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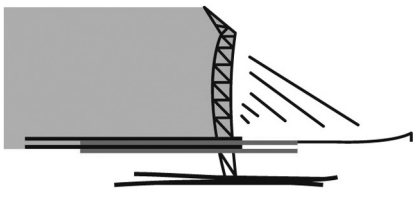

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Debated Damages

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Rector Magnificus, esteemed colleagues, dear students, family and friends, and other guests,

1 Introduction[1]

When deciding on the topic of my inaugural lecture, I had to make various difficult choices. Granted, they are not 'tragic choices' in the sense of Calabresi and Bobbitt, where conflicts of value are involved in deciding on the allocation of scarce economic resources, but still the choices were difficult.[2] And they *do* involve scarce economic resources, for example the time you are now spending on listening to me. I will return to this issue at the end of the lecture.

The first choice I had to make was whether I should focus the lecture more on family and friends, or more on students and colleagues. Because an inaugural lecture is a professional occasion, I have chosen to focus the lecture more on the latter group. I hope to make up for my current neglect of family and friends after the lecture.

The second choice was whether I primarily address a legal audience, or a Law and Economics audience. Given that the chair I am appointed to is established in the Erasmus School of Law, not the Erasmus School of Law and Economics, I have chosen to focus this lecture on a legal audience, but I hope that it also contains interesting aspects for the Law and Economics public.

Finally, I had to choose the topic. After considering and rejecting various options, I have chosen to discuss three forms of damages which are the subject of heated discussions in the Netherlands, hence the title *Debated Damages*. Some of the debates have already been going on for decades, others are of a more recent origin, but they all share the fact that different views are expressed and a consensus has not yet been reached. I want to contribute to those debates by providing a Law and Economics view on those debated damages. It is not my goal, neither today nor in my future research and teaching, to fine-tune complicated highly technical mathematical models of accident law, but rather to apply economic ideas and concepts which enable policy recommendations to be provided to policy makers.[3]

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[1] I would like to thank Michael Faure and Roger Van den Bergh for their valuable comments on a previous version of this text.

[2] Calabresi and Bobbitt 1978.

[3] On the tension between the two approaches, see e.g. Ogus 2004; Garoupa and Ulen 2008; Bishop 2013; Posner and Becker 2015. Bishop quotes Alfred Marshall, generally seen as a founding father of economics, who writes inter alia: 'Use mathematics as a short hand

This approach also resonates in the name of the chair I am appointed to: it is not called *Economic Analysis of Tort and Damages Law*, but *Legal Economic Analysis of Tort and Damages*. Hence, the term 'legal', not 'economic' comes first.[4]

As said, I will discuss three examples of debated damages. The first topic is pain and suffering damages for personal injuries, the second is affection damages and the third is mass damages.

The first topic has been the subject of ongoing discussions for many years. In the Netherlands, the view is often expressed that pain and suffering damages for personal injuries are too low in general, but also that damages for major injuries fall even shorter from a desirable situation than damages for minor injuries. This of course raises the question of what the proper magnitude for pain and suffering damages for personal injuries is to start with.

The second topic, affection damages, also has been heavily debated for many years already and a draft bill regarding compensation for such damages was rejected by the Senate in 2010. However, in May 2014 a public consultation was started regarding a new draft bill which does include affection losses in Article 6:107 and 6:108 of the Civil Code, hence in cases of grave and permanent injuries or death. The consultation closed in early August 2014.

The third topic was also the subject of a recent public consultation, which closed in early October 2014. In the Netherlands, Article

language, rather than as an engine of inquiry. (...) Translate into English. (...) Then illustrate by examples that are important in real life.' (Pigou 1925, p. 427). If the theoretical models lack relevance for the actual legal issues under investigation, they do not form 'good economics' in Bishop's view and I agree with this. Even more, and Bishop also stresses this point, such an approach might even result in a situation where the economic analysis of law becomes less influential and important, because it lacks relevance for the legal audience. In the words of Bishop (2013, p. 76): 'It cannot be good news when the economic debates/arguments leave the non-economist both cold and perplexed.'

4 This point should not be overstressed and is merely intended to express that the chair is established in the School of Law and that the research undertaken will have a strong focus on the legal aspects of the topics under investigation. I use 'Law and Economics' and 'Economic Analysis of Law' as synonyms, but recognize that the analyses can be more legally oriented or more economically oriented. I therefore do not follow the distinction Miller (2011) makes between the two terms. He describes 'the economic analysis of law' as the use of economic principles and reasoning to understand legal materials and sees this as a branch of economics where law is the object of study. In 'law and economics', both disciplines in his view form an 'equal partnership' and both contribute to the activity. See Miller 2011, p. 459, 460.

3:305a of the Civil Code enables mass litigation, but section 3 of this article prohibits mass litigation with the object of receiving monetary compensation. The consultation regards a proposal to lift this prohibition on mass damages litigation.

In this lecture, I will provide my view on these three forms of debated damages, from an economic perspective. However, before I can dive into the three topics in Sections 3, 4 and 5 respectively, I will start in Section 2 with a short general economic description of damage and damages. This is necessary to understand the economic analysis of the debated damages in the subsequent sections.

2 An economic approach to damage and damages

2.1 Damage and full compensation

According to the 'difference hypothesis' of Friedrich Mommsen, damage or loss is the difference between the wealth of a person as it is at a given time, and the wealth as it would have been at that time if the damaging event had not occurred.[5] This legal idea of the difference hypothesis of Mommsen can be beautifully expressed in economic terms, more specifically by using so-called *indifference curves*.

An indifference curve represents all combinations of two goods which an individual finds equally desirable, or in other words, which yield him the same level of utility. Let us call these two goods 'A' and 'B' for the time being. Hence, this person is indifferent to all combinations of A and B on the curve. It is often assumed that the extra utility yielded by an additional unit of a good, decreases the more the person already has from this good. For example, the first ice cream on a hot summer day provides much utility, the second already a bit less, the third even less et cetera. This is called *decreasing marginal utility*.[6] This decreasing marginal utility also holds for wealth: with the first Euros someone acquires, he will fulfil the most important needs, such as food, clothing, and housing. Someone who already has a certain level of wealth which covers those needs, will spend his additional money on less important things such as nicer clothes, a holiday et cetera. So the more money one already has, the less additional utility an additional Euro yields, because it will be spent on satisfying less important needs.

Figure 1 below represents a set of indifference curves for various combinations of goods A and B which are characterized by decreasing marginal utility. Curve *U1* depicts all combinations of A and B which result in utility level 1, and curve *U2* depicts all combinations of A and B which result in the – higher – utility level 2. The fact that *U2* is located higher than *U1* shows that utility level 2 is higher than utility level 1.

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5 In the words of Mommsen (1855, p. 3): '*Die Differenz zwischen dem betrage des Vermögens, wie derselbe in einem gegebenen Zeitpunkte ist, und dem Betrage, welchen dieses Vermögen ohne die Dazwischenkunft eines bestimmten beschädigenden Ereignisses in dem zur Frage stehenden Zeitpunkte haben würde.*'

6 One of my promoters once claimed that this decreasing marginal utility does not hold for drinking beer.

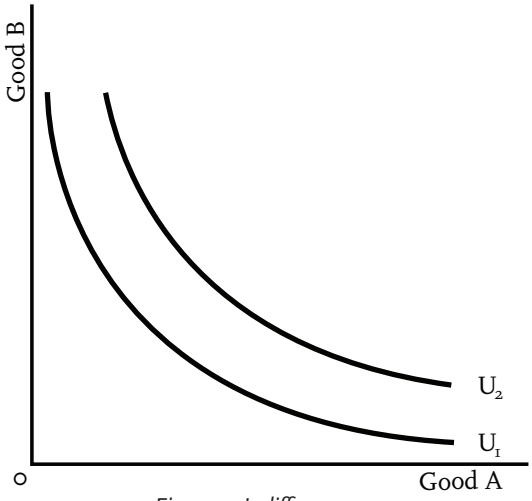

Figure 1. Indifference curves

If a person who is originally located somewhere on *U2* loses several units of good A, his utility level decreases and he now ends up on a lower indifference curve, e.g. *U1*. There are several ways of bringing him back to his original utility level: (1) he receives exactly the number of units of good A he lost, so that he returns to the original point on curve *U2*; (2) he receives a number of units of good B which bring him back to curve *U2*, albeit in a different location on that curve; (3) he receives a combination of A and B bringing him back to curve *U2*.

If good B consist of money, the relevance of this line of reasoning for the law of damages is clear: if due to a tort our victim loses several units of good A or they become damaged, there are several ways in which the tortfeasor can compensate the victim: he replaces or repairs the lost or damaged units of A (so, restoration in kind), he pays an amount of monetary compensation which yields the same amount of utility that the lost or damaged units of good A yielded (so, damages), or a combination of both options (for example, if repair of good A does not fully restore the victim to the original position, an additional monetary compensation is required to offset the decreased value of A). This line of reasoning is depicted in Figure 2 below.[7]

[7] Also see Cooter and Ulen 2012, p. 190ff.

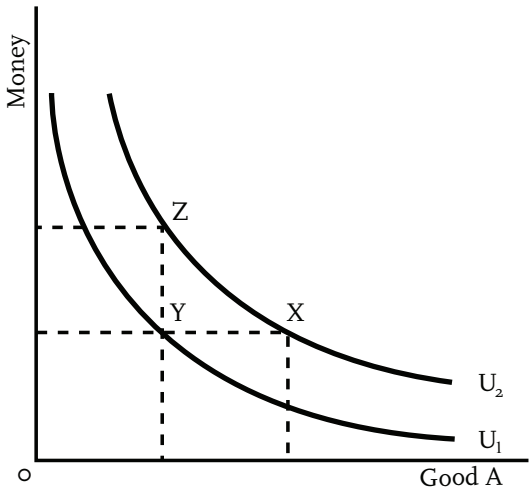

Figure 2. Damage and damages

Imagine a person who is originally located in point X. Due to the tort which damaged or destroyed several units of good A he ends up in point Y. Restoration in kind would bring him back to point X, whereas full monetary compensation would bring him to point Z. He is indifferent between both options, because they yield the same level of utility. Repair plus monetary damages to compensate for a remaining loss in value of A would bring him to a point on curve *U2* between X and Z, which again yields the same utility because it is located on the same indifference curve.

If good A represents health, in principle the same line of reasoning can be applied. If a person gets injured due to the tort of someone else, and if the injuries can be fully cured with medical treatment, the tortfeasor should cover the medical costs so that the victim returns to his original position. In cases where, after medical treatment, the victim still has lost utility due to the accident, additional monetary compensation is required to bring the victim back to his original utility level. This is relevant in situations where the treatment does not fully cure the victim, but also if the victim has experienced pain, suffering, anxiety et cetera due to the accident. The medical treatment may restore the physical health, but due to these non-pecuniary losses the victim is not restored to his original position. I will return to this issue when discussing pain and suffering damages for personal injuries.

