Tort Law*. This group consists of about twenty members from Europe, Israel, South Africa and the USA, who are all well-known tort law scholars. The *Principles* ‘have been drafted on the basis of an extensive comparative research project extending over more than a decade and focusing on the most important elements of tort law.’¹ The goal of the *Principles* is to serve as a basis for the enhancement and harmonization of the law of torts in Europe; they should serve as ‘a kind of framework for the further

¹ European Group on Tort Law, *Principles of European Tort Law. Text and Commentary*, Springer: Wien, New York 2005, p.v.

development of a truly harmonized European tort law.² In this paper, both goals of the *Principles* (harmonization and enhancement) will be critically assessed from a Law and Economics point of view.

In the first part of the paper, we will briefly investigate whether harmonization of tort law is desirable. A traditional legal argument is that unification based on common principles of law may guarantee a more consistent legal system than the current selective and piecemeal harmonization of parts of private law by way of EC Directives. In addition, it is argued that differences in legal rules increase legal uncertainty and lead to problems in the management of enterprises and in legal practice, which hinders cross-border trade. In the Law and Economics literature, a more cautious approach to harmonization dominates. Whereas comparative lawyers stress the need for internal consistency of the law, legal economists focus their attention on the external consistency of the legal system with goals of social welfare. On the one hand, Law and Economics scholars stress the benefits of divergent legal rules. Competition between legal orders allows satisfying a greater number of preferences and enables learning processes. On the other hand, Law and Economics scholars admit that competition between legal orders may fail because of interstate externalities or a 'race to the bottom'. Also scale economies and transaction cost savings may justify harmonization. By contrast, the popular market integration argument is conceptually weak and lacks empirical evidence. The first part of this paper will discuss the main arguments in favour or against harmonization of tort law.

In the second part of the paper, we will investigate whether the *Principles* lead to an enhancement of tort law, judged from a Law and Economics perspective. The European Group on Tort Law did not limit its task to finding the largest common denominator, but also posed the question whether such a common core would be the best solution for Europe.³ To judge whether the Group has been able to define the 'better law', it is necessary to clarify what the drafters of the *Principles* consider to be the normative goals of tort law. According to Article 10:101 of the *Principles*, damages serve the goal of compensation, but also the aim of preventing harm. This suggests that the preventive function of tort law, which is stressed in the Law and Economics literature, is taken seriously. However, many elements of the *Principles* turn out to be contradictory to Law and Economics recommendations. Within the scope of this paper, a detailed analysis of the full text of the *Principles* cannot be provided. Therefore, we will limit the discussion to the most important points of difference with the economic approach to tort law. These include: the rule that damages are limited to normal losses, so that abnormally high losses need not be compensated; the rule that life, bodily or mental integrity, human dignity and liberty receive 'the most extensive protection', property rights 'extensive protection' and

² J. SPIER, 'General Introduction', *Principles of European Tort Law*, 2005, p 16, no. 30.

³ *Ibid.*, p 15, no. 20.

pure economic interests or contractual interests ‘more limited protection’, the very narrowly defined rule on strict liability, which only concerns abnormally dangerous activities, and a number of rules for assessing damages, such as compensation for fatal accidents and the specific problems of immaterial losses. It will be shown why these rules are not in perfect harmony with an economic approach to tort law. Besides this critical perspective, the analysis will also reveal that many rules contained in the *Principles* are largely in conformity with the insights from the economic analysis of tort law. This applies to the elements of the fault standard, some of the rules on causation and the innovative concept of proportional liability. Finally, the concluding remarks will provide an overall assessment of the importance of the *Principles* for the future development of tort law in Europe.

1. Is Harmonization of Tort Law Desirable?

1.1 *The Traditional Arguments: Legal Certainty, Market Integration and the Need of a ‘Level Playing Field’*

There are many scholarly legal publications that favour a far-reaching harmonization of private law or even a European Civil Code.⁴ In these publications, the question *whether* a European private law is desirable is not critically examined. The questions asked rather relate to *how* and *when* private law will be harmonized. The major concern is to create a broad framework for harmonization that would guarantee more uniformity than the current selective and piecemeal harmonization of parts of private law by way of Directives.⁵ As to the necessity of harmonization, the analysis in the legal literature is usually very simplistic. Several lawyers advance the costs of different tort systems to justify the harmonization of tort law. It is argued that differences in legal rules increase legal uncertainty and lead to problems in the management of enterprises and in legal practice, which hinders cross-border trade. The latter argument is also very popular with European bureaucrats, who usually add that differences in tort law create inequality in competitive conditions across the member states.⁶ Harmonization is thus presented as an instrument to create a ‘level playing field’ for industry.

The argument about increased legal certainty and its beneficial impact on the volume of inter-state trade is not convincing. There is no empirical evidence that differences in legal systems do indeed hinder cross-border transactions in a significant way. The EC Commission simply assumes that legal diversity impedes cross-border trade and that harmonization of law will encourage enterprises to engage in such transac-

⁴ A.S. HARTKAMP et al., *Towards a European Civil Code*, Ars Aequi Libri, Nijmegen 1994; S. GRUNDMANN and J. STUYCK (eds), *An Academic Green Paper on European Contract Law*, Kluwer Law International, The Hague 2002.

⁵ O. LANDO, ‘Why Does Europe Need a Civil Code?’, in: S. Grundmann and J. Stuyck (eds), *op.cit* (note 4), p 207 at 208.

⁶ See for example the considerations of the Directive on unfair contract terms (OJ, 1993, L 95/29) and the Directive on product liability (OJ, 1985, L 210/29).

tions. Unfortunately, this is merely a presumption and there is no empirical evidence supporting such expectation. Large, multinational enterprises may not be deterred by the need to adapt to local rules from entering foreign markets.⁷ The case law of the European Court of Justice testifies that these companies may combat restrictive rules of the import state by challenging their conformity with the principle of free movement of goods. Negative integration may thus function as an effective mechanism to open up markets.⁸ Small and medium size firms may be more reluctant to bear the additional costs of adapting to the legal rules of foreign markets (or to challenge restrictive rules). However, the reactions of the business associations representing these firms to the proposals on a European contract law rejected the idea that full harmonization was necessary to foster competition in the internal market.⁹

Also the need to create a level playing field is not a valid argument in favour of harmonization. First, the rules of tort law are the same for all actors within a relevant jurisdiction, so that distortions of competition to the detriment of foreign suppliers are avoided.¹⁰ Second, the argument that states may obtain a competitive advantage by enacting particular legal rules neglects that international trade is based on comparative advantages. It is not necessarily illegitimate to exploit differences in legal rules. The goal to create a level playing field for industry seems to be in contradiction with the essence of international trade itself. Exploiting differences in legal systems may be objected on distributional grounds, but it is not necessarily in conflict with the goal of allocative efficiency. If legal rules confer a competitive advantage on firms in a particular Member State, the consequence will be that prices for consumer goods in the international market will be reduced, with welfare gains going to consumers who previously had to pay higher prices. Some losses will be incurred by industries having to comply with stricter laws, but gains will flow to other industries offering cheaper products produced in conformity with less demanding legal norms. The aggregate welfare consequences for the entire common market are likely to be beneficial. Third, harmonization of a particular field of law, such as tort law, is not an appropriate remedy to correct inequalities in doing business, which have an impact on the competitive position of firms across Europe. The problem with a partial harmonization plan is that it does not equalize all costs. The costs of

⁷ G. WAGNER, 'The Economics of Harmonization: The Case of Contract Law', 39. *CML Rev (Common Market Law Review)* 2002, p 995 at 1014.

⁸ At this point, it should be added that a large-scale harmonization of laws got started when it turned out to be politically difficult, if not impossible, to remove barriers to trade in the absence of positive harmonization. Unfortunately, the political price to pay for the removal of the trade barriers has often been an excessively rigid set of common rules and an excessive curb on regulatory competition.

⁹ C. OTT & H.-B. SCHÄFER, 'Die Vereinheitlichung des europäischen Vertragsrechts - Ökonomische Notwendigkeit oder akademisches Interesse?', in: C. Ott & H.-B. Schäfer (eds), *Vereinheitlichung und Diversität des Zivilrechts in transnationalen Wirtschaftsräumen*, Tübingen, Mohr Siebeck 2002, pp 117-141.

¹⁰ G. WAGNER, 'The Project of Harmonizing European Tort Law', 42. *CML Rev* 2005, p 1269 at 1271.

complying with a particular set of rules are only one component of the total costs of production. Harmonizing one part of the legal system (e.g. tort law) will leave competitive distortions in other fields of law intact. Furthermore, the goal of creating a level playing field will not be reached, since firms in some countries will maintain an advantage in terms of infrastructure, wages, labour productivity, and so on. Member States that perform well on the non-harmonized components of costs will thus retain competitive benefits. The ultimate answer is to eliminate the possibility of competition over any of the costs mentioned, including both costs of complying with divergent legal rules and other production costs. Such a comprehensive Community intervention would equal an outright rejection of the subsidiarity principle.

1.2 *Economic Analysis of Harmonization*

In contrast with the legal literature, the economic analysis of harmonization takes a much more cautious attitude. On the one hand, Law and Economics scholars stress the benefits of divergent legal rules. Competition between legal orders allows satisfying a greater number of preferences and enables learning processes. On the other hand, Law and Economics scholars admit that competition between legal orders may fail because of interstate externalities or prisoners' dilemmas between Member States causing a 'race to the bottom'. Another argument in favour of harmonization is that centralization may achieve scale economies or reduce transaction costs.

