Economic Analysis of Fault

Michael Faure

Part I – Introduction

[1] Tort law has also been studied extensively by scholars interested in the economic analysis of law. This economic literature has also paid attention to the importance of actions such as wrongfulness and fault in establishing liability. It seems important to address briefly the economic literature with respect to fault. Although economic analysis is obviously not decisive at the normative level, it may provide useful insights when it comes to drafting general principles of tort law.¹

[2] Obviously, economic analysis of tort law, which has largely an American background, has not always focused on the importance of different legal categories, such as the difference between wrongfulness and fault. However, several of the questions that are important in the discussions concerning fault have been addressed in the economic theory of tort law, more particularly in the context of the economic analysis of the negligence rule. In that respect the question has also been addressed for example whether the standard of care in negligence should be established using a subjective or an objective yardstick. Economic analysis has equally paid attention to the question whether mentally ill persons should be held liable according to the negligence rule or not.

[3] Some of these issues will be addressed in this paper, whereby some of the general questions and cases of the questionnaire on fault will be discussed as well. It is, however, not possible to follow these in the same order, since economic theory has a different structure. Some of the notions of economic theory will be illuminated by examples from Belgian tort law. It is obviously not meant to provide a country report on Belgium,² but the Belgian examples are used to illustrate the points of economic analysis.

¹ I am grateful to Israel Gilead, Ulrich Magnus and Gary Schwartz for useful comments on an earlier draft of this paper.
² Obviously this is not the place to provide a detailed overview of the discussion of the usefulness of the economic analysis of tort law. See in that respect e.g. W. Landes/R. Posner, The Economic Structure of Tort Law (1986), 1–24.
³ This is provided by Herman Coey.

Part II – The Economic Model of Tort Law

[4] In the economic analysis of law, tort law is seen as an instrument to deter activities, worth being avoided on efficiency grounds through liability rules. The expectation to be held liable ex post should induce parties ex ante to take care or change the activity level with a view to reducing the accident risk. Liability rules should, according to this economic model, thus be used in order to reach efficiency. In order to establish the efficient solution, economists state that the goal of tort law is to minimize the sum of accident costs and the costs of accident avoidance. The sum, called the social costs of accidents, can be presented as follows:

\[ C = p(x,y)L + A(x) + B(y), \]  
where:

- \( C \) = the sum of expected accident costs and the costs of care,
- \( A \) = the victim,
- \( B \) = the injurer,
- \( x \) = level of care of the victim,
- \( y \) = level of care of the injurer,
- \( p \) = probability that an accident will occur,
- \( L \) = magnitude of the loss.

[5] It is assumed that both parties are risk neutral, that the magnitude of the loss (L) is independent of the level of care, that more care will reduce the probability (p) of an

---


5 Although I stress the preventive function of tort law in this paper, Calabresi has pointed at the fact that liability rules may equally aim at loss spreading (Calabresi’s secondary costs) and at a reduction of administrative costs (Calabresi’s tertiary costs). See G. Calabresi, The Costs of Accidents (1970).


7 See G. Calabresi (supra fn. 5). See also S. Shavell, Economic Analysis of Accident Law (1987), 5–6.

8 This is the basic model presented by S. Shavell, Strict Liability versus Negligence, [1980] Journal of Legal Studies (JLS), 1–25.
accident and that only the victim (A) suffers a loss. To minimize the social costs (C), the levels of care must be set at \( x = x^* \) for the victim and \( y = y^* \) for the injurer. At these efficient levels, the marginal benefits from an increase in care (reduction of \( p(x,y)L \)) equal the marginal cost of greater care.\(^9\) From an economic point of view, optimal care is thus not equal to the highest care possible. The highest care might lead to spillover, since the marginal costs would be greater than the marginal benefit in reducing the expected loss. Calabresi formulated this as follows:

> "Our society is not committed to preserving life at any cost. In its broadest sense, the rather unpleasant notion that we are willing to destroy lives should be obvious. Wars are fought (...). Ventures are undertaken that, statistically at least, are certain to cost lives. We take planes and cars rather than safer, slower means of travel. And perhaps most telling, we use relatively safe equipment rather than the safest imaginable, because — and it is not a bad reason — the safest costs too much."\(^{10}\)

[6] The difficulty is therefore to find the efficient levels of care \( x^* \) and \( y^* \). In a tort situation, transaction costs are mostly prohibitive, meaning that the efficient levels \( x^* \) and \( y^* \) cannot be reached through voluntary negotiations.\(^{11}\) Therefore, the legal system should intervene to provide liability rules that will lead to the efficient level of care. [7] One rule that may give incentives to the injurer to follow the efficient level of care is the negligence rule. The negligence rule is defined as a rule according to which the injurer will only have to bear the loss if he uses less than a legally required level of care, referred to as the due care level. This probably equals the notion of wrongfulness, discussed earlier by the group.\(^{12}\) The negligence rule as defined here, means that the injurer will be held liable if he spends less than the due care level required by the legal system, in other words if he acted wrongfully. Assuming that the due care level required by the legal system is equal to the optimal level of care (\( y^* \)), the injurer will always follow the optimal care level. This is indeed the cheapest solution for him. If the injurer would spend less than \( y^* \) on care, his total costs would be equal to

\[
p(o, y^*)L + B(y^*)
\]