Cooter and De Pianto argue that in the case of death or serious injuries, indifference curves might be incomplete because there might not be monetary equivalents for these harms. Such harms are hence 'incompensable'.[8] I will further discuss this issue in Section 2.2 below.

As said, according to the approach of Mommsen, the legal starting point is that damages should bring the victim back to the position he would have reached without the damaging event. From an economic perspective, 'full compensation' implies that the tortfeasor should bring the victim back to the utility level he would have reached without the tort.[9] This raises the question of *why* we want the tortfeasor to restore the victim's utility level. A common response of lawyers to that question is that compensation is a goal in itself, and even the main goal of tort damages. For example, Bloembergen regards compensation as 'the central goal' of the law of damages.[10]

Without going into a full discussion regarding the goals of tort damages, some remarks regarding this possible compensation goal are needed.[11] First, if compensation truly is a goal, it is difficult to understand why tort law focuses so much on the behavior of the tortfeasor. This is especially clear if a rule of negligence applies: only if the injurer was not careful enough will he bear the victim's losses. From a compensation point of view, this does not make much sense, because for the mere compensation of the victim's loss, the injurer's behavior is not so important. Second, tort law is not the best instrument to reach a compensation goal. Insurance results in compensation much quicker and much cheaper than tort law.[12]

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8 Cooter and De Pianto 2013, p. 445. Also see Cooter 2003, p. 1100ff.

9 See e.g. Cooter and De Pianto 2013, p. 442.

10 Bloembergen 1982, p. 2. Lindenbergh states in his revision of Bloembergen's book that the goal of the law of damages is to place the victim (in as far as possible) in the position he would have reached if the tortfeasor had fulfilled his (primary) legal duties, so compensation. The law of damages in that sense provides an important contribution to the enforcement of rights, which is the aim of tort law. See Bloembergen and Lindenbergh 2008, p. 8ff.

11 On the possible goals of tort law, see (among many others and besides the authors mentioned in the subsequent footnotes) e.g. Deutsch 1971; Calabresi 1977, p. 24ff; Tunc 1983, p. 87; Priest 1988; Kötz 1990; Spier et al. 2003, p. 7; Engelhard and Van Maanen 2008, p. 11ff.

12 Also see Calabresi 1977, p. 21, 27; Shavell 1987, p. 263.

Also legal authors in various countries challenge the view that compensation indeed is a goal of tort law. For example, in the American handbook *Prosser and Keeton on Torts* we can read that the primary function of tort law is not compensation, but to determine when compensation is to be required.[13] The Australian handbook *Fleming's The Law of Torts* states that the law does not compensate all losses and that shifting is only justified when there is a special reason.[14] The English writer Williams argues that the idea that tort law aims at compensation does not look below the surface of things. The real question is why do we wish to compensate?[15] And the German lawyer Kötz writes that tort law decides about awarding damages, but also about withholding them. Therefore, if one says the goal of tort law is 'compensating', in Kötz' view one should equally say its goal is 'not compensating'.[16] In the Netherlands, comparable views are expressed by, for example, Van Dam, Hartlief and Nieuwenhuis.[17]

Following this approach, compensation might better be regarded as the *instrument* with which the goals of tort law are pursued.[18] In Law and Economics, the impact of law on social welfare is analysed and social welfare is often seen as the sum of utility levels of the members of society.[19] This implies that a loss which reduces the utility level of an individual, in principle lowers social welfare. It is therefore desirable to avoid these losses, in order to avoid the decrease in social welfare. However, precautionary measures which may avoid a loss are not without cost. From an economic point of view, tort law aims at minimizing the sum of care costs and expected

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13 Keeton et al. 1984, p. 20.

14 Fleming 1992, p. 3.

15 Williams 1951, p. 137. He writes: 'An intelligent approach to the study of law must take account of its purpose, and must be prepared to test the law critically in the light of its purpose.'

16 Kötz 2001, p. 17.

17 Van Dam 1989, p. 213; 226ff; Hartlief 1997, p. 17-21; Nieuwenhuis 1997, p. 13, 18, 19; Hartlief 2004, p. 7.

18 Also see e.g. Posner 2003, p. 192. Owen labels compensation a 'function' of tort law. It cannot be a goal because compensation is only appropriate when liability is appropriate and the reasons why liability is deemed appropriate in certain circumstances form the true goals. See Owen 1985, p. 666.

19 See e.g. Arlen 2000, p. 683; Posner 2003, p. 24ff; Shavell 2004, p. 2; Schäfer and Ott 2004, p. 47.

accident losses, thereby weighing the costs and benefits of care.[20] This is often called the prevention goal of tort law: it is desirable that people take precautionary measures as long as the reduction in expected accident losses caused by these measures outweighs their costs. Therefore, not *all* losses are avoided, because that would be too expensive. So, tort law, in this view, should not aim at *maximum* care and *minimum* expected accident losses, but at *optimal* levels where the marginal costs of care are weighed against the marginal benefits. Losses that are too expensive to avoid, should subsequently be spread optimally over society. After all, due to the decreasing marginal utility of wealth, concentrated losses cost more utility than spread losses: if one person suffers a large financial loss, this might endanger also his ability to satisfy more urgent needs, but if more people each only suffer a small loss, this only harms the fulfilment of their least important needs. Finally, the system costs should be included in the analysis, because the costs of the legal system should not outweigh the benefits in the sense of better prevention and loss spreading.

Hence, in the economic analysis of tort law, prevention and loss spreading are regarded as the goals, and compensation is the instrument to reach those goals. This also clarifies the 'division of labor' between the law of torts and the law of damages: the law of torts determines which party in which circumstances will receive a behavioral incentive from the legal system, and the law of damages determines how large that incentive will be. In principle this economic approach implies that tort damages should be full: only if the full decrease in utility experienced by the victim is weighed against the full costs of precautionary measures, will the economically desirable actions be chosen.[21]

2.2 Pecuniary and non-pecuniary losses

2.2.1 Introduction

In case of a pecuniary loss, the victim loses money or replaceable goods. Arlen defines a commodity as replaceable if its owner believes that equivalent commodities are available on the market. Full

[20] See e.g. Calabresi 1977, p. 24ff; Shavell 1987, p. 7; Posner 2003, p. 167ff; Shavell 2004, p. 175.

[21] See e.g. Faure 2000, p. 148ff. For the exceptions, see e.g. Arlen 2000, p. 682; Visscher 2009, p. 156ff.

compensation in the case of the loss of replaceable goods means receiving the market price, because that enables the victim to buy a perfect substitute.[22] In the case of a non-pecuniary loss however, non-replaceable 'goods' such as for example family portraits, but also health or emotional well-being are lost or damaged.[23] Both types of losses result in a loss of utility. Hence, in order to give the correct behavioral incentives to the actors involved, both types of losses should in principle be included in tort damages. The so-called *prevention theory* therefore argues that non-pecuniary losses have to be included in tort damages.[24]

Cooter and Ulen argue that the idea of perfect compensation, meaning that the amount of compensation brings the victim back to the same utility level he had before the accident, is 'the right goal for courts trying to internalize costs, but implementing the goal is difficult for intangible, but real, harms'.[25] It is not possible to observe and measure this subjective loss, and it is certainly possible that no amount of compensation will make the victim truly indifferent between not suffering the loss on the one hand, and suffering the loss but receiving compensation on the other hand. Given that there is no market for these non-replaceable goods, there is also no market price available which could be used as a basis to assess damages. We therefore need an indirect way to assess them.[26] I will discuss two indirect methods below.

2.2.2 Insurance theory

One indirect way of assessing such losses is by analyzing how much money people are willing to spend on insurance against such losses.[27] This approach is labelled the *insurance theory*. The line of reasoning is as follows: If people do not want to buy insurance against immaterial losses because they find the premium too high, tort law should not force such coverage upon them.[28] This especially holds in situations where these people would in fact pay for this coverage

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22 Arlen 2000, p. 683.
23 Shavell 1987, p. 133; Arlen 2000, p. 697ff; Shavell 2004, p. 242.
24 Adams 1989, p. 213ff; Ott and Schäfer 1990, p. 566; Arlen 2000, p. 702; Shavell 2004, p. 242; Cooter and Ulen 2012, p. 253ff.
25 Cooter and Ulen 2012, p. 192.
26 Also see Cooter and De Pianto 2013, p. 439ff.
27 See e.g. Ott and Schäfer 1990, p. 566.
28 Shavell 1987, p. 228ff; Adams 1989, p. 216ff; Ott and Schäfer 1990, p. 568; Pryor 1993, p. 101 ff; Shavell 2004, p. 269ff.

because the price of the products, services or activities involved increases as a result of potential liability.[29] Tort damages are in this line of reasoning regarded as a possible way to cover losses and hence they serve a similar goal as insurance, for which the person who receives the cover pays a price.[30]

Based on the idea of decreasing marginal utility of wealth, it is argued that people *do* want to buy insurance against *pecuniary* losses, but *not* against *non-pecuniary* losses. If someone suffers a pecuniary loss, he loses wealth and after the accident has less wealth than before the accident. Therefore, money has become worth more to him after the accident (it has a higher marginal utility). This is an economic explanation of why people take insurance against pecuniary losses: before the accident they spend money with a relative low marginal utility on the insurance premium and after the accident they receive money from the insurance which by then has a relatively high marginal utility. In other words, they transfer money from a state of the world where they need money less (the paid premium before the accident), to a state of the world where they need money more (the coverage after the accident). The utility they lose because they have to pay the insurance premium is lower than the expected utility of receiving coverage in case they indeed suffer the pecuniary loss. Insurance hence allows people to distribute resources across different states of the world (before and after an accident), which enables them to improve their situation.[31]

With *non-pecuniary* losses, people do not lose wealth, but they suffer an immaterial loss irrespective of their wealth. Danzon explains that optimal compensation is higher if the accident increases the marginal utility of wealth (as is the case with pecuniary losses) and lower if it decreases it. Whether personal injuries affect marginal utility of wealth in her opinion cannot be determined theoretically, but an investigation of whether coverage against non-pecuniary losses is in practice included in private and public insurance leads her to the conclusion that full coverage of all losses (so also non-pecuniary losses) 'far exceeds the coverage people are prepared to pay for, given the choice'.[32]

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29 For example, if product liability also encompasses non-pecuniary losses, product prices may be higher than if liability only covers pecuniary losses.

30 Rubin and Calfee 1992, p. 250; Arlen 1993, p. 117; Geistfeld 1995, p. 793ff; King 2004, p. 184.

31 Croley and Hanson 1995, p. 1822.

32 Danzon 1985, p. 550ff. Also see Croley and Hanson 1995, p. 1801.

Many proponents of the insurance theory argue that non-pecuniary losses do not increase the marginal utility of wealth of victims, because their wealth has not changed.[33] It is even argued that accidents in which people suffer permanent injuries *decrease* the marginal utility of money because the victims may lose ways in which they can spend their money. If they now spend their money on a different activity than before the accident, this activity must yield less utility than the previous one. Otherwise they would have already chosen this activity before the accident.[34] Empirical research seems to corroborate the view that injuries reduce the marginal utility of wealth.[35]

Hence, according to the insurance theory, people are not willing to buy insurance against non-pecuniary losses, because such losses do not increase, or may even decrease, the marginal utility of wealth. The insurance coverage they expect to receive after the accident would have a lower marginal utility than the money they have spent on the premium. Such insurance would therefore actually decrease their expected utility, because the premium costs more utility than the expected coverage yields. The fact that in practice there is no demand for such insurance is regarded as corroboration of this line of reasoning. This in turn implies that tort damages should not include such losses, because the loss of utility arising from the increase in the price of products, services et cetera would outweigh the utility received by the expected coverage.