1.2.1 *Benefits of Competition Between Tort Laws: Satisfying a Greater Number of Preferences and Enabling Learning Processes*

The argument that different legal rules may satisfy a greater number of preferences merits particular attention in the field of tort law. First, there may be different views regarding the goals of tort law across Member States. An efficiency approach stresses the goal of prevention (through deterring dangerous conduct), whereas a social justice approach emphasizes the goal of compensation. Since achieving deterrence and compensation simultaneously may be impossible,¹¹ legal systems will not be able to escape from trade-offs between these competing goals. Decisions as to which goal should take precedence over the other may differ across EC Member States. Second, the legal system is part of the culture of a nation. Social norms about what is desirable behaviour vary across the European Member States. Those who regularly travel across Europe will realize that social norms on what is desirable behaviour in a traffic situation are clearly different in Naples from the social norms governing driving behaviour in Sweden. What can be termed reasonable care in Stockholm may be counterproductive, excessive care in Naples. Also the degree of wealth influences the

¹¹ Withholding compensation is an instrument to provide incentives to victims to take efficient care in order to avoid accidents (reduction of primary costs of accidents, see section 2.1 of this paper).

choice of liability rules, in particular the degree of care expected from manufacturers. Tort law imposes costs on producers, which will be passed on into consumer prices (as far as elasticity of demand allows price increases). Wealthy countries may prefer stricter standards, since the people living there can financially afford such rules. Conversely, poor countries may prefer more lenient tort rules. Whereas excessive noise may be seen as negligent behaviour in the former countries, it may be tolerated in the latter countries since obeying noise limits increases the costs of production and consumer prices. Product liability offers another example: wealthy countries may prefer strict liability (irrespective of the price increases such a rule may cause), whereas poor countries may prefer products that are less safe but can be financially afforded by a large group of consumers. In sum, tort standards should be sensitive to social norms and differences in wealth across countries.¹²

A second argument in favour of divergent tort rules is that competition between legal systems enables learning processes. Tort law contains many vague concepts, such as the fault standard and criteria to assess causation. Different interpretations of these concepts may provide important information about the performance of the legal rule in real-life cases. Trial-and-error is particularly important when there is a high degree of uncertainty on the economic effects of a given liability rule. If a single Member State changes its tort system, for example by introducing a rule of strict liability for a particular activity, other Member States may prefer to wait to take similar steps until the economic effects of the legislative change have become clear. There is a large American empirical literature on the social costs of divergent accident rules.¹³ Europe offers a unique laboratory, in which the effects of 25 divergent tort rules could be tested. A 'top down' harmonization impedes such learning processes, which are particularly important when there is a great deal of uncertainty on the economic effects of different liability systems and the ensuing total costs of accidents. Competition between legal systems may thus increase the efficiency of tort law. One may object that a common system of European tort law does not need to be inflexible and may remain open to improvements and innovation. However, in contrast with a European contract law that may be offered as a twenty-sixth choice, parties involved in a tort setting are generally not able to choose the applicable law

¹² This line of reasoning implies that the optimal unit for legislation might even be smaller than the national state, due to differences in wealth and social norms within a country. However, for the choice between national tort law and harmonized European tort law, which is the topic of this paper, the possibility of an even smaller unit of legislation is irrelevant. An additional remark seems appropriate. In the Law and Economics literature, it is well established that a combination of tort law and regulation is required to achieve the goals of primary and secondary cost reduction (see e.g. S. SHAVELL, 'Liability for Harm versus Regulation of Safety', 13 *JLS (Journal of Legal Studies)* 1984, pp 357-374). Regulation can be more easily adapted to the local or regional circumstances than tort law.

¹³ D. DEWEES, D. DUFF & M.J. TREBILCOCK, *Exploring the Domain of Accident Law. Taking the Facts Seriously*, Oxford University Press, New York 1996.

beforehand. Competition between different tort laws can only take place at the level of the Member States, which may choose to either follow the European rules or keep their own legal systems unchanged. Since private parties cannot profit from an additional layer of vertical competition between EU law and national laws, the scope for learning processes in the area of tort law is more limited than in the field of contract law. For this reason, it is very important to safeguard the horizontal competition between the tort laws of the Member States.

1.2.2 *Arguments in Favour of Harmonization*

A major argument in favour of harmonization of laws is the need to internalize negative interstate externalities. From an economic point of view, states should be able to choose the rules which best satisfy the preferences of their citizens as long as they also bear the full costs of their legal decisions.¹⁴ Where trans-boundary effects occur, harmonization may be required to avoid that costs are thrown upon other jurisdictions. River pollution is an obvious example: citizens in downstream states suffer from lenient environmental water standards in upstream states. Negotiations between the countries involved may not lead to optimal outcomes because of opportunistic behaviour. This may provide a powerful argument in favour of central rules on water pollution.¹⁵

To justify harmonization of tort law, two things must be shown. First, rules of tort law must affect transactions with interstate repercussions. Second, it must be impossible to fully internalize negative externalities arising from interstate transactions by applying national rules of tort law. In the search for trans-boundary torts, product liability can be regarded as a major area of private law to be governed by European law, leaving the problem of differences in wealth aside. Sellers of defective products should not escape liability when harm occurs outside the territory of the exporting state. Interestingly, product liability was also the first topic covered by the EC harmonization process.¹⁶ Community intervention into matters that are for the most part local cannot be justified by the interstate externalities argument. To some extent, the EC legislative programmes also cover national torts. For example, the European environmental liability programme¹⁷ applies to damage to biodiversity, which is not necessarily trans-boundary (e.g. soil pollution and protection of habitats). The externalities' argument throws a different light on the criticism of lawyers that the unifica-

¹⁴ The economic theory underlying this important insight is the Tiebout model on optimal provision of public goods (C. TIEBOUT, 'A Pure Theory of Local Expenditures', *JPE (Journal of Political Economy)* 1956, pp 416-424). See also the literature on economic federalism (W. OATES, *Fiscal Federalism*, Harcourt Brace Jovanovich, New York 1972).

¹⁵ See for an elaboration of these arguments: R. VAN DEN BERGH, 'Economic Criteria for Applying the Subsidiarity Principle in European Environmental Law', in: R. Revesz, P. Sands & R. Stewart (eds), *Environmental Law, the Economy, and Sustainable Development*, Cambridge University Press, Cambridge 2000, pp 80-95.

¹⁶ Directive 85/374, OJ, 1985, L 210/29.

¹⁷ White Paper on Environmental Liability, COM(2000) 66 final.

tion of tort law has been very selective. There may be very good reasons why the EC does not intervene in tort situations, which do not entail significant cross-border effects. Tort lawyers are right in arguing that a selective harmonization causes costs due to a decreased legal consistency of different national legal systems. However, it may be doubted whether the benefits of legal consistency outweigh the costs of harmonization (satisfying less preferences, not enabling learning processes) in the absence of interstate externalities.

Even if an impact beyond the borders of a single Member State can be shown, a further inquiry as to the possibilities of national private laws to cope with the relevant externalities is needed to support the conclusion that European tort law is needed. Manufacturers of defective products are generally liable in damages for harm suffered in export markets. If the law of the export state does not allow recovery for certain types of damage or even totally exempts the product from the scope of the product liability law, compensation will be available according to the law of the import state if the law of the latter country does not contain similar exclusions. Hence, if a defective product is exported, negative externalities do arise but they do not automatically constitute a sufficient cause for Community action. European law would accomplish a useful task only in very specific circumstances, where the rules of the import country do not allow a full internalization. The task of European law would then be to fill the gaps when compensation claims and, therefore, full internalization of cross border externalities are impossible. An example is a Member State law, which does not easily allow recovery unless the victim can prove beyond reasonable doubt (for example, because the threshold of proportional liability is not reached)¹⁸ that the particular manufacturer caused his loss. This line of reasoning points at inefficiencies in national tort laws and thus parallels the Public Choice argument, holding that central rules may be more efficient than rules enacted at lower levels of government.¹⁹ Remarkably, the EC Directive does not harmonize different legal approaches to problems of causation.²⁰ Consequently, the view that EC law is more efficient than national liability rules is not supported by real-life harmonization.

The next argument in favour of harmonization is that regulatory competition may cause a 'race to the bottom'. A very popular argument in the American debate on federalism is that competition between jurisdictions may lead to 'bad' law. States may reduce workers' protection, lower environmental standards or soften the regulatory burden on enterprises in other ways, in order to attract investment and profit from increased tax revenue. A state will gain in the struggle to attract firms by choosing in

¹⁸ See below, section 2.3 and section 2.5.4 of this paper.

¹⁹ D. MUELLER, *Public Choice III*, Cambridge University Press, 2003.