[8] If, on the other hand, he spends the efficient level of care, he will not have to bear the expected loss. Hence, the expected costs of the injurer are in that case only his costs of taking efficient care: \( B(y^*) \). The question whether \( B \) will take efficient care or not will, therefore, depend upon:

\[
p(o, y^*)L + B(y^*) \geq B(y^*)
\]

---

10 G. Calabresi (supra fn. 5), 17.
12 See the questions 1.1, 1.2 and 1.4 of the questionnaire.
[9] If the sum of expected loss and the actual costs of care are higher than the costs of efficient care (y*) the injurer will take efficient care. If, on the other hand, these costs would be lower than the costs of taking efficient care, it would be cheaper for the injurer not to take efficient care. However, since we defined y* as the point where the social costs are as low as possible, P(o,y*)L + B(y*) will always be higher than the costs of taking y*. Hence, the simple conclusion is that under a negligence rule, the injurer will always have no incentive to spend y* on care and an efficient outcome will be reached. This is true as long as the legal system defines y* as due care.13

[10] Economic literature has indicated that also other legal rules such as a strict liability rule may serve the deterrent purpose of tort law. I will, however, not discuss strict liability within the scope of this paper since this has been the subject of earlier work of the group.14 Moreover it should be stressed that the analysis presented here assumed that the injurer has money at stake to pay compensation to the victim15 and that only one party (referred to as 'the injurer') influences the accident risk. The influence of the victim on the accident risk is therefore assumed to be zero in the analysis presented here.

Part III – Efficient Care and the Learned Hand Standard

[11] According to this economic model, an injurer will be found liable under a negligence rule if he spent less than the due care the legal system required from him (y<y*). The crucial question therefore is, from an economic point of view, how the judge should establish this efficient level of care. Spending more on care will reduce the probability that an accident may occur additionally. Requiring the injurer to spend more on care is efficient as long as the marginal costs of care are lower than the additional benefit in reduction of the expected loss. The efficient level of care y* is found where marginal costs of care equal the marginal benefit in reduction of expected loss.16

[12] Economic analysis does not, however, assume that judges make explicit mathematical calculations of marginal costs and marginal benefits to establish the efficient care level. Often such a marginal cost/marginal benefit weighing takes place in a rather implicit manner. Hence, economic scholars often argue that judges act as if the goal

13 See S. Shavell (supra fn. 7), 14.
15 The deterrent effect of liability rules may obviously be diluted if there is a "judgement proof" problem (see S. Shavell, The Judgement Proof Problem, [1986] International Review of Law and Economics (IRE), 43–58).
of their actions were to achieve wealth maximization, even though their decisions are mostly not formulated in economic terms.\footnote{This claim has especially been made by W. Landes/R. Posner, [1981] GLR, 851.} Sometimes, however, a judge will explicitly argue that the injurer is liable since he could have reduced the likelihood of an accident easily by spending relatively low costs on additional care.

\footnote{18} Judge Learned Hand took economic considerations explicitly into account in judging comparative negligence in the following case: a barge was moored in a harbor, while a storm was approaching. The barge broke loose from its moorings and considerable damage to the ship was caused. The question arose whether the barge-owner had taken appropriate precautions in order to protect its own vessel. Judge Learned Hand wondered whether the accident could have been avoided by having a person watching the barge who could have prevented any collision of vessels. The costs of this preventive measure might have been considerably lower than the expected loss. According to Learned Hand, this question had to be judged by weighing the costs of preventive action versus the damage caused by the accident. Judge Learned Hand translated this question by asking whether the burden of precaution \((B(y))\) is lower or higher than the probability times the magnitude of the loss \((P,L)\): the formula therefore reads: \footnote{19} 

\[
B(y)L \geq pL
\]

\footnote{19} Although this case is often quoted in American law and economics textbooks, Learned Hand’s formula does not quite fit into the economic model of tort law.\footnote{20} The problem is that Judge Learned Hand expresses the costs of care and the expected loss in absolute numbers, whereas in the economic model \(y^k\) is fixed by weighing marginal costs versus marginal benefits. Brown pointed at this shortcoming of the Hand formula and showed that the efficient level of care should be determined in an incremental and not in an absolute manner.\footnote{21} However, Landes and Posner provided a detailed analysis of American tort case law and argued that in legal practice American courts actually define the required care in incremental terms: “The courts ask: what additional care inputs should the defendant have used to avoid this accident, given his existing level of care?”\footnote{22} This obviously invites a marginal analysis. Other criticism has been
formulated upon the Rand formula as well, which can, however, not be discussed within the scope of this paper.23

Part IV – The Bonus Pater Familias Standard

1. The law: defining care in abstracto

[15] How does the economic analysis of tort law, presented above, compare to the concepts of negligence in for instance Belgian or French tort law? Under Belgian law the general liability rule relates to the fault concept, laid down in art. 1382 of the civil code. This states:

"Any act by which a person causes damage to another, makes the person through whose fault the damage occurred liable to make reparation for such damage".