The insurance theory has been criticized on various grounds. First, even if the argument that marginal utility of wealth does not increase as a result of the non-pecuniary loss is correct, the overall utility level of the victim decreases and he might want to take out insurance because the money received after suffering the non-pecuniary loss may again increase the overall utility level to a certain extent.[36]

Second, this so-called 'baseline utility' might have an effect on the marginal utility of wealth as well. Croley and Hanson provide the following example: when a person is deciding to which of two friends

33 Also see Cook and Graham 1977, p. 146ff.
34 Friedman 1982, p. 82.
35 Sloan et al. 1998, p. 489ff; Viscusi and Evans 1990, p. 371; Evans and Viscusi 1991, p. 102ff.
36 Croley and Hanson 1995, p. 1827ff.

to give an opera ticket, the friend who enjoys opera more in principle will derive more utility from the ticket. However, if the other friend has a difficult period in his life, an evening out (whether it is the opera or something else) might give him much utility, given that his baseline currently is so low. Therefore, it could be the case that the second friend derives more utility from the ticket, even though the first friend likes opera more.[37]

Third, the fact that there is no demand for insurance against non-pecuniary losses may be caused by imperfect information regarding the extent of non-pecuniary losses, the probability of their occurrence and the compensation required in respect of them, or by countervailing social norms in the form of societal hostility to putting a price on pain and sorrow and legal restrictions such as the indemnity principle.[38] In addition, there may be problems on the supply side of the insurance market. It might, for example, be very difficult for insurers to tackle adverse selection and/or moral hazard in the area of non-pecuniary losses. This could result in a situation where there *is* demand for such insurances, but no supply.[39] And, obviously, demand for insurance against non-pecuniary losses might also be limited or non-existent exactly because such losses are included in tort damages, so that they are already (partially) covered. This might explain why Danzon finds a low take-up of insurance: people adjust their decisions to the existing law.[40]

Finally, the empirical research that corroborates the conclusion that marginal utility of money does not increase or may even decrease after suffering non-pecuniary losses, asks healthy people to imagine that they suffer an accident with permanent injuries. Pryor doubts whether healthy people can provide accurate statements about marginal utility of money after a disability and argues that this will lead to an under-estimation of marginal utility.[41]

2.2.3 Ex ante care measures

Above it became clear that according to the insurance theory, tort damages should not encompass non-pecuniary losses because people

37 Idem, p. 1815.
38 Idem, p. 1845ff.
39 Bovbjerg, Sloan and Blumstein 1989, p. 934.
40 Avraham 2005, p. 947ff; Avraham 2006, p. 89.
41 Pryor 1993, p. 116ff.

do not want to pay for such coverage. According to the prevention theory, however, the tortfeasor should pay for such losses in order to provide him with the correct incentives. In the literature, decoupling liability is sometimes suggested as a solution to this problem. Under decoupled liability the injurer pays an amount reflecting all the losses he has caused, while the victim only receives an amount equivalent to what he would have spent for insurance coverage. The difference between the two amounts is collected by the state in the form of a fine.[42]

In my view, this is not a good solution. First, in cases where the victim might be facing a higher price for a product or service due to tort coverage of non-pecuniary losses while he would not want to self-insure against them, decoupling still results in higher prices (because the tortfeasor has to pay for non-pecuniary losses) but now the victim would not receive any compensation for them. In a sense, this is the worst of two worlds: paying a pseudo-premium (the increased price), but not receiving coverage. Of course, if the damages paid by the injurers could ex ante be distributed over all potential victims, this problem would not occur. However, such a system might not be feasible in practice.

Second, in the many accident situations where there is no prior relationship between tortfeasor and victim, the victim is not confronted with a higher price to start with, so that this whole line of reasoning is irrelevant. Geistfeld, however, explains that in activities where an actor could be either an injurer or a victim (e.g. traffic accidents), expanded tort coverage is not free: in the case where our actor would become a victim, he will *receive* more damages, but in the case he would become an injurer, he would have to *pay* more damages. This leads Geistfeld to the conclusion that damages should be based on the ex ante willingness to pay to avoid losses.[43] I will explain that idea in more detail below.

As said before, given that non-pecuniary losses do not have a market value and cannot be measured directly, we need an indirect way of assessing them. The insurance theory uses the insurance decision regarding non-pecuniary losses as such an indirect assessment

[42] See Arlen 2000, 706ff. For an overview of more literature, see Karapanou 2014, p. 61.
[43] Geistfeld 1995, p. 804ff and p. 826ff.

method. It has become clear that there is much discussion about the question whether rational individuals would indeed want to take out insurance against such losses, and empirical research does not give a definite answer.

However, even if the insurance theory would be correct in arguing that people do not want to self-insure against non-pecuniary losses because marginal utility of wealth does not increase after an accident, this in my view should not lead to the conclusion that victims should not receive compensation for such losses. Besides the point that excluding non-pecuniary losses from tort damages might weaken the incentives of potential tortfeasors to take optimal care and activity decisions, insurance decisions of potential victims provide information on their degree of risk aversion but *not* on how they experience the potential loss. I therefore think that the insurance theory is asking the wrong question.

In my view it is better to assess whether the potential victim was willing to spend resources on taking accident avoidance measures *ex ante*, so before any accident.[44] That would imply that such losses, according to his own assessment, *do* lower his utility level, because he is willing to spend resources on trying to avoid them. The resources the victim would be willing to spend provide information on how the victim himself assesses the non-pecuniary loss. The victim is willing to forego (the utility derived from) a certain amount of wealth, in exchange for avoiding suffering the non-pecuniary loss, or at least reducing the probability of its occurrence. This weighing of foregone wealth and avoiding non-pecuniary losses, in my view, forms a better basis for assessing non-pecuniary damages than the insurance decision (which, again, regards risk aversion rather than loss assessment).

Let me give an example. The largest immaterial loss I can imagine is if something were to happen to my wife or children. Still, I have not taken out life insurance on their lives, which would yield me an amount of money if they die. But I *do* take many costly measures which lower the probability of such events. Take my children as an example. I bought child safety seats (which were quite expensive) to use in the car for all three of my children; I even

44 See e.g. Danzon 1984, p. 526; Miller 1989; Ott and Schäfer 1990, p. 568; Rubin and Calfee 1992, p. 249; Geistfeld 1995, p. 825; Cooter and De Pianto 2013, p. 447.

had to buy a bigger car to fit these child seats; I pay for my children's swimming lessons (both in money and in the time I spend at the side of the pool); I installed secured electricity sockets in their rooms, et cetera.

Analyzing how many resources people are willing to spend on care measures in order to avoid suffering non-pecuniary losses gives an idea of how much utility such non-pecuniary losses would cost: the same as the money spent on these care measures would have yielded.[45] This can be labelled the victim's ex ante willingness to pay to avoid the non-pecuniary loss. In my view, this ex ante willingness to pay forms a good basis to determine tort damages for non-pecuniary losses, because it shows how many resources the victim found equivalent (ex ante) to suffering the loss.[46]

This idea can be shown with the help of Figure 3 below.[47] Wealth is represented on the horizontal axis and the utility it yields on the vertical axis. More wealth yields more utility but at a decreasing rate, due to the decreasing marginal utility of wealth. Imagine a person who finds himself in situation A, with a wealth of €20,000 and a corresponding utility level of 900. If this person suffers a non-pecuniary loss, he does not lose wealth, but he loses utility in a direct way. This can be represented by a downward shift of the utility curve, bringing our victim to point B with a wealth still of €20,000 but now with a utility level of 720.[48] He therefore has lost 180 units of utility due to the non-pecuniary losses.

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45 For care measures that do not necessarily avoid the loss but 'merely' lower the probability of such losses occurring, the measures express the willingness to pay to reduce the risk. The reduction in probability has to be incorporated when assessing damages. This is explained in more detail below, in the text following footnote 51.

46 Of course it might be difficult to measure this willingness to pay, and/or to distinguish the willingness to pay to avoid pecuniary, as opposed to non-pecuniary losses. I will return to that issue below.

47 Also see Calfee and Rubin 1992, p. 371, 376.

48 Note that in Figure 3 the utility curve keeps the same form and is merely shifted downward. This reflects the argument of the insurance theory that marginal utility of wealth does not increase due to a non-pecuniary loss, which in this Section is assumed to be correct for the sake of argument. If marginal utility of wealth decreased, the curve would become flatter, and if it increased the curve would become steeper. This in itself does not change the line of reasoning of the current Section, which focuses on the ex ante willingness to pay to avoid the loss, and not on the marginal utility of wealth.

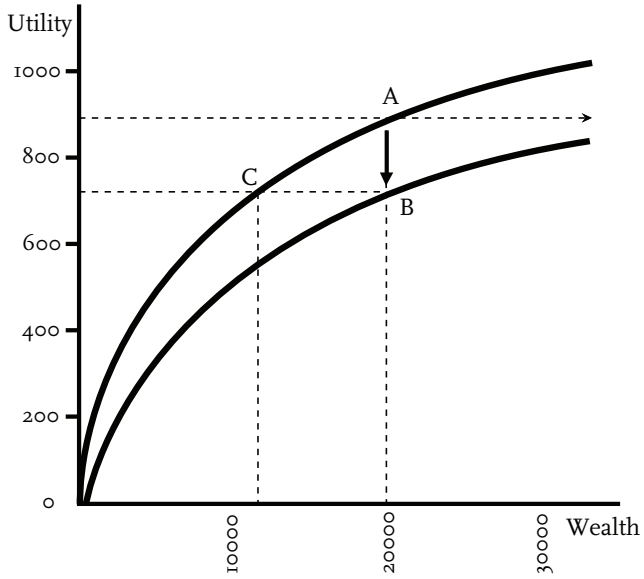

Figure 3. Ex ante willingness to pay

The important thing to note is that this decrease in utility due to the non-pecuniary loss in this example is the same as when the victim would not have suffered the non-pecuniary loss, but would have lost €8,000 instead. He then would have ended up at point C on his original utility curve, with a wealth of €12,000 and a corresponding utility level of 720. This implies that our victim is indifferent between suffering the non-pecuniary loss on the one hand, and losing €8,000 while not suffering the non-pecuniary loss on the other hand. Hence, he would have been willing to spend up to €8,000 on care measures which would have avoided the non-pecuniary loss. This €8,000 represents his ex ante willingness to pay to avoid the loss. By basing non-pecuniary damages on this amount of €8,000, we give incentives to a potential tortfeasor to take care measures which cost less than €8,000. That is exactly what we want him to do, because he then makes a correct weighing between the costs of care on the one hand, and the losses which can be avoided with those measures on the other hand.