²⁰ R. VAN DEN BERGH, 'Subsidiarity as an Economic Demarcation Principle and the Emergence of European Private Law', 5. *MJ (Maastricht Journal of European and Comparative Law)* 1998, p 129 at 140-145.

favour of lax regulation when other states do not act in the same way. However, when states are trapped in a prisoners' dilemma they will all reduce the regulatory burden (race to the bottom). As a consequence, only businesses will gain. Centralization, including harmonization of laws, may then be needed to generate efficient outcomes. However, in the field of tort law it seems highly doubtful that EC member states will strive for low levels of victim protection to attract industry. Even in areas of law where one might expect a substantial impact of the desire to attract businesses on the choice of the regulatory burden for industry, theoretical and empirical research shows that there is no convincing proof for a race to the bottom and that, by contrast, a 'race to the top' may take place. For example, there is no support for the claim of a race to the bottom in environmental law (or the 'pollution haven' hypothesis), neither theoretically nor empirically.²¹ Firms will not relocate plants to escape from stringent environmental regulations. Other factors, such as the availability of a good infrastructure, labour conditions (unionization of the labour force) and taxes may be much more important in location decisions of business. It seems even more unlikely that firms will relocate plants to profit from lenient tort laws. A race to the bottom could theoretically materialize if Member States try to attract industry by enacting lenient product liability and product safety laws. The result would then be an overall reduction of product quality. Besides lack of empirical proof, this reasoning has a number of weaknesses. Since harm often occurs in export markets, Member States will face difficulties in attracting manufacturing industries that sell a great part of their products outside the domestic market. Even if product safety and liability standards are more lenient in the export state, the industry will not escape from higher costs triggered by the stricter liability regime of the import state. The story is different only with respect to retailers who will be sued by consumers in the jurisdiction where they are located. Remarkably, the EC Product Liability Directive does not apply to retailers; only producers are held liable. Hence, EC consumer law does not prevent a race to the bottom in markets where it could theoretically occur.²² More generally, it is doubtful whether states will engage in a race to the bottom if they cannot charge the industry for using lenient rules of tort law. At this point, a comparison with the alleged race to the bottom in American corporate law is illuminating; one must not forget that 16 percent of the total tax revenue of Delaware is derived from incorporation fees.²³ Finally, the race to the bottom argument supposes that firms, which have to comply with stricter rules, suffer a competitive disadvantage. However, if rules of tort law are efficiency motivated (rather than based on distributional considerations) they will

²¹ M. FAURE, 'How Law and Economics May Contribute to the Harmonization of Tort Law in Europe', in: R. Zimmermann (ed), *Grundstrukturen des Europäischen Deliktsrechts*, Nomos, Baden-Baden 2003, p 31 at 47-49 with further references.

²² R. VAN DEN BERGH, *op. cit* (note 20), at 139.

²³ R. ROMANO, *The Genius of Corporate Law*, AEI Press, Washington 1993, pp 8-9.

increase and not decrease the competitiveness of firms. In the latter case, the race will be for the 'top' rather than for the 'bottom'.

The last argument in favour of harmonization is the achievement of scale economies or the reduction of transaction costs. However, it must immediately be added that the importance of this argument varies across different fields of law. Scale economies may be important for the design of efficient rules of public law, such as safety regulation, but negligible in other fields of law, such as private law. Comparative lawyers often refer to the need for legal certainty as a crucial quality feature of any legal system: if rules differ, information costs increase and the outcome of cases is less predictable. In economic terms, this argument refers to transaction cost savings generated by harmonization of laws. At first sight, uniform rules may reduce information costs, since knowledge of several different legal systems is no longer required. It is, however, doubtful that uniform laws on their own will be effective in reducing uncertainty. To start with, problems will already emerge when the 'uniform' rules have to be translated into the different languages of the Member States. Language differences resulting from the translations of Directives can lead to different interpretations of the same provision. Even if interpretation problems can be avoided through adequate translations, legal certainty will not automatically be achieved. Unlike goods, legal rules cannot easily be transported from one state to another. It does not suffice that the legal systems of the EC Member States use the same wording. This wording must also be understood as having the same content in the different legal systems. 'Legal transplants' *sensu stricto* may be simply impossible. Legrand emphasizes that there could only occur a meaningful legal transplant when both the propositional statement as such and its invested meaning – which jointly constitute the rule – are transported from one state to another. 'At best, what can be displaced from one jurisdiction to another is, literally, a meaningless form of words. (...) In any meaningful sense of the term, legal transplants, therefore, cannot happen.'²⁴ Common uniform rules only increase legal certainty when a uniform interpretation of the law in each Member State is secured. Interpretation problems will be particularly severe when Directives use vague notions. In such cases, the overall effect of harmonization may be increased transaction costs, rather than the legal certainty so much sought by legal scholars.

2. Economic Analysis of the Main Articles of the Principles of European Tort Law

2.1 The Goals of Tort Law

Article 10:101 of the *Principles* defines the nature and purpose of damages, in the following way: 'Damages are a money payment to compensate the victim, that is to say, to restore him, so far as money can, to the position he would have been in if the wrong complained of had not been committed. Damages also serve the aim of preventing

²⁴ P. LEGRAND, 'The Impossibility of Legal Transplants', 4. *MJ* 1997, p 111.

harm'. This definition reflects the views of the drafters of the *Principles* on the goals of tort law. Compensation is seen as the main goal of tort law and prevention is added as a secondary goal. The explicit reference to the prevention of harm makes clear that the authors of the *Principles* have been influenced by legal economists stressing the deterrent function of tort law.²⁵ However, the economic approach to tort law has not been accepted up to its entire consequences. In an economic approach, compensation as such is never the goal. If it was, the only acceptable rule would be strict liability without any defence of contributory negligence. Fault liability cannot be explained as an instrument to guarantee the payment of damages, since the harm caused must only be compensated if it can be shown that the tortfeasor behaved negligently. According to the dominant view in Law and Economics, the goal of tort law is twofold: accident prevention and optimal spreading of losses, or, in the terminology of Guido Calabresi: the reduction of primary and secondary accident costs.²⁶ In addition, the administrative costs of achieving primary and secondary cost reduction should be taken into account, so that this reduction is not outweighed by an increase in the system costs. To reduce primary costs of accidents, judges must hold the injurer liable if he took less than efficient care. Economically optimal care levels are reached where the marginal costs of care equal the marginal benefits resulting from the decrease in expected harm. Tort law may also serve the purpose of improving loss spreading. If injurers are better able to bear the risk than victims, it will be efficient to impose liability on the former. It is important to realize that there may be inconsistencies between these goals. For example, if a traffic accident is caused both by the negligent behaviour of a car driver and a pedestrian, the latter should bear a part of the losses to give him an incentive to take efficient care. If the entire loss is to be compensated by the car driver (in practice: the latter's insurance company) loss spreading may be improved if the insurance company of the car driver is better able to bear the risk than the pedestrian, whose losses are not entirely covered by public health insurance. However, excluding liability of the pedestrian may increase the primary costs of accidents. The definition of damages (Article 10:101) gives the impression that the authors of the *Principles* regard compensation as more important than the prevention of accidents and that insufficient attention is paid to the optimal spreading of losses. There are a number of rules contained in the *Principles*, which confirm that compensation is the main goal and seem to indicate that only lip service is paid to the goal of prevention. If prevention was taken seriously, it would be difficult to explain the exclusion of punitive damages, the under-compensation of the harm caused by fatal accidents and the reduction of damages in the light of the financial situation of the parties. The *Principles* offer no basis for claiming punitive damages. From a perspective of prevention, punitive damages may be an instrument to compensate for the low probability

²⁵ See e.g. the contributions of M.G. Faure in many of the volumes of *Unification of Tort Law* from the European Group on Tort Law.

²⁶ G. CALABRESI, *The Costs of Accidents. A Legal and Economic Analysis*, 5th printing, Yale University Press, New Haven 1977, p 24 ff.

that injurers are caught.²⁷ According to Article 10:202 (2) ‘in the case of death, persons such as family members whom the deceased maintained or would have maintained if death had not occurred are treated as having suffered recoverable damage to the extent of loss of that support’. From a viewpoint of prevention (to fully internalize the negative externalities), also the harm of the deceased must be compensated. The relevant benchmark is the value the deceased attached to his life. The average value of statistical life is much higher than the money payments to people maintained by the deceased person (see section 2.5.2). Article 10:401 allows a reduction of damages ‘in an exceptional case, if in the light of the financial situation of the parties full compensation would be an oppressive burden to the defendant.’ A reduction of damages reduces the precautionary measures taken by the tortfeasor below the level of efficient care (see section 2.5.3). Also the narrow rule on strict liability (discussed below in section 2.4) is not in conformity with a liability regime that should give adequate incentives to prevent accidents.

2.2 Fault Standard

According to Article 4:101 of the *Principles*, a person is liable on the basis of fault for intentional or negligent violation of the required standard of conduct.²⁸ Article 4:102(1) subsequently describes the required standard of conduct, in the following way: ‘The required standard of conduct is that of the reasonable person in the circumstances, and depends, in particular, on the nature and value of the protected interest involved, the dangerousness of the activity, the expertise to be expected of a person carrying it on, the foreseeability of the damage, the relationship of proximity or special reliance between those involved, as well as the availability and the costs of precautionary or alternative methods’. The various factors mentioned for determining the required standard of conduct are largely consistent with the economic approach to fault liability. As will be shown below, the added value of the economic approach is that it does not merely list the relevant factors for establishing that a person is liable on the basis of fault, but also clarifies the relationship between the different elements of the required standard of conduct.

From an economic point of view, the key difference between strict liability and fault liability is that under the latter rule it must be investigated whether the injurer acted differently than he should have done, while this question is irrelevant under the former rule. To establish negligence, which is the dominant form of fault liability, it

²⁷ See e.g. S. SHAVELL, *Foundations of Economic Analysis of Law*, The Belknap Press of Harvard University Press, Cambridge, Massachusetts 2004, p 244.