[16] This makes clear that Belgian law just like French law, does not make a difference between wrongfulness and fault.24 Fault is the general requirement for liability under the negligence rule of art. 1382 of the civil code. There are two categories of fault: the violation of a statutory or regulatory norm on the one hand and the breach of the general duty of care on the other hand. In legal practice most of the liability cases in Belgium come within the first category. Whether a certain conduct violates the general duty of care has to be appreciated by reference to the standard of the so-called bonus pater familias, a Roman law based concept. This standard is applied in French law oriented countries like Belgium, but is also used in other legal systems, where it is usually referred to as 'the reasonable man standard'. It refers to the conduct of a normally careful and prudent person, capable of conducting himself with care and diligence.25 The judgement whether a particular defendant violated the bonus pater familias standard or not, will, according to Belgian legal doctrine, in principle be done in abstracto. This means that Belgian law will in principle not take into account personal features of the defendant, such as his intelligence, education or gender.26


24 See question 1.4 of the questionnaire.


In the context of the appreciation of the duty of care, the foreseeability of the damage is another condition for liability. The injurer is liable if the harm caused by the act is reasonably foreseeable and if he nevertheless did not take the necessary measures to prevent the accident.27

2. Differentiation of $y^*$?

How does this bonus pater familias notion, used in some legal systems to determine fault, relate to the economic analysis of tort law? We indicated that the economic model shows that a fault liability will give incentives to the injurer to take efficient care, provided that the efficient care level $y^*$ is established by the judge in an optimal manner. $y^*$ is, as was shown above, dependent upon the costs of preventive measures on the one hand and the expected loss on the other hand. The costs of care might of course be different for every individual. A person with very high qualifications could take care at lower costs than a person who does not possess those qualities. For example, an experienced football or hockey player can during a game take relatively high care at relatively low costs, whereas the costs of care for an amateur who plays the game for the first time might be a lot higher. Since the costs of care differ, in principle also the $y^*$ differs. Should the legal system now take into account these different abilities of injurers in avoiding accidents and should the legal system thus differentiate between different $y^*$s? In principle one could state that for an injurer with low qualifications $y^*$ will be lower than for the average injurer, because his costs of taking preventive measures are considerably higher. At first sight, one could therefore argue that forcing such a high cost/low care injurer to the average care level would be inefficient and would thus lead to spillage. Posner gives the following example. Assume that the expected loss equals 100 and that the average injurer can only avoid the accidents at a cost of 120. In that case there should be no liability, since the costs of prevention are higher than the expected losses. However, when one particular injurer with very high qualifications would be able to avoid the accident at a cost which is lower than 100, it would in principle be efficient to hold him liable, thus giving him an incentive to take efficient care.28 The fact that the legal system cannot calculate the actual costs of care of every injurer also explains why people are nevertheless held liable. In the ideal world of the economics of the negligence rule all injurers would follow $y^*$ and would therefore never be held liable. But courts estimate the accident avoidance costs on the average, which is the reasonable man rule.29

The previous thoughts bring us to an important conclusion with respect to the efficient care level: if the legal system could, at relatively low costs, distinguish between several types of injurers, it would be efficient to hold them to different standards of

---

27 R.O. Daley (supra fn. 26), 165–167; H. van den Berghe (supra fn. 26), 8.
29 So R. Posner (supra fn. 28), 171 and S. Shavell (supra fn. 7), 73–86.
care. Obviously the costs involved with administering such a system of detailed classification will often be too high. Therefore, one would expect that if a classification of the due care standard is too costly, the legal system will set the standard at a certain average level of \( y^* \). The legal system will, therefore, given the high costs of a detailed classification, unavoidably set the efficient care level at an average level of \( y^* \), referred to as \( \tilde{y}^* \). An inevitable consequence is that some injurers will not be capable of following the \( \tilde{y}^* \) standard. This will, hence, lead to liability cases. Indeed, if the simple economic model of tort law, as presented above, would always apply, this would mean that every injurer would always spend \( y^* \) on care, so that injurers would never be found liable and there would be no liability cases under the negligence rule before the court. The fact that the legal system is not able to provide a detailed classification of the \( y^* \) standard for every injurer, but applies an average standard (\( \tilde{y}^* \)) is one of the reasons why there will be liability cases under the negligence rule before the court.

[20] This problem can be illustrated by using a frequency distribution curve.