Figure 3 also shows that non-pecuniary damages do not make the victim indifferent ex post. Receiving an amount of €8,000 after having suffered the non-pecuniary losses does not return our victim

to his original utility level. In Figure 3 the non-pecuniary losses are even of such a magnitude that no amount of damages can fully compensate the victim: the lower utility curve never reaches the original utility level of 900. Hence, non-pecuniary losses can be such that no amount of damages can truly compensate the loss ex post because the original utility level will not be reached anymore. Still, there is an ex ante willingness to pay to avoid the loss, which in my view forms the proper basis for non-pecuniary damages.

If the downward shift of the utility curve had been less severe than in Figure 3, ex post compensation could have brought the victim back to his original utility level of 900. However, such ex post compensation always exceeds the ex ante willingness to pay. For example, with a non-pecuniary loss where the ex ante willingness to pay to avoid that loss would have been €5,000, ex post damages which would bring the victim back to his original utility level would have amounted to €7,000.[49] The victim's ex ante willingness to pay €5,000 shows that he himself assesses the non-pecuniary loss at €5,000. This implies that in the weighing of costs and benefits of care measures, this non-pecuniary loss should count for €5,000. If it is assessed at a lower amount, the behavioral incentives would be inadequate and if it is assessed at a higher amount, they would be excessive. If tort damages are based on the ex post line of reasoning, they would amount to €7,000. We would then incentivize a potential tortfeasor to spend up to €7,000 on care measures, while the victim himself assessed his loss at €5,000. Hence, ex post damages lead to over-deterrence so that the ex ante measure in my view is better. In contrast to what the insurance theory argues, the ex ante measure does not result in over-compensation or over-deterrence, because it compensates the victim exactly for the amount he would have been willing to pay himself. This line of reasoning in my view nicely fits the statement of Posner in the case *Kwasny v. United States*: 'No one likes pain and suffering and most people would pay a good deal of money to be free of them. If they were not recoverable in damages the cost of negligence would be less to

[49] This is not shown in Figure 3, but could easily be seen in a figure with a smaller downward shift of the utility curve.

the tortfeasors and there would be more negligence, more accidents, more pain and suffering and hence higher social costs.'[50]

Figure 3 assumes an ex ante care measure which can avoid the loss with certainty, and assesses the damages for this non-pecuniary loss at the costs of this ex ante measure. In practice there will be many situations where the care measure does not avoid the loss with certainty, but 'merely' reduces the probability of such losses occurring. The car seats, swimming lessons and electricity sockets mentioned above are examples of this.

A similar line of reasoning applies in such situations, but one has to incorporate the fact that it regards probabilities rather than certainty.[51] For example, if a potential victim would be willing to spend up to €100 on a care measure which lowers the probability of a certain non-pecuniary loss occurring by 1‰, one can argue that the potential victim assesses this loss at €100,000. After all, if he assessed it higher he would have been willing to spend more on this care measure, and if he assessed it lower, he would have been willing to spend less. Or, put differently, if a thousand potential victims each spend €100 for a 1‰ reduction in the probability of suffering this non-pecuniary loss, in total € 100,000 is spent and one accident in which the loss would occur, is prevented.[52] Hence, in order to use the ex ante willingness to pay to reduce the probability of suffering non-pecuniary losses as a basis to assess damages for such losses, one has to divide the amount by the reduction in this probability.

The ex ante willingness to pay is not easily observable, and it may differ per person, for example because one victim is wealthier than another victim.[53] However, it is important to realize that tort damages, from an economic perspective, do not necessarily have to be assessed correctly in each and every individual case. It is questionable whether a precise calculation of non-pecuniary losses is possible

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50 823 f2d 194 *Kwasny v. United States* (7th Cir. 1987).

51 See Friedman 1982, p. 85ff; Danzon 1984, p. 526; Ott and Schäfer 1990, p. 568; Rubin and Calfee 1992, p. 249; Geistfeld 1995, p. 825; Cooter 2003, p. 1112ff; Schäfer and Ott 2004, p. 246; Cooter and Ulen 2012, p. 253ff; Cooter and De Pianto 2013, p. 453ff. Note that Cooter does not use the victim's willingness to pay as a basis for his calculations, but one or more care measures which in society are regarded as reasonable care measures.

52 A similar line of reasoning is used with the concept of the *Value of a Statistical Life*. See Section 4.3 below for a more detailed discussion.

53 Also see Avraham 2006, p. 107ff.

in the first place. But more importantly, economically speaking it is only required that the losses are assessed correctly *on average,* because a potential tortfeasor ex ante will not know the exact loss he will cause. Structural under-compensation or structural over-compensation should be avoided, but accuracy in all individual cases is not required.[54] This idea perfectly fits the assessment of pain and suffering damages in the Netherlands, because the Supreme Court has stated that in this assessment courts have to abstract from the concrete experience and have to assess the loss in a more objective sense.[55]

The conclusion of this Section is that we should be looking for an average ex ante willingness to pay to avoid non-pecuniary losses. Individual values, which would be difficult if not impossible to find, are not necessary. The focus should not be on finding damages which make the victim indifferent ex post. First, no such amount might exist in the first place because no amount of money might be able to offset the loss. Second, even if there was an amount which makes the victim indifferent ex post, this amount would always exceed the victim's willingness to spend resources on accident avoidance measures and hence result in over-compensation and over-deterrence.

54 Kaplow 1994, p. 313ff; Kaplow and Shavell 1996a, p. 194.

55 Hoge Raad 20 September 2004, *NJ* 2004, p. 112. The Supreme Court writes in Section 3.5: *'De wijze waarop en de intensiteit waarmee het derven van levensvreugde door de benadeelde is of zal worden beleefd, zullen in rechte vaak niet, of niet anders dan zeer globaal, kunnen worden vastgesteld, zodat bij de begroting van het nadeel zal moeten worden geabstraheerd van de concrete beleving en in meer objectieve zin moet worden vastgesteld in welke mate van nadeel als hier bedoeld sprake is geweest.'* [The way in which and the intensity with which forgone joy of life is experienced by the victim cannot, or else only in very general terms, be determined so that in assessing the losses one has to abstract from the concrete experience and one has to assess in more objective sense to what extent losses as referred to here have occurred.]

3 Pain and suffering damages for personal injuries

3.1 Introduction

When reading the Dutch legal literature on pain and suffering damages for personal injuries, it becomes clear that there is much dissatisfaction regarding the magnitude of these damages in the Netherlands. They are generally regarded as too low.[56] It is furthermore suggested that the amounts awarded for more serious injuries fall even shorter of the desired magnitude as compared to those for minor injuries. Lindenbergh argues that the level of compensation seems to stagnate in the Netherlands, while in the surrounding countries the amounts increase.[57] De Bosch Kemper explains that the fact that the Supreme Court has instructed courts to pay attention to the maximum amounts awarded in the Netherlands, slows down developments in the magnitude of damages.[58] Hartlief even wonders if the developments in the Netherlands are enough to compensate for inflation. He argues that an increase in the amounts of pain and suffering damages is needed and that there is no justification for departing from the European trend.[59] Van Dam and Frenk state that the Supreme Court could, just as is done in e.g. Germany and England, require that pain and suffering damages should reflect developments in society.[60] Many other legal scholars share these opinions.

The mere fact that pain and suffering damages in the Netherlands are lower than in other countries in my view does not in itself tell us much about the 'correctness' of the amounts. The amounts in the other countries could be too high, rather than the Dutch amounts too low. Furthermore, many differences between jurisdictions can impact upon the correct magnitude of pain and suffering damages, such as the general standard of living and price level, the extent to which social security and other provisions already help the victim in coping with his loss, diverging social norms and the question

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56 Besides the literature briefly mentioned below, also see e.g. Lindenbergh 1998, p. 273; Woordkramer 2000, p. 293; Wissink and Van Boom 2001, p. 159; Lindenbergh 2008, p. 75, 76; Verburg 2009, p. 8 and p. 127ff; Van Dam 2013, p. 262ff; Frenk 2013, p. 251.

57 Lindenbergh 2006, p. 6 and 11.

58 De Bosch Kemper 2009, p. 7.

59 Hartlief 2012, p. 8; Hartlief 2014b, p. 2287.

60 Frenk and Van Dam 2012, p. 2819ff.

whether legal expenses have to be covered by the damages as well.[61] Therefore, rather than comparing amounts between countries, it is necessary to search for an external standard to assess the 'correctness' of the damages amounts. I will argue today, as I have done previously, also together with Vaia Karapanou,[62] that health economics can provide such a framework.

3.2 Difficulties in assessing pain and suffering damages

Non-pecuniary losses do not consist in a loss of wealth in the monetary sense of the word, but in a loss of 'something else'. Article 6:95 of the Dutch Civil Code describes this as 'any other prejudice' than loss to property, rights and interests.[63] Article 6:97 requires the court to assess the damage in a manner most appropriate to its nature, and where the extent of the damage cannot be determined precisely, it shall be estimated. Non-pecuniary losses in personal injury situations are typically losses which cannot be determined precisely, so that a method for estimation is required.[64]

In the Netherlands, pain and suffering damages are assessed with the help of the *ANWB Smartengeldboek*, by looking at awarded damages in comparable cases.[65] The Supreme Court has instructed lower courts to pay attention to the amounts that have been previously awarded, as well as to the highest awarded amounts in the Netherlands.[66] As said, especially this latter instruction is regarded as a barrier for increasing pain and suffering damages.

In Germany, pain and suffering damages are also assessed with reference to previous cases, but courts still enjoy substantial discretion.[67] In Italy these damages are assessed by using tables, which

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61 Sugarman 2006, p. 410ff states that when comparing pain and suffering damages between countries, one has to incorporate the general wealth level (Greece and Portugal score relatively low, which could be caused by a lower standard of living) but also the system of social security (many Scandinavian countries also score low, which could be caused by the extensive social security). Hartlief rightfully argues that such factors cannot justify the *de facto* decrease in pain and suffering damages in the Netherlands (due to a lack of compensation of inflation) and the departure from the trend in Europe.

62 See e.g. Karapanou and Visscher 2010.

63 For the English translation of the Dutch articles, use is made of Warendorf, Thomas and Curry-Sumner 2013.

64 Also see Verburg 2009, p. 4 and p. 23.

65 ANWB 2015.

66 See e.g. De Bosch Kemper 2009, p. 7.

67 Markesinis et al. 2005, p. 65ff.

may differ between courts. These tables relate to the seriousness of the injuries expressed in invalidity points.[68] In Belgium so-called 'indicative tables', composed by the judiciary, are used in which the personal, domestic and economic impact of injuries are expressed in monetary terms and in which specific issues such as pain and esthetic losses are also included.[69] In France, permanent injuries are expressed as a percentage of full incapacity and this percentage is subsequently multiplied by an amount which depends on the percentage and on the age of the victim. Here, as in Italy, different courts may use different tables. For temporary injuries, other tables are used.