²⁸ For the economic analysis of intentional torts, see e.g. W.M. LANDES & R.A. POSNER, ‘An Economic Theory of Intentional Torts’, 1. *IRLE (International Review of Law and Economics)* 1981, p 127-154; D.D. ELLIS, ‘An Economic Theory of Intentional Torts: A Comment’, 3. *IRLE* 1983, p 45-57; J. ARLEN, ‘Tort Damages’, in: B. Bouckaert & G. De Geest (eds), *Encyclopedia of Law and Economics. Volume II. Civil Law and Economics*, Edward Elgar, Cheltenham 2000, p 696; R.A. POSNER, *Economic Analysis of Law*, 6th edition, Aspen Publishers, New York 2003, pp 205, 206.

must be shown that the injurer has not been sufficiently careful. In order to assess whether the injurer has taken enough care, a comparison must be made between the costs of additional precautionary measures and the benefits thereof in terms of a reduction of the expected accident losses. The expected accident losses consist of the accident probability multiplied by the size of the losses if an accident occurs. It is economically desirable that the injurer takes additional care measures as long as the additional costs of care are lower than the reduction in expected accident losses, since in this way the total costs of accidents will decrease. In what became known as the Hand formula, judge Learned Hand has expressed this weighing of costs and benefits in the mathematical formula $B < pL$. In algebraic terms, B denotes the burden of precautions, p the accident probability and L the losses.²⁹ In the Law and Economics literature, it has been clarified that judges should not compare the absolute levels of these elements, but the marginal values thereof. The relevant question is whether an *additional* care measure costs less or more than the benefits it yields. The optimal level of care is found where the marginal costs of care equal the marginal benefits. Below this efficient level of care, the additional costs of care are lower than the resulting decrease in expected accident losses, so that it is desirable that the additional care measure is taken. Above the optimal level of care, the additional costs of care are higher than the benefits thereof, so that this care measure would be inefficient and thus is not desirable from an economic point of view.³⁰

The different elements of the Hand formula can be traced back in the formulation of Article 4:102(1), even though the wording does not exactly correspond with the economic terminology. The costs of precaution (B) appear as ‘the availability and the costs of precautionary or alternative methods’.³¹ The expected accident losses (pL) are referred to as the ‘dangerousness of the activity’ and ‘the value of the protected interests involved’. The reference in Article 4:102 to ‘the expertise to be expected of a person carrying the activity on’ relates to the relative costs and benefits of the different elements of the required standard of conduct. An example may illustrate the importance of this distinction. The costs of taking care in a traffic situation can be assumed to be lower for e.g. policemen and taxi drivers, because they are professionally involved in traffic, are well trained and have a huge experience. It is therefore desirable to hold them to a higher standard of conduct, because their costs of taking care are relatively low. Finally, also foreseeability of the damage is a relevant factor in assessing fault liability, because it is not possible to adapt one’s behaviour to

²⁹ 159 F.2d 169 (2d Cir. 1947), *United States v. Carroll Towing Co.*

³⁰ See, among many others, e.g. R.A. POSNER, *op. cit.* (note 28), p 168; S. SHAVELL, *op. cit.* (note 27), p 179; R.D. COOTER & T. ULEN, *Law and Economics*, 4th edition, Pearson Addison Wesley, Boston 2004, p 321; H.-B. SCHÄFER & C. OTT, *Lehrbuch der ökonomischen Analyse des Zivilrechts*, 4., überarbeitete Auflage, Springer-Verlag, Berlin 2005, p 175.

³¹ In the Commentary it is doubted whether this factor will play an important role in determining fault in practice, see P. WIDMER, ‘Liability Based on Fault’, *Principles of European Tort Law*, 2005, p 79, no. 13.

dangers that cannot be foreseen. However, it is important to provide actors with incentives to obtain information about the possible risks of their behaviour. Therefore, one should only conclude that a certain danger was unforeseeable if the costs of discovering the danger were higher than the benefits of discovery, which consist of the possibility to adapt the care level to the real magnitude of the danger.³²

It follows from the above that Law and Economics makes it possible to clarify the mutual relationship between several of the elements mentioned in Article 4:102(1). It also becomes clear that the 'nature of the protected interest' in itself is not relevant for an economic determination of negligence, because it is the *size* of the losses that matters. This implies that Article 2:102 of the *Principles*, which grants the 'most extensive protection' to life, bodily or mental integrity, human dignity and liberty, whereas property rights receive only 'extensive protection' and pure economic interests or contractual relationships even more limited protection, does not fit well in the economic analysis of tort law. However, in situations where courts do not have enough information to make a good assessment of the size of the losses, or where such an assessment would be very costly, the nature of the protected interest might serve as a proxy with which the size of the losses is estimated. By using such rules of thumb, courts might be able to reduce the administrative costs of determining the losses. Here, the trade-off between administrative costs on the one hand and reduction of primary and secondary accident costs on the other hand becomes clear.³³

Article 4:102(1) also mentions the availability and costs of 'alternative methods'. If a less dangerous way exists to reach a given objective, this alternative method should be chosen.³⁴ This requirement makes economic sense, because it will reduce the total costs of accidents. In the economic analysis of tort law, the concept of 'alternative methods' was further developed by Mark Grady, who formulated the theory of the 'untaken precautions'.³⁵ According to the general economic theory of fault liability, the court first determines the optimal level of care in the abstract, and subsequently assesses whether the injurer has taken efficient care. Grady argues that in real-life cases, it is up to the plaintiff to suggest care measures that the injurer could have taken, but did not take. The court then compares the care measures of the injurer to the suggested untaken precautions. If the total accident costs would have

³² S. SHAVELL, 'Liability and the Incentive to Obtain Information About Risk', 21. *JLS* 1992, pp 259-270.

³³ On the limited importance of an accurate assessment of damages, see L. KAPLOW & S. SHAVELL, 'Accuracy in the Assessment of Damages', 39. *JLE (Journal of Law and Economics)* 1996, pp 191-210 and L. KAPLOW & S. SHAVELL, *Fairness versus Welfare*, Harvard University Press, Cambridge, Massachusetts, p 265ff.

³⁴ P. WIDMER, *op. cit.* (note 31), pp 78, 79, no. 13.

³⁵ See e.g. M.F. GRADY, 'Untaken Precautions', 18. *JLS* 1989, pp 139-156; S. MARKS, 'Discontinuities, Causation, and Grady's Uncertainty Theorem', 23. *JLS* 1994, pp 287-301; T.J. MICELI, 'Cause in Fact, Proximate Cause, and the Hand Rule: Extending Grady's Positive Economic Theory of Negligence', 16. *IRLE* 1996, pp 473-482; C. OTT & H.-B. SCHÄFER, 'Negligence as Untaken Precaution, Limited Information, and Efficient Standard Formation in the Civil Liability System', 17. *IRLE* 1997, pp 15-29.

been lower had the untaken precautions been taken, the injurer is deemed negligent. A study of Dutch, German and English tort liability rules suggests that this approach is consistent with the case law in those countries. Therefore, the untaken precaution approach seems to be a good candidate for shaping a European negligence rule. Holding an injurer liable because he did not take efficient precautionary measures is both economically efficient and consistent with legal practice in the countries that where investigated.³⁶

Paragraph 2 of Article 4:102 provides for the possibility to adjust the fault standard ‘when due to age, mental or physical disability or extraordinary circumstances the person cannot be expected to conform to it’. The *Principles* deliberately do not mention a specific age below which a person cannot be held liable, but leave this to be determined on a case by case basis.³⁷ From a Law and Economics perspective, holding little children liable or deeming them contributory negligent does not make sense, because liability is incapable of influencing the accident probability. In other words, the accident situation is unilateral, because only the injurer can influence the accident risk. However, the age limit should not be set too high. From the age of about seven, children do have insights into dangers and they can correct their behaviour. Therefore, it makes sense to hold them liable. In order for the fault rule to be able to provide *ex ante* care incentives, the rule should be clear. Hence, the use of specific age limits, preferably lower than the Dutch limit of 14 years, is advisable. The German system of different age groups corresponding with increasing levels of liability nicely reflects these economic insights.³⁸

It depends on the situation whether it is economically sound to hold a person with a mental or physical disability liable according to the same standard as persons without the disability. If the disability is so severe that the person cannot control his behaviour, liability will not lead to changes in behaviour and will only cause administrative costs. If the person can control his behaviour, but his care costs are higher than those of a person without the disability, his personal optimal care level is lower than the average optimal care level. If it is possible to distinguish between the different groups of persons at low cost, it is desirable to use a lower standard of care.

³⁶ H.O. KERKMEESTER & L.T. VISSCHER, ‘Learned Hand in Europe: a Study in the Comparative Law and Economics of Negligence’, *German Working Papers in Law and Economics*, Vol. 2003, Article 6.

³⁷ P. WIDMER, *op. cit.* (note 31), pp 79, 80, no. 15.

³⁸ §828 of the German Civil Code (BGB) states:

‘(1) Wer nicht das siebente Lebensjahr vollendet hat, ist für einen Schaden, den er einem anderen zufügt, nicht verantwortlich.

(2) Wer das siebente, aber nicht das 18. Lebensjahr vollendet hat, ist für einen Schaden, den er einem anderen zufügt, nicht verantwortlich, wenn er bei der Begehung der schädigenden Handlung nicht die zur Erkenntnis der Verantwortlichkeit erforderliche Einsicht hat. Das Gleiche gilt von einem Taubstummen.’

In case law, children older than seven are separated into three age groups, making them responsible according to the extent to which they could understand the danger of their actions and adapt their behaviour to this insight: seven to ten years, eleven to fourteen years and older than fourteen years.

For example, a blind pedestrian can be easily recognized by his cane, so that others can adapt their behaviour to his lower optimal care level. Conversely, if the administrative costs of distinguishing between the different groups become too large, or if the distinction may lead to strategic behaviour (people faking a disability), it is better to use the general fault standard for all groups.³⁹ A positive side effect thereof will be that less capable people, who cannot meet the required standard, might refrain from the activity altogether, which is an efficient way to prevent harm.

2.3 Causation

Article 3:101 opens the section on causation by formulating the *condicio sine qua non* (csqn) requirement: ‘An activity or conduct is a cause of the victim’s damage if, in the absence of the activity, the damage would not have occurred’.⁴⁰ Article 3:102 states that in case of multiple activities, where each of them alone would have caused the loss at the same time, each activity is regarded as a cause of the victim’s damage. Hence, although none of the activities is a csqn, each is regarded as a cause. This makes good sense from an economic perspective, because if neither activity was regarded as cause, tort law would not be able to provide care incentives to the parties engaged in these activities. This would lead to an amount of care below the efficient level and to higher than optimal accident costs.