![Diagram](image)

[21] This curve shows for how many persons the average care (\( \tilde{y}^* \)) is equally the efficient care. One will notice that for some individuals their efficient care (\( y^{*3} \)) is much higher than the average (\( \tilde{y}^* \)). These are the individuals who can exercise very

---


high care at relatively low costs. At the other side of the distribution curve, one finds persons with very low qualifications for whom the efficient care \( (y^*) \) constitutes a relatively low level of care. What happens when the law only requires an average standard of care \( (y^*) \) is that the high care individuals \( (y^*) \) have no incentive to spend this high care under the regime of the fault rule. They are indeed already off the hook if they take the average care \( (y^*) \) required by the legal system. The low care/high costs injurers \( (y^{*1}) \) will probably try to follow the \( y^* \) care level required by the legal system, since this will allow them to avoid having to pay damages to the victim. But for some of these extremely low qualified injurers it may cost so much to exercise the average care required by the legal system that it is relatively ‘cheaper’ for them to run the risk of being held liable. For them, the actual costs of taking care are larger than their expected loss. In other words By\( ^* \) to reach \( y^* \) is \( > B(y^*) + p(x,y)L). \)

[22] These refinements of the economic model of tort law are important, since they show that classification of levels of care is efficient when this is possible at relatively low costs. Whether such an individualization of the standard of care is possible, is obviously again a matter of weighing costs and benefits. A lot will depend upon the information costs for the court to find out whether a certain individual was for example highly qualified to take high care at low costs. Obviously such a differentiation will usually not take place in individual cases, but through a classification of types of injurers in various groups. If the costs of a further classification are outweighed by the benefits of such a further individualization of the standard of care in providing incentives for efficient care, such a qualification can be considered efficient.\(^{33}\)

[23] In sum: a problem with the bonus pater familias rule is that the objective standard will be an average one. It will therefore inevitably be too high for some injurers and too low for others. This may both lead to respectively overdeterrence and to underdeterrence.\(^{30}\) Therefore individualization should in principle be the rule rather than the exception, unless its costs are prohibitive.

3. Classification of care levels

[24] How do these refinements of the economic model of tort law, arguing that a differentiation/classification of the standard of care is sometimes efficient, relate to the application of a bonus pater familias standard? This question obviously relates to question 6 of the questionnaire, asking whether an objective or a subjective yardstick will be used and questioning the role of typical abilities.

---


\(^{34}\) As was shown in the paper on strict liability, this problem is avoided under strict liability since under that rule the injurers will not invest in precautions of which the marginal costs are higher than the marginal benefits in a reduced accident risk. See also M. Faure (supra fn. 14).
[25] As we have just indicated, legal systems such as for example the Belgian, indicate that an appreciation of the care exercised by the *bonus pater familias* is in principle done "in the abstract". However, some concretization is possible by referring for example to the *bonus pater familias* who finds himself in the same concrete circumstances as the injurer. Taking into account external circumstances such as time, location and atmospheric conditions is obviously useful. The costs of care and therefore the standard of efficient care will obviously be different when one is driving on a dry road with sunny weather or on a wet road during a stormy November night. These kind of circumstances are also easy to establish for the judge, so that it seems efficient that these circumstances be taken into account when the standard of due care is established. Thus, Belgian case law holds that one should take into account the external circumstances in which the injurer finds himself. Belgian case law equally holds that the judge can take prior knowledge of the injurer, for example concerning the bad condition of a specific road, into account.

[26] This case law seems to be consistent with economic analysis. The standard of care is generally established "in the abstract". An appreciation "in the concrete" which would take circumstances such as age, education or intelligence of the injurer into account is very costly. However, if a classification can be done at relatively low costs, one can also notice this in legal systems, such as for example in Belgian tort law. Professional liability offers several examples. If, for instance, a doctor's conduct will have to be examined, the criterion will not be the conduct of a careful and prudent person, but of a normally careful doctor. The average *** standard will not be the average standard of a citizen, but the average standard of a doctor. This will give the professional the appropriate incentives to take efficient care. In this case classification is obviously also not very costly, since it is clear that a professional can take care at lower costs than a normal citizen as far as it concerns his professional activity. Thus Daleq writes concerning the liability of lawyers:

"La responsabilité professionnelle des avocats obéit aux règles de droit commu en ce sens que toute faute que n’aurait pas commise un avocat normalement prudent et avisé est susceptible d’engager la responsabilité."  

---


37 See the cases cited by H. van den Berghe/M. van Quickenborne/P. Hamelink, [1980] TPR, 1167–1168.

Belgian case law offers many examples of such an application of an increased care standard in cases of professional malpractice. A judge held a doctor liable in the following case: a victim of a traffic accident, who complained of a light headache, was sent home after a superficial examination by the doctor. A few days later the victim died from the consequences of a fracture of the skull, caused by the accident. The failure to employ the means of a normally careful doctor (e.g. a radiographical examination) was considered wrongful.\footnote{39} This example shows once more that Belgian tort law does not make a distinction between wrongfulness and fault. The issue of differentiation of the standard of care discussed here, refers thus to what Belgian tort lawyers consider the ‘fault’ although it would generally come under the heading of wrongfulness in the work of this group.