The use of tables and schedules may have the desirable outcome that comparable cases result in comparable amounts of pain and suffering damages, although the fact that in France and Italy different courts use different tables may shed some doubt on this issue. However, this 'equal treatment' in itself does not necessarily mean that the resulting amounts are correct, because a critical question remains unanswered: how were the amounts used in the tables and the original amounts in earlier case law determined? The amounts may be too low or too high, across the board, and it could also be that some types of injuries are over- or under-compensated as compared to other types of injuries. This is a complaint which, as already mentioned, is indeed expressed in the Netherlands, where allegedly major injuries are under-compensated as compared to minor injuries.

In order to tackle these two issues, i.e. the question if pain and suffering damages in general are too low or too high and the question if some injuries are over- or under-compensated vis-à-vis other injuries, one needs a framework of analysis which provides a benchmark for the 'correctness' of pain and suffering damages. In my opinion, law itself cannot provide this framework, and I will argue that economics can be of help here.

As became clear above, from an economic perspective we seek a way to express the impact of immaterial losses on the utility level of victims *in general terms*, which is consistent with the instructions of the Dutch Supreme Court.[70] Hence, we are looking for an objective

[68] Markesinis et al. 2005, p. 84ff.
[69] See e.g. www.ordeexpress.be/UserFiles/ArtikelDocumenten/Indicatieve_tabel_2012.pdf.
[70] See footnote 55.

expression of the average willingness to pay to avoid personal injuries and this willingness to pay should reflect the immaterial aspects of the injuries. These aspects in essence boil down to a forgone joy of life, which again fits the view of the Dutch Supreme Court.[71] In my view, health economics can offer such an expression of the average willingness to pay to avoid a reduction in the quality of life due to personal injuries: the concept of the *Quality Adjusted Life Years*, in short QALYs.

3.3 Quality Adjusted Life Years (QALYs)

QALYs are a concept from the field of health economics. They are used to evaluate health programs, medical treatments and techniques.[72] QALYs are an instrument which helps to decide how the health care budget is spent, and they form a state-of-the-art technique.[73] In such decisions, one evaluates whether, for example, a certain treatment, medicine, surgery, or preventive program yields enough benefits to be worth its costs. In this sense, QALYs can be regarded as a way to assess the collective willingness to pay to avoid certain health conditions or to cure them.

In my view, QALYs can help in better assessing pain and suffering damages. The basic idea is straightforward: assume that a society is willing to spend an amount of €10,000 on avoiding a certain health condition because of its impact on the quality of life of the person involved. If someone due to an accident suffers from exactly this health condition, the impact on the quality of life could be expressed in monetary terms as being on average at least €10,000. If pain and suffering damages were based on this amount, they would reflect the decrease in quality of life of the victim, expressed in objective, average terms. This would be a desirable situation from the point of view of compensation (because damages are then, as far as possible, based on the actual loss), from the point of view of prevention (actors receive incentives to take care measures which cost less than the loss which would occur in the case of an accident), and also from the point of view of satisfaction (by basing the damages on the actual impact of the injuries, one can better acknowledge the sorrow of the victim).

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71 Idem.

72 Brazier et al. 1999, p. 3ff; Dolan 2000; Folland, Goodman and Stano 2007, p. 81.

73 Hofstetter and Hammitt 2001; Dix Smith, Drummond and Brixner 2009, S1-S4.

A QALY is a measure of the value of living one year in a certain health condition, and it is used as a proxy for the quality of life during that year. It expresses this quality with a number (the QALY-weight) which varies from 0.00 (death) to 1.00 (perfect health), although sometimes also negative numbers are used to indicate conditions which are regarded as worse than death. Hence, every health condition can be expressed by a corresponding QALY-weight.

The impact of a health condition, or the impact of a treatment, can be expressed in QALY terms. If, for example, a person suffering from a health condition has a QALY-level of 0.7 and a possible treatment increases this level to 0.8 during six years, the total QALY-gain would be 0.6 (six times 0.1). If an alternative treatment increases the QALY-level to 0.85 but only during three years, the total QALY-gain of that second treatment would be 0.45 (three times 0.15). The first treatment therefore yields more QALYs than the second and from that perspective might be regarded as 'better'.[74] In case of an injury or illness, multiplication of the decrease in QALY-weight caused by this health condition with the duration of this condition (i.e. by 0.5 if the condition lasts for six months and by two if it lasts for two years) yields the total QALY loss caused by the condition.

Different methods for establishing the QALY weights exist.[75] In the *standard gamble method*, people are asked to choose between living in a certain health condition on the one hand, and undergoing treatment which, with varying probabilities, leads to either perfect health or death on the other hand. The lowest probability of living in perfect health which respondents find high enough to undergo the treatment determines the QALY weight of the health condition. For example, if respondents find a 75% chance of success high enough to undergo the treatment, the QALY-weight of the health condition is 0.75.

In the *time trade-off method*, people are asked to trade off a number of years in perfect health against a number of years with a certain health condition. The ratio between the two determines the QALY weight, so the more life-years the respondent is willing to forego in order to achieve perfect health, the lower the QALY weight for the particular health condition is. For example, if respondents find ten

74 Whether the latter treatment should be preferred over the former obviously also depends on the costs of both treatments.

75 See e.g. Nord 1992, p. 561ff; Johannesson, Jönsson and Karlsson 1996, p. 283ff; Bleichrodt and Johannesson 1997, p. 155ff; Brazier et al. 1999, p. 23ff; Dolan 2000, p. 1733ff; Hammitt 2002, p. 994-996.

years in perfect health equivalent to fifteen years with the health condition, the QALY-weight is 0.67 (10/15).

In the *person trade-off*, respondents are asked to choose between improving the health or extending the life expectancy of a group of people in the first (better) condition and a group of people in the second (worse) condition. The ratio between these two groups determines the relative QALY weight of both conditions.

In the *visual analogue scale*, respondents rank the condition on a line with concrete endpoints ranging from 0 to 100 where 0 represents death (or the worst imaginable health condition) and 100 represents perfect health (or the best imaginable health condition).

Another type of method, the so-called 'generic measures', asks respondents to fill out a questionnaire regarding various aspects which might or might not be affected by the health condition. For example, the *EuroQoL EQ-5D* questionnaire uses five dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. Respondents indicate whether they have no problems, slight problems, moderate problems, severe problems or extreme problems in each dimension.[76] Each of these levels is assigned a weight previously elicited by the visual analogue scale or the time trade-off method. The exact combination of answers provided by the respondents determines the QALY-weight of the health condition. The *Health Utilities Index Mark 3 (HUI3)*[77] uses eight dimensions to classify health states: vision, hearing, speech, ambulation, dexterity, emotion, cognition and pain. Each dimension has five or six different levels to indicate the impact of the condition. There are some other generic measures besides the EQ-5D and the HUI3, but these two are regarded as the better measures to elicit QALY-weights.[78]

The different methods may lead to different results, among others because of the type of questions that is being asked. Also the type of respondent may affect the result: does the research target the general public, or people who actually experience the health condition under consideration, or health specialists? And if one targets the people who experience the health condition, then it is important to know *when* the research was done, because the respondents may have adapted to the health condition in the meantime. Adaptation may therefore result in

76 Rabin, Oemar and Oppe 2011.
77 Horsman et al. 2003.
78 Brazier et al. 1999, p. 76.

lower QALY-losses because people learn to live with their condition.[79] This all implies that applying QALYs to assess pain and suffering damages in the way I will propose below, does not necessarily result in one unique, 'correct' amount. The research does, however, provide an upper and lower boundary for the QALY-weight of the health condition, between which the QALY-weight of the health condition may vary. This allows a judge who may want to apply the QALY-approach to fine-tune the exact amount of pain and suffering damages on the basis of the concrete circumstances of the case, but still to base the damages on health economics insights regarding the impact of the health condition on the quality of life.

For example, assume that there are three high quality health economics researches regarding the difference in QALY-weight between people who have vision in one eye and people who have vision in two eyes. The first paper assesses this difference at 0.1, the second at 0.07 and the third at 0.12. We could the use this information to assess the immaterial loss someone would suffer when losing (sight in) one eye at 0.07-0.12 QALY per year. As explained above, given that we are looking for an objective expression of the average loss, it would make sense to assess the loss at 0.095 QALY (the average of the three values found in the literature), but to allow the court some discretion within the given boundaries to incorporate characteristics of the case.

Summarizing, QALYs express the reduction in quality of life of the victim, caused by an injury or illness, in which the nature, severity and duration of the health condition play an essential role. This is, in my opinion, exactly what pain and suffering damages seek to reflect.

Before one can use QALYs to assess pain and suffering damages, they need to be expressed in monetary terms. This is not an easy task. Various methods exist, which may yield different outcomes.[80] Many factors are relevant in assessing the monetary value of a QALY, and because these factors may differ per country, the resulting amounts may also differ per country. Therefore, in order to apply the QALY-method in the Netherlands we should focus on a Dutch amount. In the Dutch literature an amount of €80,000 is often mentioned as an

79 Dolan 2000, p. 1738ff; Bagenstos and Schlanger 2007, p. 763ff.

80 It lies beyond the scope of this inaugural lecture to discuss the relevant aspects of monetization of QALYs in detail. For a more extensive discussion of this issue, see e.g. Karapanou and Visscher 2010, p. 63 and Karapanou 2014, p. 122ff and the literature mentioned there.

upper limit, while the lower limit is often set at €20,000 per QALY.[81] So, there is no single 'correct amount', but it makes sense to apply an amount which lies between these two limits. European research from 2010 suggested a value for the Netherlands of about €34.000-€43.000 per QALY.[82] In a recent publication it is stated that the Dutch are, on average, willing to pay €52,200 for a QALY of someone else.[83] In 2010, Dutch health economist Pomp assessed a QALY at €50,000.[84]

As said, there is no unique correct amount of a QALY. In order to use QALYs for the assessment of pain and suffering damages for personal injuries, one has to choose an amount. In my view, given the upper and lower limit of €80,000 and €20,000 respectively and given the recent Dutch publications which assess a QALY at (about) €50,000, this amount provides a good benchmark. In any case it does not seem to make sense to apply an amount lower than €20,000 per QALY or higher than €80,000 per QALY. For the examples in Section 3.4 below, I will apply an amount of €50,000 per QALY.

3.4 Examples of QALY-based pain and suffering damages

In this section I will provide a few examples of how QALYs could be used to assess pain and suffering damages. As said, for the calculations I will use a value of €50.000 per QALY. I will compare the resulting amounts with the damages as they are actually awarded in Dutch cases. This exercise will show indeed that current pain and suffering damages in the Netherlands are too low, and that the 'relative ranking' of injuries on the basis of QALYs is different from the ordering that results in case law.