Article 3:103 deals with the problem of alternative causation. The difference with the concurrent causes covered by Article 3:102 is that, in the latter case, each activity would have caused the loss if one disregards the other activities, while with alternative causes it is uncertain which of the activities caused the loss.⁴¹ Article 3:103 states that each activity is regarded as a cause to the extent corresponding with the likelihood that it may have caused the victim’s damage. In this way, the *Principles* adopt the idea of proportional liability. In our view, it is rather odd to regard the different activities as ‘proportional causes’. It would have been more logical to regard all activities as causes, and to reach the situation of proportional liability in the phase of the assessment of the damages, by making each actor liable for the proportion of the losses that corresponds to the likelihood that the particular activity caused the damage.⁴² We will further elaborate upon the topic of proportional liability in the section on damages.

³⁹ E.g. M.G. FAURE, ‘Economic Analysis of Fault’, in: P. Widmer (ed), *Unification of Tort Law: Fault*, Kluwer Law International, The Hague 2005, pp 317, 318 and 322 ff.

⁴⁰ The *Principles* write *conditio* instead of *condicio*. However, in the Latin of Cicero, *conditio* means the preservation of peas, while the Latin word for ‘condition’ is *condicio*. See J.H. NIEUWENHUIS, *Onrechtmatige daden. Délits, Unerlaubte Handlungen, Torts. Buitencontractueel aansprakelijkheidrecht in Europees perspectief*, Kluwer, Deventer, 2003, p 46.

⁴¹ J. SPIER, ‘Causation’, *Principles of European Tort Law*, 2005, p 48, no. 2.

⁴² The results from the survey in J. SPIER (ed), *Unification of Tort Law: Causation*, Kluwer Law International, The Hague 2000 in our view do not support the choice for proportional liability that is made in the *Principles*. According to the ‘Comparative Conclusions on Causation’, most countries apply a rule of joint and several liability in these cases, see p 154.

Article 3:104 states that ‘if an activity has definitely and irreversibly led the victim to suffer damage, a subsequent activity, which alone would have caused the same damage, is to be disregarded’. The justification for this rule is that the second activity is no csqn for the loss.⁴³ From an economic perspective, however, it is not desirable to systematically exclude liability of the second actor. Apart from the fact that one could argue that the first activity is no csqn either – after all, the second activity would have caused the same loss –, it may also be desirable that the second actor gets incentives to take efficient care. His activity would have caused a loss if the first activity had not been present. If his behaviour was negligent, he should have taken more care (see section 2.2), and if his behaviour falls under a rule of strict liability, the actor should have based his care decisions on the losses he may cause (see section 2.4). The circumstance that there is another activity, which is not controlled by the actor, does not influence the *ex ante* desirability of taking care. It is a matter of chance *if* there is another activity causing the same loss and if that is the case, which activity is the first and which is the second.

The circumstances of the case at hand determine whether liability of the second actor makes economic sense or not. Assume that two cars are speeding and the drivers cannot stop in time to avoid hitting a pedestrian crossing the street. In this example, it should not matter who happens to hit the pedestrian first, since both car drivers should have reduced their speed. Apart from providing inadequate incentives to take care, trying to determine who hit the pedestrian first would also lead to higher administrative costs. Therefore, regarding both cars as cause of the losses makes economic sense. Admittedly, one of the cases described in the Commentary to the *Principles* seems to provide fewer arguments to hold the second actor liable.⁴⁴ A first actor collides with the car of the victim, which after the accident is a total loss. A few minutes later, the second actor crashes into the wreck. In this example, the argument of additional administrative costs does not hold, because it is clear who the first actor was and who the second. In addition, the full range of possible accidents and the resulting losses determines the optimal level of care for the second actor. Because the car is already a total loss, crashing into the wreck does not cause additional damage (the wreck already has a value of zero). The conclusion is that the rule of Article 3:104 makes economic sense in some, but not in all, situations. It may be added that the second paragraph of the article, stating that ‘the subsequent activity is taken into consideration if it has led to additional or aggravated damage’, is in conformity with economic insights. The reason is that the second actor has caused more losses than already occurred and he should take these losses into consideration when determining his care level.

Article 3:201 non-exhaustively lists a number of factors that are relevant in determining whether and to what extent damage may be attributed to a person,

⁴³ J. SPIER, *op. cit* (note 41), p 51, no. 1.

⁴⁴ J. SPIER, *op. cit* (note 41), p 51, no. 3.

provided that his activity is considered as a cause of the losses. The first factor is foreseeability, taking into account in particular ‘the magnitude of the damage in relation to the normal consequences of such an activity’. The Commentary gives the following examples: an explosion of an oil refinery causing larger than normal losses and a car accident in which persons earning high incomes are severely injured, so that they cannot perform their function for many years.⁴⁵ Economic analysis of law teaches that it is not desirable to limit damages to the normal losses. In reaching his care decisions, the injurer must take account of all possible accidents, each with its own probabilities and size of the harm. If abnormally high losses do not have to be entirely compensated, actors will not fully be confronted with the expected losses they cause and will receive inadequate care incentives. It is illuminating to add that the logical counterpart of limiting liability for abnormally high losses is increasing liability for abnormally low losses. Such a rule cannot be found in the tort laws of European countries. Consequently, in order to give the correct financial incentives, compensation for abnormally large losses should not be limited.⁴⁶ Only if losses are so unlikely that they are totally overlooked, liability will not lead to prevention and only cause administrative costs. Excluding liability for the latter type of accidents therefore makes economic sense.⁴⁷ The drawback of this rule, however, is that actors do no longer have incentives to carefully investigate the possible dangers of their behaviour. For this reason, only losses that are unforeseeable in the economic sense should be excluded from liability. As long as the benefits of discovering an unlikely danger are higher than the costs of the additional investigations, liability for harm caused should remain unrestricted (see section 2.2). Finally, foreseeability should not be an element in the assessment of causation because it has nothing to do with the question if the injurer has made the losses happen. Foreseeability can be relevant in the phase where liability is established, because actors cannot adapt their behaviour to dangers that they cannot know.

The second factor mentioned in Article 3:201 is the nature and value of the protected interests. We have already discussed this factor in section 2.2 above. The third factor of Article 3:201, the basis of liability, implies that attribution of the harm to a person seems more appropriate if liability is based on fault rather than in cases of strict liability.⁴⁸ This is not in conformity with economic insights. To provide incentives to take efficient care, an actor should be confronted with all losses that he has caused, irrespective of the basis of liability. If the actor only faces partial liability, he receives inadequate incentives. Also the protective purpose of the violated rule is mentioned as a relevant factor in Article 3:201, although it is admitted that this factor

⁴⁵ J. SPIER, *op. cit.* (note 41), p 61, 62, no. 14.

⁴⁶ See e.g. S. SHAVELL, *op. cit.* (note 27), p 238.

⁴⁷ H.-B. SCHÄFER & C. OTT, *op. cit.* (note 30), pp 265, 356.

⁴⁸ J. SPIER, *op. cit.* (note 41), p 62, no. 17.

will often not come into play, as liability will probably not be established at all when the violated rule only protects specific other interests.⁴⁹

The last factor mentioned in Article 3:201 is again in conformity with economic insights, although the wording ('the extent of the ordinary risks of life') is a bit obscure. The example in the Commentary clarifies what is meant.⁵⁰ A victim is slightly injured in a car accident for which the actor is liable. After a few days, he decides to consult his physician, but on the way to the physician he is again hit by a car. In this example, the latter accident is regarded as an ordinary risk of life so that the first actor is not liable for the consequences of the second accident. In the economic literature, this type of accident is known as a 'coincidental accident'.⁵¹ The tort is a csqn for the losses, but the tort does not increase the likelihood or the severity of the particular accident. A famous example is *Berry v. Sugar Notch Borough*,⁵² involving a case where a decayed tree fell down at the exact time when a speeding trolley was passing by. As speeding does not increase the probability of being hit by falling trees, liability cannot lead to a lower probability of such accidents and it would only create administrative costs. Speeding was a csqn, because if the trolley had driven at the correct speed, it would not yet have reached the tree when it fell down. Hence, there is retrospective causation (but for the speeding, the accident would not have happened), but no prospective causation (speeding does not cause this type of losses).⁵³ The legally relevant cause in the example given in the Commentary, therefore, is not the first car accident but the second one. If the second car driver was negligent, there is a prospective causal link between his negligent behaviour and the losses, because driving negligently increases the probability of being involved in a traffic accident.

If there is retrospective but no prospective causation, liability is not economically desirable. Also in the opposite situation, where there is prospective but no retrospective causation, liability may not make economic sense. This brings us to a topic (not treated in the *Principles*), which is highly relevant under a rule of fault liability: the so-called theory of the 'lawful alternative'.⁵⁴ If an actor was negligent and if losses occurred, but the actor can prove that the same losses would have occurred if he had taken due care, the negligence is no csqn for the losses and the actor should not be held liable. Hence, csqn should not be required between the activity and the losses but between the negligence (or fault) and the losses. An example may clarify the relevance

⁴⁹ J. SPIER, *op. cit.* (note 41), p 63, no. 21.

⁵⁰ J. SPIER, *op. cit.* (note 41), p 62, no. 19.

⁵¹ S. SHAVELL, *op. cit.* (note 27), p 254.

⁵² 191 Pa. 345, 43 Al. 240 (1899).

⁵³ O. BEN-SHAHAR, 'Causation and Foreseeability', in: B. Bouckaert & G. De Geest (eds), *Encyclopedia of Law and Economics. Volume II. Civil Law and Economics*, Edward Elgar, Cheltenham 2000, p 646 ff.