The differentiation of the standard of care in case of professional malpractice fits easily into the economic model of tort law. The costs of classification of this case are relatively low. It is indeed easy for the judge to establish whether a certain defendant belonged to a specific profession. Since the costs of classification are low, the judge can easily apply the higher standard of care that corresponds to the professional activity. In other words: the benefits of classification (the ability of requiring a higher level of care from the professional) in this case largely outweigh the marginal costs of classification. This classification in several standards of care in case of professional liability corresponds with the economic model. It indeed forces the professionals to follow the standard of care, which corresponds to their superior knowledge. Hence, case law can require the efficient standard of care for the specific professionals.

Applying this to case 7 we could, from an economic point of view, argue that the geologist is apparently someone who, given his particular capacity and knowledge, can take high care at relatively low costs. It would therefore be efficient to hold him to a high level of care to provide preventive measures. The crucial point is probably that D is a geologist and should therefore, given his expertise, have foreseen specific ground conditions anyway. The concrete fact that he did ground work in this area makes it probably worse for this specific case, but it should not necessarily be decisive in the finding of liability. As far as the costs of differentiation are concerned, one can argue that the fact that D is a geologist is easily recognizable for the court. It is therefore possible to hold D to higher care because of this expert knowledge. The fact that, moreover, he had done research work in this area is an interesting additional feature, which might be taken into account when due care levels are set by courts. The geologist’s prior research work is an individual expertise that should not necessarily be ignored since the costs of this individualization are probably not prohibitive.

Part V – The Blameworthiness Requirement

[30] Some of the issues discussed under the notion of fault, such as force majeure and the insanity defence have also been analyzed in the economic model of tort law. In legal terms, at least in Belgian tort law, it is often stated that in addition to the fault (meaning in Belgian law: wrongfulness) of the defendant also the blameworthiness requirement should be met. This relates to the question concerning the conditions of capacity for tortious liability (question I.5 of the questionnaire). The fault will indeed only make the injurer liable if the act is imputable to him. This condition of blameworthiness relates to the free will and the capacity of discretion of the tortfeasor.40 This blameworthiness requirement also has a clear economic rationale. When the injurer did not act out of free will, liability cannot influence his incentives to take care and has, therefore, no economic meaning. A finding of liability that does not influence the incentives of the tortfeasor will only create administrative costs (caused by the transfer of the loss) without any compensating benefits in providing additional incentives to take care.

[31] This idea can be found in Belgian tort law in the notion of blameworthiness. The principle is that an injurer cannot be held liable if a fault is not imputable to him.41 As a consequence for example, children who did not reach the age of discretion yet, the so-called infantes, cannot incur any personal liability.42 There is a clear economic rationale for this rule: since liability cannot have any influence on the incentives to take care, it would only cause the administrative costs of shifting the loss without any compensating benefit for the incentives. Blameworthiness (or imputability) can hence be considered as an additional condition in establishing fault, from an economic point of view.43

[32] Let us address three specific cases, these being the insanity defence, the issue of force majeure and the liability of children, to illustrate these points.

1. Insanity defence

a) Economic analysis

[33] From an economic point of view, it makes no sense to hold mental patients who are in such a state of mind that they cannot control their acts, liable. Liability in such a case would not affect their incentives and would, therefore, only cause costs

42 There is no clear rule as to what the ‘age of discretion’ is. It is usually considered the age at which children are not yet able to make an adequate judgement of the consequences of their behaviour and therefore certainly below the age of 10.
43 See question I.7 of the questionnaire.
without any compensating benefit. The situation is different, however, in the case of mental patients who are clearly less qualified than the average citizen, but not totally incapable of controlling their acts. Those mental patients will usually be held by the legal system to the standard of care of the ordinary citizen, the bonus pater familias standard (54). Given their lower qualifications, they will, however, never be able to reach that standard of care.\(^4\) For them the negligence rule in fact becomes a situation of strict liability. The standard of care under negligence for them is that tough that they can never reach the standard of due care, required under the negligence rule. As a result of this, the mental patient will have to make a trade off. He will have to weigh the benefits of a specific activity against the total costs of accidents that he will have to bear (meaning costs of care and the expected loss). This mental patient who is held liable under the negligence rule is one of the high cost/low care type individuals of the frequency distribution curve discussed above. The outcome of the trade off is probably that the person with lower capacities will change his activities. This activity level change is obviously an efficient solution as well.\(^3\)