3.4.1 Non-complicated fractures

A non-complicated leg fracture results in about €1,500-€1,650 in pain and suffering damages in the Netherlands, while in more complicated fractures amounts of about €2,300 have been awarded.[85] Health economics research has investigated whether in cases of a

81 See e.g. Raad voor de Volksgezondheid en Zorg 2006, p. 33, 43, 91ff; Helsloot, Pieterman and Hanekamp 2010, p. 135ff; Hamberg-van Reenen and Meijer 2011.

82 European Value of a Quality Adjusted Life Year (EuroVaQ) 2010.

83 Van Gils, Schoemaker and Polder 2013, p. 3. They refer to Bobinac et al. 2013.

84 Pomp 2010.

85 ANWB 2015, p. 17ff.

broken leg (more specifically, a closed tibial shaft fracture) it is worthwhile to perform surgery very quickly, within twelve hours.[86] When analyzing the successive stages of the healing process and the corresponding QALY-weights during those stages, it turns out that, depending on how quickly surgery was performed, the *total* QALY loss during the healing process can be assessed at about 0.087-0.13 QALYs if there are no remaining side effects of the fracture.[87] Expressed in money, applying a value of €50,000 per QALY, this would amount to €4,350-€6,500, so three to four times as high as the amounts which are actually awarded in the Netherlands.

A broken collarbone results in about €1,100 in pain and suffering damages in the Netherlands, although in several cases damages are higher due to accompanying injuries, such as bruises or a broken nose.[88] Recent health economics research compares the traditional treatment (a mitella or sling) with surgery.[89] In this research, the average QALY-weight of living with a healing fracture during the healing process, is assessed at 0.706 and the average duration of the healing process at about 28 weeks. The average QALY-weight after complete healing was 0.842. The QALY-loss due to the fracture in my view can then be assessed at 0.0748 QALY: the decrease from 0.0842 to 0.706 (so, 0.136) lasts for about 28 weeks, so 0.55 year, and 0.136*0.55=0.0748. Applying €50,000 per QALY this would result in damages of €3,740, so about three times as high as actually awarded.

3.4.2 Loss of an eye

Loss of an eye often results in about €22,000-€30,000 in pain and suffering damages in the Netherlands.[90] Health economics research has investigated whether cataract surgery to the second eye, after successful surgery to the first eye, is worthwhile. According to this research, the difference in QALY-weight between sight in one eye and sight in two eyes, is 0.109.[91] A study regarding diabetes related complications suggests a QALY-loss of about 0.074 due to loss of an eye.[92]

This decrease in QALY-weight reflects the decrease in quality of life during one year. Given that loss of an eye is a permanent injury,

86 Sprague and Bhandari 2002.
87 Idem, p. 321.
88 ANWB 2015, p. 75.
89 Pearson et al. 2010, p. 426.
90 ANWB 2015, p. 64ff.
91 Brown et al. 2001, p. 644; Busbee et al. 2003, p. 2312.
92 Clarke, Gray and Holman 2002, p. 344.

in principle the victim should annually receive €3,700-€5,450 for the rest of his life (0.074 resp. 0.109 multiplied by €50,000). However, it is standard practice in the Netherlands to award damages in a lump sum. Therefore, this stream of periodic payments has to be converted into an amount at once. For simplicity's sake I calculate the net present value of this stream of future payments, but I realize that in practice more complicated methods are used.[93] The QALY-method would result in pain and suffering damages of €79,000-€117,000 for a 44-year old man (who received €25,418 in reality)[94] and €107,000-€158,000 for an 18-year old female (who received €30,429).[95] Hence, QALY-damages for loss of an eye based on €50,000 per QALY are about three to five times as high as the actually awarded amounts.

3.4.3 Deafness of young children

In two Dutch cases on medical malpractice where a five year old child and an unborn child became deaf in both ears, pain and suffering damages of €49,617 and €72,780 have been awarded.[96] There exists extensive health economics research regarding cochlear implants (which directly electronically stimulate the auditory nerve system). This research suggests that deafness in both ears results in a QALY-loss of 0.145-0.281, depending on the effect of traditional, acoustic hearing devices.[97] Research which focused specifically on deaf

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93 I take the life expectancy as published by the Dutch Central Bureau of Statistics (see http://statline.cbs.nl/Statweb/selection/?DM=SLNL&PA=37360NED&VW=T) and apply a discount rate of 3%, because this is the rate that is often applied in the Netherlands. It is based on an estimated 6% return on capital and an inflation rate of 3%. The Court of Appeal's Hertogenbosch ruled that due to the recent low interest rate and the expectations for the future, a lower discount rate of 2.2% (4.2% return on capital and 2% inflation) should be applied for the first twenty years (Court of Appeal's Hertogenbosch, November 5, 2013, ECLI:NL:GHSHE:2013:5188). However, because the cases I discuss are older cases, I do not apply this correction. I realize that in practice more complicated models are used to calculate the lump sum, in which also taxes are included. In principle, the annual amounts as determined by the QALY-loss can be plugged into those models, so that QALY-based pain and suffering damages can be determined in the usual way.

94 The accident in this case happened in 1992 and a 44-year old male then had a remaining life expectancy of 33 years. The net present value of 33 payments of €3,700-€5,450 with a discount rate of 3% is €79,138-€116,569.

95 The accident in this case happened in 1996 and an 18-year old female then had a remaining life expectancy of 63 years. The net present value of 63 payments of €3,700-€5,450 with a discount rate of 3% is €107,301-€158,052.

96 ANWB 2015, p. 135.

97 Summerfield et al. 2002, p. 1259.

children found a difference of 0.237 QALY between no implant and a unilateral implant (so in one ear), and a difference of 0.076 QALY between unilateral and bilateral implants. The total difference between deafness and bilateral implants hence is 0.313 QALY.[98] An older publication asked parents of deaf children to assess the quality of life before and (well) after the implant. Depending on the exact research method, this difference was assessed at 0.22-0.39 QALY.[99] The value of 0.39 was found by using extensive questionnaires which also asked about the impact of the deafness on speech, cognition and emotion. In Section 3.3 above it already became clear that such methods are being regarded as the qualitatively better methods.

The QALY-loss due to deafness hence can be assessed at 0.22-0.39 per year, depending also on the age of the person involved. When focusing on young children and when also incorporating the influence of deafness at a young age on speech, cognition and emotion (as is explicitly done by the court in the Dutch case concerning the child that went deaf before birth), an assessment of the QALY-loss of 0.313-0.39 seems better, so €15,650-€19,500 per year. This would result in pain and suffering damages of about €470,000-€585,000 for the five year old,[100] and about €7,500-€9,500 higher for the baby.[101] This implies damages six to eleven times as high as currently awarded.

3.4.4 Other examples

Without going into the details of the underlying cases and the health economics research used for the QALY-weights,[102] it also turns out in other types of injuries that pain and suffering damages based on QALYs, where a monetary value of €50,000 per QALY is applied, significantly exceed the amounts that are actually awarded. For amputation of a forearm, QALY-based damages would be about nine times as high, for amputation of a lower leg about seven times as high and

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98 Summerfield et al. 2010, p. 620. Given that bilateral implants do not yield a quality of hearing which is equivalent to natural hearing, this 0.313 might still be an underestimation of the impact of deafness on the quality of life.

99 Cheng et al. 2000, p. 853.

100 The accident in this case happened in 1991 and a 5-year old male then had a remaining life expectancy of 70 years. The net present value of 70 payments of €15,650-€19,500 with a discount rate of 3% is €469,455-€584,944.

101 The accident in this case happened in 1991 and the life expectancy of a male baby then was 74 years. As compared to the previous case, the net present value of these four additional future payments is €7,567-€9,429.

102 For this information, see Visscher 2013 and Visscher 2015. Note that in these publications a higher discount rate of 4% was applied.

for paralysis about five times as high. A noticeable exception is HIV-infection, which according to QALY-research would result in about the same amount of damages as actually awarded. The likely explanation is that due to improved medication, the quality of life and the remaining life expectancy of HIV-infected persons nowadays is much better than in the 1990s when the actual cases were being tried.[103]

3.5 Conclusion

This overview of cases suggests that pain and suffering damages in the Netherlands are substantially too low from an economic perspective. I therefore share the first critique of Dutch legal scholars that pain and suffering damages are systematically too low. This frustrates the preventive goal of tort law, and obviously also result in incomplete compensation.

The QALY-method provides a different 'relative ranking' of injuries than the Smartengeldboek. When applying the QALY-method, pain and suffering damages for some types of injuries would increase more than for other types of injuries. However, one cannot say that damages for more serious injuries systematically fall even shorter than those for minor injuries, so I do not share the second critique of Dutch legal scholars. It is noteworthy that actually the case for which the highest pain and suffering damages are awarded in the Netherlands (HIV-infection) results in the lowest increase when applying the QALY-method.

Given the too low level of damages across the board, I fully support the plea to increase pain and suffering damages for personal injuries. Based on QALYs I advocate an even larger increase than many lawyers would propose. Wouldn't this make activities which may cause injuries too expensive so that socially desirable activities might be stopped? In my view: no. After all, whether an activity is socially desirable does not only depend on its benefits, but also on its costs. If an activity can only be undertaken profitably if it does not bear all the costs it causes, in economic terms it is not a desirable activity and the externality is not fully internalized. The victims whose losses are not fully compensated then in a sense 'subsidize' this activity and that cannot be a good situation.[104]

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[103] See Nakagawa et al. 2012.

[104] This echoes Lloyd George's alleged saying in the field of workers' compensation that 'the cost of the product should bear the blood of the working man'.

4 Affection damages

4.1 Introduction

The second form of debated damages I want to discuss, is 'affection damages'. This regards non-pecuniary losses suffered by a well-defined group of people who stand in a close (emotional and affective) relationship with a victim of e.g. a tort or crime who suffered grave and permanent injuries or who was killed.[105] The Dutch term for these losses is *affectieschade*, which I translate as affection losses. The term 'bereavement damages' in my view is too narrow, because it only encompasses fatalities, while affection damages can also be awarded in cases of non-fatal accidents. As shorthand notation I will refer to the group of people who can claim affection damages as 'relatives', even though this term is not fully accurate.[106]

In March 2005, the Second Chamber of the Dutch parliament accepted a draft bill which concerned affection damages. In order to avoid long and possibly unsavory procedures, the draft suggested a fixed amount of €10,000. In 2010 the Senate rejected the draft bill, among others because there was doubt whether the goal of recognition of the loss of the relatives could be reached by a 'translation' into a monetary award (which often will be paid by an insurance company) and because of the fear of a claim culture.

In May 2014 a new draft bill regarding, among others, affection damages was proposed for public consultation. In Section 4.2 I will briefly describe the proposal, in so far as it concerns affection damages, in more detail and in Section 4.3 I will provide a Law and Economics view on the topic of affection damages, evaluating the draft bill from that perspective.

4.2 The draft bill from May 2014

In this section I will briefly describe the draft bill and the literature in which the draft bill has been discussed, in so far as it concerns the topic of affection damages. Other aspects of the draft bill, such as compensation of reasonable costs of nursing and domestic help, lie outside the scope of the analysis.