⁵⁴ In Belgium this is called the theory of '*het rechtmatig alternatief*', in Germany the theory of '*das Rechtmäßiges Alternativverhalten*', and in the Netherlands the '*leer Demogue-Besier*'.

of this distinction.⁵⁵ Suppose that due care implies that a cricket field must be surrounded by a fence of 10 feet high, to prevent balls from causing damage to people or property in the neighbourhood. Occasionally a ball may fly over this fence, but this happens so rarely that it is not worthwhile to build a higher fence. In other words, the costs of increasing the height of the fence exceed the benefits thereof. Now suppose that the owner of a field erects a fence of only 9 feet high, so that he is negligent. If a ball is hit over this fence at a height of 9.5 feet, the owner should be held liable because his negligence has caused the losses. However, if a ball is hit over the too low fence at a height of 11 feet, the owner should not be liable, because also a fence of the correct height (the lawful alternative) would not have stopped the ball. The negligence is no csqn of the losses because without the negligence the losses would have occurred all the same.

From an economic point of view, fault liability should be limited to the losses that are caused by the negligence of the actor, because otherwise the actor will receive excessive care incentives. An inefficient outcome will be reached (i) if the actor is afraid that the court might underestimate his true level of care, thereby deeming him negligent even though he took sufficient care, or (ii) if the court sets the due care level higher than optimal without applying the theory of the lawful alternative. If the actor is found negligent under these circumstances, he will be bound to compensate the entire damage, including losses that are not caused by his negligent behaviour. In the cricket example, the optimal height of the fence is 10 feet. If the injurer erects a fence of 10 feet, but the court by mistake sets the due care level at 11 feet and does not apply the theory of the lawful alternative, the injurer will be held liable for all balls flying over the fence, irrespective of their height. Confronted with a large expected liability, the injurer may choose to build a fence of 11 feet, which is excessively high. By contrast, if the court applies the theory of the lawful alternative, the actor will choose to build a fence of the optimal height of 10 feet. He will then become liable for balls flying over between 10 feet (the efficient height) and 11 feet (the inefficient yet required height). Because 10 feet is the optimal height, the additional costs of having a fence of 11 feet exceed the expected liability when the fence is 10 feet high. Therefore, incorporating the theory of the lawful alternative can prevent excessive care incentives if the court by mistake sets the due care level too high. Of course, this advantage should be weighed against the increase in administrative costs that it causes.

2.4 *Strict Liability*

Article 5:101 of the *Principles* contains the following rule on strict liability: ‘A person who carries on an abnormally dangerous activity is strictly liable for damage charac-

⁵⁵ See M. KAHAN, ‘Causation and Incentives to Take Care Under the Negligence Rule’, 18. *JLS* 1989. The example is based on the case *Bolton v. Stone*, [1951] A.C. 850.

teristic to the risk presented by the activity and resulting from it.’ Even though this provision goes beyond the common denominator of national tort laws of EC Member States and extends the scope of strict liability beyond the scope defined by specific legislation, it is still very narrowly formulated.⁵⁶ In the Law and Economics literature, several situations are distinguished in which strict liability is preferred. All these activities cannot be qualified as ‘abnormally dangerous’, so that a broader rule would be preferable.

First, strict liability is to be preferred in unilateral accident situations, where only the injurer influences the accident risk.⁵⁷ In such an accident setting, there is no need to provide the victim with incentives to take care. Both fault and strict liability may give correct care incentives to the injurer, but strict liability has a number of advantages over fault liability. Care can be exercised in several dimensions. Fault liability gives incentives to take care only in the dimensions that are incorporated in the fault standard. Under strict liability, the injurer will take optimal care in all dimensions that influence his expected liability. Furthermore, the administrative costs will presumably be lower under strict liability, because there is no need to establish the actual care level of the injurer. Because there is less uncertainty over the outcome of the individual case, there will be more settlements out of court that are cheaper than lawsuits. A third advantage of strict liability in unilateral accident situations is that it leads to a more efficient activity level of the injurer, which brings us to the second situation in which strict liability is superior to negligence.

Second, strict liability is to be preferred if it is important to give incentives to the injurer for choosing an optimal activity level.⁵⁸ An actor engages in an activity as long as his costs are lower than the benefits he derives from the activity. He will only choose an efficient activity level, if he compares his personal benefits to *all* costs, including both his private costs and the costs he imposes on others. Under fault liability, the injurer escapes liability by taking due care. Therefore, he disregards the expected accident losses in taking a decision on the activity level. Because he is not liable for engaging in additional dangerous activities as long as he exercises due care, his activity level will be too high. Only strict liability provides incentives to the injurer to compare his private benefits with all costs, leading to the choice of the efficient activity level. In unilateral cases, this is an additional reason to prefer strict liability, which is especially (but not exclusively) important if the injurer carries out an abnormally dangerous activity. After all, expected losses can still be very high, even if due care is taken. Therefore, reduction of these expected losses should also be aimed for by reducing the activity level. In bilateral cases, where both the victim and the injurer can influence the accident risk, a defence of contributory negligence is needed to

⁵⁶ G. WAGNER, *op. cit.* (note 10) at 1282-1283.

⁵⁷ S. SHAVELL, *op. cit.* (note 27), p 178 ff.

⁵⁸ R.A. POSNER, *op. cit.* (note 28), p 178 ff; S. SHAVELL, *op. cit.* (note 27), p 193 ff; R.D. COOTER & T. ULEN, *op. cit.* (note 30), p 332, 333; H.-B. SCHÄFER & C. OTT, *op. cit.* (note 30), p 208 ff.

provide the victim with the correct care incentives. The Law and Economics literature has made clear that it is impossible to give both actors correct activity incentives, because only the actor that ultimately has to bear the expected accident losses will make a correct weighing of his utility against the total costs of the activity. Therefore, fault liability will lead to an efficient activity level of the victim (because he is the residual risk bearer), and strict liability with a defence of contributory negligence will induce an efficient activity level of the injurer. Hence, if it is more important to control the activity level of the injurer (as is often argued with respect to traffic accidents between car drivers and adult pedestrians), strict liability should be chosen.⁵⁹

The third reason to prefer strict liability, although there is no abnormally dangerous activity, is the situation where the injurer has better information regarding accident risks and possible care measures than the victim and/or the court.⁶⁰ In these situations, fault liability would cause problems for the court to establish a standard of conduct that is able to provide the correct care incentives. Fault liability would also cause problems for the victim to prove that the injurer behaved negligently. Strict liability does not suffer from these problems, because it is up to the injurer to weigh the costs of care against the resulting reduction in expected accident losses. His superior information enables him to make a better weighing than the court or the victim could do. For example, a pharmaceutical company is presumably better able to weigh the costs and benefits of additional testing of a new medicine than the court.

The three situations described above (unilateral accidents, control of the activity level of the injurer and superior information of the injurer) show that there are several reasons favouring strict liability, independently from the abnormal danger created by the activity. These additional reasons may explain strict liability for non-dangerous activities in several European countries. It may be deplored that the *Principles* do not include these reasons, since they seem to be shared (at least implicitly) by the tort laws of several European countries. Strict liability for animals provides a good example to illustrate the above reasoning. Such a rule exists, among other countries, in Belgium, France, Germany, Italy, the Netherlands and Spain.⁶¹ The preference for strict liability over fault liability can be explained by the desire to limit the activity level of the owner, by the difficulty to incorporate all possible care measures in the negligence rule, and by the fact that animals can cause losses in unilateral situations. Of course, in bilateral situations there should be a defence of contributory or comparative negligence, to avoid liability in cases where the victim has provoked the animal.

⁵⁹ M.G. FAURE, 'Economic Analysis', in: B.A. Koch & H. Koziol (Eds), *Unification of Tort Law: Strict Liability*, Kluwer Law International, The Hague 2002, p 366, 367; R.A. POSNER, *op. cit.* (note 28), p 179; S. SHAVELL, *op. cit.* (note 27), p 202.

⁶⁰ S. SHAVELL, *op. cit.* (note 27), p 189.

⁶¹ B.A. KOCH & H. KOZIOL (eds) 2002, pp 49, 133, 152, 211, 238 and 298.

2.5 Damages

2.5.1 General Remarks

After the injurer has been found liable for the losses suffered by the victim, the compensation to be paid must be calculated. The calculation of damages poses several problems, including whether calculation should be done in a concrete or in an abstract manner, whether damages should be a 'lump sum' or take the form of periodical payments, which losses have to be compensated and which losses should remain uncovered, and how to determine a suitable amount for non-pecuniary losses. In the Law and Economics literature, it is well established that the injurer must fully bear the consequences of the losses he has caused, in order to give him the correct incentives to weigh the costs of precautionary measures against the harm that can be prevented by taking these measures.

According to the comparative report on the law of damages of the European Group on Tort Law, almost all European countries follow the principle of *restitutio ad integrum*.⁶² Consequently, to a large extent, Chapter 10 of the *Principles*, which deals with the topic of damages, is in conformity with economic insights. Article 10:101 states that damages serve the aims of compensating the victim and preventing the harm. Several provisions of Chapter 10 are consistent with the economic argument in favour of full compensation. For example, Article 10:103 states that any benefits that the injured party gains are to be taken into account when determining damages. This rule avoids overcompensation, which could reduce the incentives of the victim to take efficient care. Also the principal choice in favour of concrete determination of damages, made in Article 10:201 of the *Principles*, fits the Law and Economics approach, provided that the exception made for abstract determination is applied in situations where this method provides a good approximation of the real damages. In this way, the reduction in the costs of calculation of damages outweighs the small (if any) errors in determining the amount of compensation to be paid. Material damage to cars is an example of a situation where abstract determination of damages may make economic sense. The costs of repair by a competent mechanic are a good assessment of the true losses. The abstract method avoids the problem that the injurer would not have to pay if the victim decides not to have his car repaired. Admittedly, the victim who does not have his car repaired does receive an amount of money so that he actually may gain from the accident. However, this only causes problems if a potential victim actively tries to become involved in an accident. A defence of comparative or contributory negligence solves this problem, because the victim will receive no or incomplete compensation and will not gain from the accident after all.