\(b\) \hspace{1em} \text{The law}

\(^{34}\) Apparently the legal system follows economic logic in these cases: if a person is in such a state of mind that his incentives cannot be influenced at all, liability makes no economic sense. But there are some exceptions: if the capacity to judge is only reduced, with very high precaution costs as a result, liability will still be able to influence the decision whether or not to engage in a certain activity. Holding the person with lower capacity to the average standard of care may give him an incentive to avoid risky activities.\(^6\) Therefore, for instance in traffic liability cases, a person with lower capacities will be held to the same standard of care as the average citizen. If he cannot meet this relatively high standard of care, the obvious solution for him is not to engage in this risky activity. An activity level change in the particular case could for example mean that the person would avoid driving and use public transportation.\(^4\)

\(^{35}\) There is another exception to the general rule that insanity leads to an exclusion of liability. If the mental condition was foreseeable for the injurer or has been caused by him, the tort he commits will still be imputable to him. Belgian case law applies this in cases related to drunk driving. The fact of being drunk may undoubtedly affect the

\(^{44}\) S. Shawell (supra fn. 7), 75.
\(^{46}\) The effect will, of course, be that for the lower capacity individual the negligence rule in fact implies a strict liability element, since he can never reach the due care standard the legal system requires from him (so W. Landes/R. Posner, [1981] GLR, 880).
\(^{47}\) Some of these issues are incorporated into safety regulations as well. To qualify for a driver’s license there will be a minimum standard concerning the physical and mental condition of the driver.
incentives of the driver, but he will nevertheless be held liable for the consequences of an accident that was caused while being drunk. This again makes sense from an economic point of view since this case law will make clear to potential injurers that they should *ex ante* avoid causing their own insanity.

c) The cases

[36] Therefore, in the two situations discussed in case 4, D should be liable for the accident from an economic point of view, although one could argue that in case 4a D is not to blame since *ex ante*, being sober, he assumed that he would not have to drive before he started drinking his bottle of wine.

[37] Regarding case 5, one may consider D as a person with lower capacities (the slow reactions). Assuming that D, who can apparently work, is not totally insane and that, therefore, it is possible to affect his incentives, it is probably efficient to hold D to the average level of care required by the legal system (γ*). But given D’s lower qualifications (the slow reactions) he will not be able to follow the average care standard (γ*) and will, therefore, be held liable. One could argue that in this case liability might lead to an activity level change. For D, given his slow reactions, walking is apparently a risky activity. D might want to organize special transportation to his workplace in order to avoid injuring cyclists.

[38] Economic analysis would probably apply the same reasoning to case 6. D should be held to the average care level of a driver. Because he puts on the brakes too late, he will be held liable. Given his slow reactions it might not be possible for D to reach the average care level required by the legal system. But liability makes, again, sense, since it could give an incentive for an activity level change. D should not engage in the risky activity of driving and should look for a less risky activity (although it is not clear that in this case walking is safer, given case 5!)

2. *Force majeure*

[39] The issue of ‘*force majeure*’ relates to typical reasons, excluding fault, referred to in question 1.10.

[40] If the accident is caused through *force majeure*, most legal systems hold that the fault is not imputable to the injurer. Belgian case law with respect to traffic accidents has many examples of this rule. When an accident is caused through a sudden and unexpected physical or mental incapacity, the injurer will not be held liable. Thus, many cases hold that if a traffic accident is caused by a heart attack or by an epileptic faint, the injurer will not be held liable. On the other hand, the injurer cannot call on the exception of *force majeure* if he knew or should have known of such a possibility.

---

48 See, as far as Belgian tort law is concerned, the cases cited by H. van den Berghe/M. van Quickenborne/P. Hamelink, [1980] TPR, 1175.
It has been decided that a patient who suffers from a heart condition and, despite the advice of his doctor not to drive his car any more, nevertheless does so, will be fully liable for the damage caused by an accident due to his unconsciousness.\footnote{49}

\textbf{[41]} These decisions are straightforward from an economic point of view. To hold an injurer who unexpectedly suffers a heart attack liable could not influence his level of care or his activity level and would thus not make sense from an economic point of view. If, on the other hand, the accident was not unforeseeable for the injurer, for example because he was aware of his physical or mental condition, liability does make sense. In such a case, liability could again lead to an activity level change. Once more, such a patient who is for example aware of his heart condition, is an individual at the left of the frequency distribution curve, who will not be able to spend more on care. If he is aware of his specific condition, he might try to exercise higher care. However, given the specific condition, he might never be able to reach \textit{y*} and thus he might prefer the activity level change: taking the bus instead of driving the car.