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[105] See e.g. Hebly, Van der Zalm and Engelhard 2015, p. 98.

[106] Not all eligible people are relatives, and not all relatives are eligible, see Section 4.2.

The draft bill introduces affection damages in the case of fatalities (Article 6:108 section 3 of the Dutch Civil Code) and of grave and permanent injuries (Article 6:107 section 1 sub b). Eligible for these damages are (a) the spouse or registered partner of the victim, (b) the life companion who has or had an enduring common household with the victim, (c) parents and (d) children of the victim, (e) persons who have in an enduring way taken care of the victim in a family setting or (f) vice versa and (g) other persons who, at the time of the event which injured or killed the victim, had such a close connection with the victim that reasonably they should be regarded as relative.

Lindenbergh argues that the draft bill primarily wants to acknowledge the immaterial loss of the relatives, something which almost all European countries already do.[107] Hartlief writes that the draft bill rightfully expands damages for so-called 'secondary victims'.[108] Verheij explains that the modest magnitude of the amounts is related to the two functions these damages serve: recognition of the suffering of the relatives and appeasement of their shocked feelings,[109] although he also argues that for the latter function, fixed modest amounts are problematic.[110] This function requires that the party who caused the losses must make a certain sacrifice, which might not be the case with fixed modest amounts. Verheij mentions that to avoid unsavory discussions and to limit the system costs, the proposal uses fixed modest amounts and he explicitly argues that affection damages are *symbolical* and that they do not aim at compensation.[111] The proposed amounts vary from €12,500 to €20,000, depending on the type of relative, the type of wrongdoing (e.g. accidents or crimes) and the type of injury (fatal or non-fatal). The below table shows the current proposal.[112]

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[107] Lindenbergh 2014, p. 856. The Explanatory Memorandum to the draft bill states on p. 5 that besides the Netherlands, Germany is the only European country without a form of affection damages.

[108] Hartlief 2014a, p. 1727.

[109] Verheij 2014, p. 222ff.

[110] Verheij 2014, p. 224. Also see Hebly, Van der Zalm and Engelhard 2015, p. 102.

[111] Idem. Also see Lindenbergh 2014, p. 856.

[112] Also see e.g. Verheij 2014, p. 222, Rijnhout 2014, p. 125 and Hebly, Van der Zalm and Engelhard 2015, p. 102. The letters within parentheses in the first column refer to the groups of entitled relatives which are mentioned in the text above.

	Grave and permanent injuries	Death	In case of violent crime	
			Grave and permanent injuries	Death
Spouse, registered partner, life companion (a, b)	€15,000	€17,500	€17,500	€20,000
Minor children or adult children living at home and parents (c, d)	€15,000	€17,500	€17,500	€20,000
Foster parents and foster children (e, f)	€15,000	€17,500	€17,500	€20,000
Adult children not living at home and parents (c, d)	€12,500	€15,000	€15,000	€17,500
Care in family situation (e and f)	€12,500	€15,000	€15,000	€17,500
Other close connection (g)	€12,500	€15,000	€15,000	€17,500

4.3 An economic perspective on affection damages

Various legal authors have stressed that the proposed amounts of €12,500-€20,000 are symbolical. In practice, symbolical amounts tend to be modest, and that is also the case in the draft bill. Recently, legal sociologist Schwitters made a plea for the symbolical function of pain and suffering damages in general.[113] For that function, the link between damages and the norm violation is important, and the damages do not necessarily equal the loss so that pain and suffering damages could actually decrease. The symbolical function is especially important for the functions of enforcement and appeasement and liability mostly serves the goal of underlining the importance of the behavioral norm. Schwitters contrasts these functions with those of compensation and prevention.

From an economic perspective, not much can be said about the symbolical function of damages. If indeed the goal is to signal, ex post, that the tortfeasor did not act according to the norm and is responsible for the immaterial losses of the victims, or to give a signal to the victim that he is not to blame, one could indeed use a symbolical amount.[114] This amount should then be based on the reprehensibility of the behavior.[115] However, it is not clear to me why such symbolical amounts should necessarily be modest.

[113] Schwitters 2014.
[114] Suurmond and Van Velthoven 2005, p. 1934.
[115] Compare Polinsky and Shavell 1998, p. 948ff.

From the perspective of prevention and compensation, some additional observations can be made. First, just as with other forms of non-pecuniary losses, given that affection losses lower the utility of the people involved, they do constitute real losses and therefore, in principle, should be included in tort damages.

Second, because these losses cannot be measured exactly, we need an abstract method of assessing them. By using standardized amounts which express the loss in general terms, the costs of the legal system can be reduced, which is positive.[116] The legal desire to avoid unsavory procedures is thus perfectly aligned with the economic desire to limit the system costs.

Third, from a prevention and compensation perspective, the proposed amounts of €12,500-€20,000 seem too low. Suurmond and Van Velthoven have argued that affection damages could be based on the so-called *Value of a Statistical Life*, in short VSL.[117] This VSL is derived from all kinds of decisions individuals take which affect health and safety. Examples are installing an airbag in a car, using seatbelts, installing a smoke detector and buying safer, more expensive products. Such market choices contain an implicit tradeoff between money and risks, and these tradeoffs are used to estimate the VSL. If, for example, a thousand people are willing to spend up to €2,000 each on a safety measure which reduces the probability of a fatal accident by one permille, in total €2 million is spent and one live is saved. The VSL in this example would then be €2 million.

The VSL should not be regarded as the 'true value of a human life', but rather as the tradeoff that results from given research. According to Sunstein, the VSL is currently set at about 9 million dollars.[118] This American VSL is comparable to the VSL found in other developed countries.[119] Suurmond and Van Velthoven state that the VSL consists of two components: (1) the money the deceased himself would otherwise have spent on consumption during his life, and (2) the non-pecuniary loss of the relatives. The authors apply a low estimation of the VSL of €2 million[120] and assume that the

[116] Suurmond and Van Velthoven 2005, p. 1936 also see this as a positive point in the first draft bill regarding affection damages.

[117] See e.g. Viscusi and Aldy 2003; Sunstein 2004; Sunstein and Posner 2005; Ashenfelter 2006.

[118] Sunstein 2014, p. 7. For older research, see Sunstein 2004, p. 205; Sunstein and Posner 2005, p. 563.

[119] Viscusi and Aldy 2003, p. 24, 35 and 63.

consumption component will not exceed €1 million. This would imply that the immaterial loss of the relatives would then be at least €1 million.[121] A recent Dutch report on traffic safety also states that the VSL consists of lost consumption and immaterial loss. The VSL in this report is assessed at €2.5 million and the immaterial loss-component at €2 million.[122] These amounts originate from 2011. Corrected for inflation, they would amount to about €3.2 million resp. €2.5 million.[123]

Sunstein and Posner however argue that the VSL most likely does *not* include the loss to survivors, because it is doubtful whether people's willingness to pay to reduce accident risks includes the grief of their dependents. A different way of assessing these losses is therefore needed.[124] They acknowledge that it is very difficult to express grief in monetary terms, but based on research which compares the self-reported happiness of married people with that of widowed persons, assuming an average of five years before remarriage, they state that an amount of about €625,000 would 'not be the worst place to start'.[125] Obviously, if there are more dependents, for example children, the amount should be higher, sometimes much higher.[126]

A more recent paper studies mental distress caused by bereavement and investigates how happiness regression equations might be used to assess damages for emotional harm and pain and suffering. As the authors of this paper themselves write: 'We use regression equations in which a measure of subjective well-being is the dependent variable. Intuitively, our method can trace out a form of indifference curve between income and any kind of life event (such as bereavement). This is achieved, put loosely, by measuring how many happiness points are gained on average by a higher income of X

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120 This €2 million (in Euros from 1997) is mentioned as a 'safe lower boundary' for the VSL in the Netherlands in the Dutch PhD dissertation of A.T. de Blaeij (*The value of a statistical life in road safety; Stated preference methodologies and empirical estimates for the Netherlands*, Amsterdam (VU) 2003) to which the authors refer.

121 This €1 million again is a - very safe - lower boundary, according to the authors.

122 Wijnen 2014, p. 13ff.

123 Inflation calculated on the basis of data of the Dutch Central Bureau for Statistics: www.cbs.nl/nl-NL/menu/themas/prijzen/cijfers/extra/prijzen-toen-nu.htm.

124 Sunstein and Posner 2005, p. 568ff, 595.

125 Sunstein and Posner 2005, p. 571ff. The original amount mentioned by the authors is $400,000 (in 1990 dollars). American inflation is calculated on http://fxtop.com/en/inflation-calculator.php. Conversion into 'Dutch Euros' is done via http://stats.oecd.org/Index.aspx?DataSetCode=PPPGDP.

126 Sunstein and Posner 2005, p. 586.

thousand dollars and how many happiness points are lost by the death of a loved one and then calculating the ratio of the two.'[127] They use data from the British Household Panel Survey, which contains responses from over 10,000 adult individuals from 1992-2005 on questions regarding various issues, among which is the impact of bereavement.[128] Bereavement increases psychological distress as expressed with the help of the '12-item general Health Questionnaire' (GHQ-12). The authors then study which increase in income would, on a statistical level, offset the distress from bereavement.[129] Various econometric specifications yield different results. The authors warn that their paper's contribution is methodological and they do not 'attempt to adjudicate between the compensation amounts calculated under different econometric specifications'.[130] They do provide an overview with 'illustrative valuations of compensatory damages in the first year', which would amount to about £114,000-£202,000 for a partner and £89,000-£140,000 for a child.[131] Expressed in current Euros and accounting for the difference in the standard of living between the UK and the Netherlands, the amounts would be about €163,000-€288,000 resp. €127,000-€200,000.[132] Note (again) that this only relates to the first year after death of the partner or child.

An older Swiss publication which asked respondents to consider themselves either as potential victims of a road accident or as relatives of potential victims and to state their willingness to pay to reduce the likelihood of such an accident occurring, suggests that the immaterial losses to relatives of victims of traffic accidents are about 25% *higher* than the immaterial losses to victims themselves.[133] The immaterial loss to relatives was assessed at about Sfr 2 million for fatal accidents and a bit higher for injuries resulting in severe and permanent disabilities. Expressed in current Euros and accounting for the difference in the standard of living between Switzerland and the Netherlands, this would amount to about €1.2 million.[134]

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127 Oswald and Powdthavee 2008, p. S220.
128 Idem, p. S224ff.
129 Idem, p. S231ff.
130 Idem, p. S240.
131 Idem.
132 British inflation is calculated on http://fxtop.com/en/inflation-calculator.php. Conversion into 'Dutch Euros' is done via http://stats.oecd.org/Index.aspx?DataSetCode=PPPGDP.
133 Schwab, Christe and Soguel 1996, p. 285ff.
134 Swiss inflation is calculated on http://fxtop.com/en/inflation-calculator.php. Conversion into 'Dutch Euros' is done via http://stats.oecd.org/Index.aspx?DataSetCode=PPPGDP.