⁶² U. MAGNUS (Ed), *Unification of Tort Law: Damages*, Kluwer Law International, The Hague 2001, p 188.

Other provisions in Chapter 10 are less consistent with Law and Economics insights: the rules on damages for fatal accidents and reduction of damages will be discussed below. We will also devote attention to the choice for proportional liability made in Chapter 3 on causation.

2.5.2 *Damages for Fatal Accidents*

Article 10:202 (2) deals with damages for fatal accidents. Persons such as family members whom the deceased maintained or would have maintained if death had not occurred can claim damages to the extent of the loss of that support. From a Law and Economics perspective, this amount of damages is too low to be able to reach the goal of prevention, because the full losses are not incorporated in the calculation. The damages are based on the loss of maintenance of the surviving relatives, but the loss of life of the deceased himself is omitted. Yet, it can be safely assumed that the deceased attached a positive value to his life, which is greater than the maintenance costs of his relatives. Since this higher value is not compensated, Article 10:202 is problematic, not only from a perspective of prevention but also from a compensation point of view.

How should the value that the deceased attached to his life be calculated? This is a very difficult problem to which the Law and Economics literature does not provide a perfect answer. The suggested solution is the so-called ‘value of a statistical life’ (VSL). In 2002, Viscusi and Aldy published an overview of more than 60 studies regarding the VSL.⁶³ This VSL is derived from all sorts of decisions taken by individuals that influence their health and safety. Examples include buying a dangerous product or choosing dangerous work. Such market choices contain implicit trade-offs between money and risk, allowing for estimates regarding the size of the VSL. For example, a person who buys an airbag for his car because it decreases the risk of a fatal accident, values the decline in the accident probability higher than the price of the airbag. This decision thus provides information regarding the value he attaches to his life. By analyzing many of such decisions, one can derive a general figure of the VSL. This VSL is not a universal constant or the correct price of a human life. It is the trade-off that is found in a concrete investigation concerning a particular risk, such as the relation between the height of the salary and the occupational hazards. A VSL that is found in labour related research, therefore, cannot be simply transplanted to a non-labour environment such as traffic accidents, because the different populations have different risk preferences and attach different values to

⁶³ W.K. VISCUSI & J.E. ALDY (2002), ‘The Value of a Statistical Life: A Critical Review of Market Estimates throughout the World’, *Harvard John M. Olin Center for Law, Economics, and Business Discussion Paper Series 11/2002 nr. 392*.

life-saving.⁶⁴ Most American labour-related researches find a VSL between \$3.8 and \$9.0 million. According to Sunstein, the VSL is currently set at about \$6.1 million.⁶⁵ Research regarding buying and using seatbelts, smoke detectors, bicycle helmets *et cetera* show a comparable, but somewhat lower VSL.⁶⁶ These estimates indicate that damages for fatal accidents that are based on the maintenance by the deceased are too low to provide compensation for sustained losses and to give the injurer incentives to make a correct weighing between the costs of taking care and the benefits thereof.

Sunstein argues that the VSL is not a correct measure for cost-benefit-analyses, and that one should use instead the value of a statistical life year (VSLY). The life of a young person is 'worth more' than the life of an older person, in the sense that more life years are saved. This implies that damages for fatal accidents should be higher if the victim is younger. Article 10:202 can reach this outcome, provided that the deceased maintained relatives, but the overall level of damages remains too low because the loss of life of the deceased is not incorporated. In sum, Law and Economics does not provide a perfect solution to the problem of calculating the value of life but at least avoids that real losses are not compensated (as is the case in the *Principles*), which results in under-deterrence and a too high level of accident costs.

2.5.3 Reduction of Damages

Article 10:401 states that 'in an exceptional case, if in light of the financial situation of the parties full compensation would be an oppressive burden to the defendant, damages may be reduced.' In doing so, the basis of liability, the scopes of protection of the interest and the magnitude of the damage have to be taken into account. Given the Law and Economics arguments in favour of full compensation, it will come as no surprise that reduction of damages generally is regarded negatively, because it reduces the incentives of the injurer to take efficient care and to choose an optimal activity level. In the *Principles*, only limited justifications for reduction of damages are given. It is especially noteworthy that no reference is made to the topic of insurability, which is often invoked in discussions regarding reduction of damages. The line of reasoning is that full liability would lead to uninsurability of certain activities, so that reduction of damages is needed. In this respect, Van den Bergh and Faure argue that it is not primarily the possible size of the losses that leads to uninsurability, but rather uncertainty regarding the probability of losses and the danger of adverse selection. Limitation of liability does not solve the latter problems and provides inade-

⁶⁴ *Ibid.*, p 24.

⁶⁵ C.R. SUNSTEIN (2003), 'Lives, Life-Years, and Willingness to Pay', *University of Chicago Law & Economics, Olin Working Paper No. 191* and C.R. SUNSTEIN & E.A. POSNER (2004), 'Dollars and Death', *University of Chicago Law & Economics Working Paper No. 222*.

⁶⁶ W.K. VISCUSI & J.E. ALDY (2002), *op. cit.* (note 63), p 30.

quate incentives to tortfeasors.⁶⁷ In the Dutch Civil Code it is explicitly mentioned that the reduction of damages should not extend beyond the amount for which the injurer was insured or should have been insured. This provision reduces the scope for reduction of damages, so that it scores better on the efficiency scale than the rule adopted by the *Principles*. To keep the incentives for taking efficient care intact, the duty to insure may be limited in real cases of uninsurability but the injurer should remain liable for losses exceeding the insured amount.

In the Law and Economics literature, it is well established that the problems of limiting liability are more severe in a setting of strict liability than in a setting of negligence. The reason is that, under negligence, the injurer can avoid liability altogether by taking due care, while under strict liability he can only reduce his expected liability by taking more care. The financial reward for taking due care is therefore greater under negligence, so that a reduction in damages leads less often to inefficiently low care levels.⁶⁸ Unfortunately, many legal systems justify reduction of damages especially in situations of strict liability, where the defendant can be liable for large losses even if he was not at fault. From an efficiency point of view, this is problematic since it creates incentives to reduce precautions below the level of efficient care. The *Principles* do not explicitly mention strict liability as a factor that could call for reduction of damages, although the ‘basis of liability’ is distinguished as a relevant factor.

The Commentary provides two examples of situations that could call for reduction of damages.⁶⁹ In the first example, a fourteen-year-old son of an unemployed couple participates in a ski-camp organized by his school. When following his teacher and other pupils on a rather steep slope, he loses control over his skis on a hard frozen spot and crashes into a multibillionaire rock star. This rich victim suffers bruises in his face and, as a consequence, cannot perform on a special gala for which he would have earned € 2 million. At first sight, this example indeed calls for reduction of damages. However, on a closer look, a more careful analysis is warranted. It is very likely that either the boy himself or his school will have bought an insurance policy, which (also) covers liability for skiing accidents, or that his parents have a general liability insurance that covers the liability of the son. If so, reduction is not called for. However, if we disregard insurance, this extreme example might indeed call for reduction of damages. Full

⁶⁷ R.J. VAN DEN BERGH & M.G. FAURE, ‘De invloed van verzekering op de civiele aansprakelijkheid: een rechtseconomische analyse’, in: *De invloed van verzekering op de civiele aansprakelijkheid (preadviezen, uitgebracht voor de Vereniging voor Burgerlijk Recht)*, Koninklijke Vermande bv, Lelystad 1990, p 19 ff. Also see R.D. COOTER & T. ULEN, *op. cit.* (note 30), p 358 ff and M.G. FAURE, ‘The View from Law and Economics’, in: G. Wagner (ed), *Tort Law and Liability Insurance*, Springer-Verlag, Vienna 2005, pp 251, 252.

⁶⁸ See e.g. G. DARI-MATTIACCI & G. DE GEEST, ‘Judgment Proofness under Four Different Precaution Technologies’, *George Mason University School of Law, Law and Economics Working Paper Series nr. 04-2003* and S. SHAVELL, *op. cit.* (note 27), p 231.

⁶⁹ O. MORÉTEAU, ‘Reduction of Damages’, *Principles of European Tort Law*, 2005, p 181, no, 10, 11.

liability would probably not give more care incentives than incomplete liability, provided that the injurer would still be liable for an amount of money that (i) he can pay and (ii) that is large enough to make it more attractive for him to take due care. This example introduces the question whether wealth of the parties involved should influence the magnitude of liability. Due to the concept of decreasing marginal utility of wealth, it may very well be the case that € 2 million for the multibillionaire rock star are worth less in utility terms than e.g. € 10.000 for the boy or his parents. Therefore, one could argue that total welfare decreases dramatically by making the boy fully liable, because his life and the lives of his parents will be financially ruined, while the rock star does not suffer a large utility loss by not earning € 2 million in the first place. However, introducing wealth of parties into the analysis does not only influence the optimal amount of compensation, which will be higher for wealthier defendants, but also the optimal level of care, which is also higher for wealthier defendants.⁷⁰ It is therefore perfectly possible that the behaviour of the poor boy in the example should not be regarded as negligent in the first place, so that the question how much damages he should pay will not even be posed.