\textbf{[42]} Belgian case law with respect to these cases of ‘faints at the wheel’ seems to fit well in the economic model, since the case law takes into account the foreseeability of the specific health condition. The same criterion is also used in case law to answer the question under what kind of circumstances weather conditions can be considered as \textit{force majeure}. Again, Belgian case law accepts that for example, a totally unexpected cloud of fog can be considered as \textit{force majeure} but not a slowly upcoming fog that is foreseeable for the driver.\footnote{50} The same applies as well with respect to case law dealing with punctures. If a driver is confronted with a tyre that is slowly emptying itself, usually it is still possible to take preventive measures to avoid an accident,\footnote{51} but an exploding tyre is usually qualified as an unexpected event that constitutes a case of \textit{force majeure} for the driver.\footnote{52} Furthermore, case law equally holds that this \textit{force majeure} situation may not be imputable to the injurer. If a puncture is the result of bad maintenance of the car, the driver will nevertheless be held liable. This obviously makes sense from an economic point of view as well: it will give the driver an incentive to maintain his car in a proper way.


\footnote{50} See the cases discussed by H. van den Berghe/M. van Quickenborne/P. Hamelinck, [1980] TPR, 1205.


3. Children

[43] Belgian law generally holds that children who have not reached the age of discretion yet, the so-called *infantes*, cannot be held liable for the accidents they cause. The situation of these *infantes* is in fact very much similar to the situation of either the cases of *force majeure* or the mental patients with total insanity. Liability would not be able to affect their incentives, since children cannot distinguish between right and wrong.

[44] Older children who engage in a child-like activity will be held liable according to a standard of care for a child. When an eleven year old child drives with a buggy on the seaside and hits a pedestrian, the standard of care will not be the one of an experienced driver, but of a normally careful child.

[45] When, on the other hand, a child engages in an ‘adult’ activity, the child will be held to the adult level of care. If, for instance a child would, illegally, sit behind the wheel of a ‘real’ car, the way of driving of the child will be judged according to the standard for the average adult driver. The result will be that this child will be an individual at the left of the frequency distribution curve: he will not be able to reach the adult standard of care and hence will be held liable. Therefore, the child will have an incentive to change its activity: driving the bicycle instead of a car and the law reaches an efficient result again.

[46] The result of the blameworthiness requirement is that, as in this particular case, victims will often remain uncompensated, for instance if they were hit by an *infantes*. However, in some cases there is a (strict) liability of parents for the acts of their children that may guarantee compensation in those cases.

Part VI – Intent

[47] Some of the questions relate to the issue whether gradations of fault are important; in addition in some of the cases the question is addressed whether intent should have a consequence as far as the finding of liability is concerned. This is equally an issue that has been addressed in economic analysis. In this respect we can especially refer to

---


56 Although some legal systems provide specific solutions to deal with this risk of undercompensation, see H. Kozioł, [1998] MJECL, 127–128.

57 These specific liabilities of parents, employers and other third persons have been discussed in other works of this group. See J. Spier (ed.), *Unification of Tort Law: Liability for Damage Caused by Others* (2003).
a paper by Landes and Posner. There are several ways in which the notion of intent influences economic analysis of tort. An important difference between intentional and unintentional torts is that in the case of an intentional tort there is usually also a certain gain that the injurer derives from committing the tort. If voluntary transactions between the injurer and the victim were possible usually a transfer could take place without the tort being committed. In many cases, however, the loss to the victim is higher than the gain to the injurer. Therefore, from a social point of view, this tort should be deterred.

[48] The influence of intent on the traditional economic model of tort is that intent makes the probability that the accident will be committed much higher, whereby the burden of precaution to prevent the accident becomes higher as well. In other words: the gradations of fault, discussed in the questionnaire are indeed a proxy for the standard of care. Furthermore, economic analysis prescribes one particular implication for legal policy as a consequence of some torts being intentional. According to economists intent is an important argument in favour of punitive damages. By introducing punitive damages the L is artificially raised, so that potential injurers will be induced to spend more on accident prevention.

Part VII – Safety Regulation and Liability

1. Violation of statutory standards and liability

[49] As we mentioned above, in most legal systems the standard of care to be taken by market participants engaged in risky activities is not only determined by the court system within the framework of tort rules, but also by the legislator. Economic analysis of law has advanced several criteria to justify the implementation of safety regulation: information problems, insolvency, absence of deterrent effect of tort suits in some cases and administrative costs. Given the existence of regulation and liability rules in combination, the question arises how the influence of legislative safety regulation influences the tort system. As was mentioned above, in many legal systems, such as for

59 For a detailed analysis see W. Landes/R. Posner (supra fn. 2), 149–189.
60 See on these issues in further detail R. Posner (supra fn. 28), 204–208.
62 R. Posner (supra fn. 28), 207.
example in Belgium, every violation of a regulatory standard will automatically result in a finding of ‘fault’. As far as Belgian law is concerned, Dalcq puts it as follows:

‘La faute existe dès que la loi a été violé’. 64

[50] This means that as soon as there is a violation of the regulatory standard, the blameworthiness requirement is met and the violation stands in a causal relationship with the damage, the injurer has a duty to compensate.