In the second example, due to economic growth in the region and rapidly developing air traffic a local airport momentarily exceeds the level of noise allowed under existing regulations. Many people may bring a claim for this violation of a protective norm and the total amount of damages to be paid could force the airport to close. This fear brings the authors of the *Principles* to the conclusion that reduction of damages may be called for. However, in the extreme case where the losses of even a limited violation are so large that the airport indeed has to shut down, it seriously must be questioned whether it is a desirable location for the airport. Closing the airport may lead to an increase in welfare, if the local residents suffer real losses and if exploiting the airport is only possible at the expense of the residents. In sum, the arguments and examples in the Commentary in favour of reduction of damages are not very strong. Only in extreme cases where full liability is not needed to provide the correct incentives and where it would lead to devastating results, reduction of damages is justifiable. Also the availability of liability insurance greatly limits the scope for reduction of damages.

2.5.4 Proportional Liability

As we have already mentioned in section 2.2, the *Principles* adopt the concept of proportional liability in cases where two or more events may or may not have caused a loss (see Article 3:103). The justification is that a liable person has to compensate the loss he may have caused, whereas he should not be liable for a loss that partially is or may have been caused by others, the victim himself or natural events. The solution of the *Principles* is innovative and deviates from established rules of tort law in

⁷⁰ J.H. ARLEN, 'Should Defendant's Wealth Matter?', 21. *JLS* 1992, p 422 ff.

most EC Member States.⁷¹ Interestingly, a rule of proportional liability is in line with the dominant view in the Law and Economics literature, according to which it provides better care and activity incentives than an all-or-nothing solution.⁷² In the previous sections it became clear that the injurer should face liability for all the losses that he has caused, in order to give him incentives to take optimal care and to choose an optimal activity level. If it is not certain that the injurer has made the losses happen, but there is only a probability that he is the cause of the losses, full liability leads to over-deterrence and no liability leads to under-deterrence.

An example may clarify the preference for a rule of proportional liability. Suppose that on average in a population of 100,000 people, six people get a certain disease. Now consider a city of 100,000 people, where a nuclear power plant is located and where ten people become sick. Without further information, it may be concluded that the plant, e.g. by emitting radiation or contaminated fumes has caused four additional diseases. If it is not possible to distinguish between people who contracted the disease due to natural factors or circumstances in their own risk domain and people whose disease is caused by the factory, for every individual the probability that his disease is caused by the factory equals 40 percent. An all-or-nothing approach, according to which the factory is either held liable or not bound to compensate the harm, will be inefficient. On the one hand, a rejection of liability because the probability of causation does not exceed a certain threshold (e.g. 50 percent), will give the factory too little care incentives. On the other hand, if the factory is made liable for all ten cases of the disease, it will have to compensate more losses than it has caused. This will lead to excessive care and a too low activity level, possibly even to withdrawing from the activity altogether. Furthermore, it may prove to become difficult or even impossible to insure the activity, because it is problematic to calculate a premium when liability also depends on the behaviour of other people than the insured. Contrary to the problems of the all-or-nothing approach, proportional liability will provide correct incentives. If the factory has to pay 40 percent of the losses in all ten cases, the result is that it pays for four cases of the disease, which is exactly the number of diseases that it has caused.

From the above, it follows that the choice for proportional liability is consistent with arguments from the Law and Economics literature. Nevertheless, a number of qualifications put the preference for proportional liability in perspective. The first, obvious point is that with proportional liability, some victims receive too much compensation (in the example the people that got sick due to natural factors) and others receive too little (those who are hurt by the factory). This point is not relevant for the incentives of the injurer to take care, but given the emphasis that the

⁷¹ J. SPIER, *op. cit.* (note 41), p 46, no. 8, 9.

⁷² For an overview of this literature, see e.g. M.G. FAURE, 'Causal Uncertainty, Joint and Several Liability and Insurance', in: H. Koziol & J. Spier (eds), *Liber Amicorum Pierre Widmer*, Springer-Verlag, Vienna 2003, pp 79-98.

Principles put on compensation, it is noteworthy. Second, the factory only receives the optimal incentives if *all* victims bring suit. If this is not the case, the factory receives too little care incentives. Furthermore, the presented line of reasoning assumes that the probability of causation is the same for all persons involved, while in reality this probability may differ dramatically between persons. For example, the probability that the factory has caused the losses can be higher for people living nearby the factory than for persons living farther away. Also factors like age, gender, lifestyle and heredity will have their influence. It is thus perfectly possible that for some people the probability of causation is above the threshold and for others it is below the threshold. Even with the all-or-nothing approach, the factory will still be liable in some cases, so that the alleged problems of the threshold approach are less severe in reality. Next, the possibility of proportional liability may create an incentive to withdraw from certain activities if liability is based on a mere coincidental relation. In the example above, the fact that ten diseases occur in the area where the power plant is located in no way proves a causal relationship between the activity of the factory and the higher number of diseases. In some areas there will be more cases than average, in other areas there will be less than average. This is inherent to the concept of averages and it would be wrong to base liability on such a coincidence. Before a causal relation between the two variables can be assumed, it is necessary to develop a theory that can explain the possible correlation. For example, a medical theory may explain why radiation from a nuclear power plant leads to this type of disease and statistical data may subsequently show an increased number of diseases in the surroundings of a nuclear power plant. This could provide sufficient evidence to accept a causal relationship; the mere increase in itself, however, is not enough.

3. Concluding Remarks

In this paper we took a critical look at the *Principles of European Tort Law* and addressed two main questions. The first enquiry focused on the desirability of harmonization of tort law, whereas the second question related to the intrinsic quality of the *Principles* as a way to enhance the development of tort law in Europe.

The traditional arguments in favour of harmonization, such as market integration and increased legal certainty, were confronted with insights from the economic analysis of harmonization of law. Attention was drawn to a number of important advantages flowing from divergent tort laws: the possibility to satisfy divergent preferences across countries and learning processes. Social norms regarding desirable behaviour may differ per country, implying that what can be termed reasonable care in one country might be regarded as excessive care in another country. Also, different interpretations of vague concepts of tort law and different choices to replace fault liability by strict liability may generate important learning processes. Conversely, the economic arguments in favour of harmonization of tort law are weak. Many torts do not have trans-boundary effects, so that the need to internalize negative interstate externalities effects is not a major concern of the harmonization process. Even if there

are significant cross-border effects, it must first be investigated whether national norms can lead to full internalization of the externalities. Also, the argument that differences in tort law may lead to a 'race for the bottom' is not convincing in the field of tort law. Finally, the size of transaction cost savings is small and the need to realize a 'level playing field' for industry is a conceptually mistaken argument.

Even though the economic arguments in favour of diversity are stronger than the economic arguments supporting harmonization, the work of the European Group of Tort Law is a very important achievement for the future development of tort law. However, it must be stressed that the *Principles* should not be forced upon the legal orders of the Member States by way of a European Directive, which would constitute an immediate 'top down' harmonization. Conversely, the *Principles* may exert influence on national legislators and thus lay the basis for a 'bottom up' harmonization, which can be achieved gradually and spontaneously over the next years. An important instrument to enable such a harmonization is the development of a common language and uniform concepts for the practice of tort law. Irrespective of one's view on the desirability of harmonization and the intrinsic quality of the drafted rules, the common legal vocabulary can in any case be considered as an important achievement of the *Principles*. Moreover, if the *Principles* are presented as a non-compulsory system, leaving states the choice to either opt-in or opt-out, the benefits of satisfying heterogeneous preferences and learning processes will be preserved. At the same time, transaction cost savings may be achieved in fields where preferences are homogeneous. If comparative lawyers succeed in showing that some differences in legal rules across countries are merely of a technical nature and can be considered as pointless incompatibilities, which do not touch upon or relate to differing preferences, then a harmonization approach of searching for a common denominator may prove to be more successful than the 'top down' harmonization forced upon by way of EC Regulations and Directives.

In the second part of our paper, we investigated whether the *Principles* lead to an enhancement of tort law and an improvement of its quality, judged from a Law and Economics perspective. We found that large parts of the *Principles* are in conformity with economic insights: the elements of the fault standard, some of the rules on causation and the concept of proportional liability. However, the harmony with the economic analysis of tort law is not complete. According to Article 10:101 of the *Principles*, damages serve the goal of compensation, but also the aim of preventing harm. This suggests that the possible preventive function of tort law, which is stressed in Law and Economics, is taken seriously. However, many elements of the *Principles* turn out to be contradictory to Law and Economics recommendations. In our paper, we discussed the most important points of difference. First, the limitation of damages to normal losses, so that abnormally high losses need not be compensated, provides the injurer with too little care incentives. Second, the *Principles* contain a very narrowly defined rule on strict liability, which only concerns abnormally dangerous activities. In the Law and Economics literature, several other

reasons for introducing strict liability are distinguished, such as the activity level of the injurer, the possible superior information of the injurer regarding accident risks and possible care measures, and the fact that negligence gives the injurer care incentives only in the dimensions that are incorporated in the due care standard whereas strict liability provides incentives in all dimensions. Third, damages for fatal accidents are determined by the loss of support of relatives, whereas an economic approach advocates the Value of a Statistical Life. Finally, the choice for proportional liability is consistent with arguments from the Law and Economics literature, but a number of qualifications put this preference for proportional liability in perspective.

We do not claim that conformity with insights from the economic analysis of tort law is the sole criterion to judge whether the *Principles* may lead to ‘better’ law. The efficiency approach, focussing on deterrence and optimal loss spreading, may be contrasted with a social justice approach, stressing the compensatory function of tort law. Since goals of prevention and compensation are not always compatible with each other, it is ultimately a political decision which approach will take the upper hand. This brings us back to the first part of the paper, in which we emphasized that the goals of tort law may reflect different preferences across EC Member States. From this perspective, the inconsistencies with the economic analysis discussed in this paper may be seen as a political compromise that should broaden the support for the *Principles* as a basis of soft harmonization of tort law in Europe. In any case, horizontal competition between national tort laws should be kept intact and Member States should remain able to decide freely either to introduce (parts of) the *Principles* in their legal system or to keep the existing tort rules unchanged.