2. Economic analysis

[51] The question arises whether this per se rule of liability in case of violation of regulatory standards fits into the economic analysis. Shavell argues that non-compliance with a regulatory standard should not automatically result in a finding of negligence. Following the standard might be inefficient for some injurers. The injurers, for whom following the regulatory standard would only be possible at high costs, should not be held to follow this standard, since it would create inefficiencies. 65 By making every violation a ‘fault’, those injurers are given wrong incentives. They have to comply with the regulatory standard, even if it were inefficient for them to do so. But of course this ‘inefficiency’ is partially compensated by the considerable administrative costs resulting from a detailed individualization. The question, therefore, arises whether some injurers should not be held liable if they violate the regulatory standard.

[52] The problem can be compared with the bonus pater familias standard, discussed above. Atypical parties might be able to avoid a loss at lower costs, for example because they pose lower risks than normal. The regulator cannot identify atypical parties and therefore a single regulatory standard will be used. Hence, it is best for those parties not to comply with the standard. This is a consequence of the fact that a single regulatory standard will be used. The result is that one could, therefore, argue from an economic point of view that a failure to satisfy the regulatory requirement should not necessarily result in a finding of negligence, so as to avoid some parties who pose a lower risk taking wasteful precautions. Nevertheless, many legal systems consider a breach of a regulatory duty automatically fault. This may be due to the information advantage of regulation. Regulation passes on information to the parties on the efficient average standard of care. At the same time regulation also gives information to the judge who has to evaluate the behaviour of the injurer ex post in a liability case. The judge might

64 See R.O. Dalq (supra fn. 26), 163.
often lack the necessary information to find out whether in a particular case an injurer should not be held to follow the regulatory standard, for example because he posed a lower risk than usual. This explains why generally statutory standards are applied to define negligence. An exception to this rule will probably only be made if the judge can at low costs identify specific groups of injurers and set a separate standard for that group.

3. Case I

[53] Applying this rule of thumb to case 1, one could say that most legal systems would probably hold that the injurer D violated a regulatory standard (speeding), so that fault is automatically given. However, given the particular situation on that road, no other road users and no roads crossing, one could argue that the $y^*$ efficient standard in the particular case was different than the speed limit set by the regulator. Therefore, it could be argued that given the particular circumstances (which can be recognized by the judge at relatively low costs) the simple fact of speeding should not automatically be considered a fault since, in the specific circumstances, driving at high speed would not have increased the accident risk considerably had the drunken tramp not emerged from the roadside ditch.

Part VIII – Some concluding remarks

[54] I hope to have shown in this brief paper, addressing some of the issues with respect to fault, that economic analysis can provide some interesting insights concerning the functioning of tort law. Economists consider tort law as an instrument to achieve a specific goal, this being a reduction of the social costs of accidents. This obviously constitutes a limitation of economic analysis. The ultimate goal for economists is to reach efficiency and the function of tort law is to deter inefficient accidents.

[55] Taking into account these limits there are, nevertheless, several findings that seem generally interesting. Of course, one has to take into account that the language of economists is not always the same as the language of lawyers. The notion of ‘fault’ as it is used in the legal system thus not always corresponds with the notion of negligence as used in the economic models. This, however, can hardly be blamed on economic analysis. Also between different legal systems there are important variations in the terminology.

66 See on this issue also S. Rose-Ackerman, Rethinking the progressive agenda, the reform of the American regulatory state (1992), 127.
67 In fact this implies that the legislator has set an inefficient standard for that particular road
[56] Apparently several of the issues that are addressed in the questionnaire on fault have been analyzed in the economic analysis of law. This concerns for instance the fact that the standard of care required from injurers is to be established through a weighing of costs and benefits, whereby the marginal costs of precautions are weighed against the marginal benefits of a reduction in the accident loss. Economics therefore takes into account the costs of prevention and relates these to the probability that an accident will occur to establish a standard of care. Attention is also given to the question whether the behaviour of the injurer should be judged according to an objective or a subjective yardstick. Economics holds that a differentiation of a standard of care should be applied as long as the benefits of further differentiation outweigh the costs. It might, however, not be possible to provide a detailed differentiation, given the administrative and information costs this might involve.

[57] In addition economic analysis points at the importance of liability as an instrument to steer behaviour. Thus the requirement of blameworthiness avoids that persons would be held liable when their behaviour cannot be influenced through liability at all. If, on the other hand, it appears that the behaviour can be influenced liability makes sense, even if it were only to give incentives to change to another activity.

[58] Although economic analysis may, therefore, provide some contribution to the question of how fault should be established, there are obvious limitations to the economic method as well. Economic analysis cannot explain some of the legal details, nor does it address many of the differences between legal systems. Moreover, economic analysis fixes solely on deterrence as the goal of accident law. Actual tort law may have other reasons (such as victim compensation) to nevertheless hold an injurer liable, even if this would make no sense from an economic point of view. Therefore, economic analysis is usually not considered as decisive at the normative level, but we nevertheless believe that the economic literature provides a useful source of information that might be taken into account when general rules concerning fault are established.