It would be interesting to analyze whether the QALY-framework could also provide insights regarding the 'proper' magnitude of bereavement damages. A full discussion goes beyond the scope of this inaugural lecture, but the basic idea can be explained as follows. In the generic methods to illicit QALY-weights, such as the Health Utilities Index Mark 3 (HUI3),[135] emotions form a separate category. For example, the HUI3 distinguishes between various physical factors (such as vision, hearing, speech, ambulation, and pain) and also includes 'emotion' as a separate category. The possible levels of emotion in the HUI3 are 'happy and interested in life', 'somewhat happy', 'somewhat unhappy', 'very unhappy' and 'so unhappy that life is not worthwhile'. The total QALY-level of a person is determined by his levels on all health factors.[136]

If we assume that the death or injury of a loved-one only affects the factor emotion of the secondary victim while leaving the other factors unchanged and if we furthermore assume that this secondary victim was otherwise healthy and happy, we can assess the QALY-loss due to the affection losses. We then need to know by how much the happiness level decreases and how long this lasts. Obviously this would require more research, but by way of example, assume that after the death of a partner the secondary victim drops to the level 'very unhappy' for two years, 'somewhat unhappy' for the subsequent two years, 'somewhat happy' for the next two years and then has returned to the original level of 'happy and interested in life'. The total loss, based on the underlying formula of the HUI3, would then be about 1.46 QALYs.[137] Again assuming a value of €50,000 per QALY, this would be about €73,000 in affection damages.

The above economic research regarding bereavement does not yield identical results, which was not to be expected given that the research originates from different countries and applies different methods which are not all equally developed yet. But the overview does suggest that the amounts for affection damages currently proposed in the draft bill are (much) too low. However, as Sunstein and Posner also state, even though any particular amount is, to some degree, arbitrary, it is certainly preferable to zero[138] and that of course

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135 See footnote 77.

136 See www.healthutilities.com/hui3.htm for the exact formula.

137 The loss in the first and second year is 0.49356, in the third and fourth year 0.20565 and in the fifth and sixth year 0.06855 (see www.healthutilities.com/hui3.htm). The net present value of these QALY-losses yields a total QALY loss of 1.456034.

138 Sunstein and Posner 2005, p. 571ff.

also holds for the proposed modest amounts in the draft bill. In a sense this relates to the statements of Verheij and Lindenbergh who write that even though it is possible to have a discussion about the details of the draft bill, there is a danger that 'the best is sometimes the enemy of the good'.[139] In so far as the amounts currently proposed in the draft bill are the most that is feasible at this moment, a Law and Economics plea for (substantially) higher amounts should not result in rejection of the draft. After all, modest amounts in the range of €12,500-€20,000 are better than no amount at all, irrespective of whether one aims for prevention, compensation, recognition or appeasement.

[139] Lindenbergh 2014, p. 857; Verheij 2014, p. 226.

5 Mass damages

5.1 Introduction

The last topic I want to discuss today is mass damages. Currently, in the Netherlands, article 3:305a CC allows certain organizations to institute an action, intended to protect similar interests of other persons. Let's call this 'mass litigation'. Section 3 of Article 3:305a CC forbids such mass litigation to have the object of seeking monetary compensation. Let's call this 'mass damages litigation'. It is therefore important not to confuse 'mass litigation' (which is allowed) and 'mass damages litigation' (which is not allowed).

On July 7, 2014, a draft of a proposal for a bill was published which enables mass damages litigation. The public consultation closed on October 1, 2014, so this is a very recent example of debated damages. I will first briefly sketch the economic advantages and challenges of mass litigation[140] and will subsequently assess the Dutch situation from that viewpoint.

5.2 Mass litigation from an economic perspective

5.2.1 Benefits of mass litigation

A potential tortfeasor only receives behavioral incentives from tort law if he is confronted with the losses he has caused. However, if the expected benefits of a lawsuit for the victim (which may consist of damages, but also of non-pecuniary benefits such as seeing the wrongdoer being sanctioned) do not outweigh the costs of litigation (money, time, efforts et cetera), a victim might stay *rationally apathetic* so that he might not start a case in the first place.[141] Especially in situations of scattered losses, where many victims each suffer only a small loss, this is a realistic danger. Free-riding might exacerbate this problem: some victims might wait to see if someone else starts a suit from which they benefit, for example from an injunction but also from the fact that certain questions regarding negligence, causation et cetera have already been answered, without bearing the costs.

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[140] In this sketch I do not incorporate the debate regarding the impact of lawyers' remuneration (hourly fee versus contingency fee) on the principal-agent problems, because that lies beyond the scope of this lecture. The debate is not about allowing contingency fees but about allowing mass damages litigation in the Netherlands.

[141] See e.g. Kalven and Rosenfield 1941, p. 685; Landes and Posner 1975, p. 33ff; Schäfer 2000, p. 184ff; Micklitz and Stadler 2006, p. 1476; Keske, Renda and Van den Bergh 2010, p. 59ff; Cassone and Ramello 2011, p. 208ff; Biard 2014, p. 13ff.

Mass litigation could ameliorate the rational apathy problem, because the costs of litigation (e.g. lawyers' fees, costs of experts, court fees) are spread over more persons, which reduces the costs per plaintiff. Similarly, the costs when losing the case are spread over more people, which in essence is a form of risk spreading. The extent to which rational apathy may be overcome is influenced by the type of mass litigation procedure. With an opt-in procedure, individual victims might still find the costs of joining the procedure too high, especially if at that stage it is not clear how many others will join.[142] Opt-out procedures score better in this respect because, exactly due to rational apathy for example, opt-out rates can be expected to be low.[143] The group under an opt-out procedure will hence be larger than under an opt-in procedure, which also affects the costs per individual. Free-riding will also occur less under an opt-out procedure, because a potential free-rider would have to actively leave the group, which might not be attractive in case of relatively low individual losses.[144]

An additional advantage of mass litigation is that, if more victims are willing to bring their claim, the full extent of the losses becomes clearer, which is relevant in determining whether or not the injurer was negligent.

Furthermore mass litigation may reduce the total system costs because some questions regarding unlawfulness, causation or loss do not have to be discussed over and over again in the separate individual claims.[145] Whether or not total costs indeed decrease is not certain, because in the absence of mass litigation, few or no individual claims might have been brought due to rational apathy.[146] Also, mass claims are more complicated, so that the procedure is more expensive than in an individual case. The cost reduction due to economies of scale of having one rather than many procedures has therefore to be compared to the increase in cost due to the increased complexity of the case. An additional relevant point regarding the total system costs is that mass actions often result in settlement, which is less costly than litigation.[147]

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142 Keske, Renda and Van den Bergh 2010, p. 60.

143 See e.g. Eisenberg and Miller 2004, p. 1532 for an empirical analysis of this issue.

144 Keske, Renda and Van den Bergh 2010, p. 61.

145 Also see Dam 1975, p. 49; Cassone and Ramello 2011, p. 2010.

146 That would of course have resulted in problems such as under-compensation, inadequate deterrent incentives et cetera.

147 Keske, Renda and Van den Bergh 2010, p. 63. Note that the cost-decreasing aspect of mass litigation is also regarded as a benefit to the defendants, see Biard 2014, p. 17ff.

Also information asymmetry might call for mass litigation. In situations such as violations of consumer law, individual victims might not even know that a tort has been committed, or they might not have enough information to establish negligence, causation et cetera.[148] Article 3:305a CC enables a representative organization to litigate to protect the interests of the victims. If this organization has better information than the individual victims, for example because it is a repeat player that has gained expertise or because it has more assets to hire experts or specialized lawyers, the threat of liability becomes more realistic.

5.2.2 Challenges of mass litigation

Besides these advantages, mass litigation also entails several challenges. The free-riding problem might not be fully solved, as long as individuals can first wait for the result of the mass litigation before they decide whether they want to be bound by it. Victims with relatively large losses might not opt in (under an opt-in procedure) or might opt out (under an opt-out procedure) because they expect a better outcome in an individual case, where they may use the outcome of the collective claim to their benefit. Especially if victims with relatively large losses act as free-rider, the collective claim loses much of its potential. A mandatory collective action could overcome this problem, but is often regarded as contrary to due process.[149]

In addition, the principal-agent problem which already exists between client and attorney in individual litigation might be exacerbated because in mass litigation the individual victims might even have fewer incentives for adequate monitoring.[150] The issue which lies at the heart of the principal-agent problem is the fact that the interests of principal and agent are not always well-aligned. The principal has only limited possibilities to monitor and control the behavior of the agent, and such monitoring and control is costly. In individual cases where the stakes of the principal are relatively high, it might be worthwhile to spend resources on adequate monitoring and control. In mass litigation, where the stakes of individual principals are much lower and where the interests may also differ between principals, this might not be the case. The agent, be it a lawyer or a representative organization, therefore might pursue his own

[148] See e.g. Rosenberg 2000, p. 395; Deffains and Langlais 2011, p. 242ff.
[149] Keske, Renda and Van den Bergh 2010, p. 62.
[150] See e.g. Tzankova and Kortmann 2010, p. 124 and the literature mentioned there.

interests, sometimes at the expense of the interests of the principal(s).[151] This may result for example in inadequate efforts of the agent and in accepting a settlement offer which is not in the best interest of the principal.

The literature suggests that this problem might be less severe with representative organizations than with the American style class action, but it is not likely that the problem will be fully solved. Relevant issues in this respect are in how far the victims can influence the representative organization, in how far the representative organization can control its lawyers, and the possible influence of third parties.[152] The organization might not (only) be motivated by the interests of the victims, but (also) by attracting media attention and by pursuing political and/or ideological goals. It is therefore desirable that requirements are posed regarding the representativeness and the commitment of the organization, so that the scope for agency problems is reduced. However, in order to enable the victims to influence the representative organization, they should have the opportunity to opt out of a lawsuit and to join a competing organization if they think this latter organization represents their interests better. This implies that competition between organizations should be possible and that the requirements posed to such organizations should not result in a (near) monopoly of one of them.[153]

A next challenge of mass litigation is the threat of frivolous suits, which are intended to induce the defendant to settle, even if the case has no merits (the so-called blackmail settlements).[154] If the costs of settling for the defendant are lower than the costs of going to court, where the mere fact of being involved in a mass claim might cause reputational losses, even a defendant with a strong case might prefer to settle. The magnitude of this problem depends, among others, on whether the loser has to pay the litigation costs of the winner. Also the extent to which courts review the merits of the case may matter. The magnitude of the problem furthermore depends on whether defendants are more risk averse than plaintiffs, which would be necessary for blackmail settlements to systematically occur. The defendant allegedly would settle out of fear for high costs, but if

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151 See e.g. Coffee 1995, p. 1347; Miller 1998, p. 259; Schäfer 2000, p. 197ff.

152 Schäfer 2000, p. 198; Keske, Renda and Van den Bergh 2010, p. 70ff; Keske 2010, p. 113 and the literature mentioned there; Van den Bergh 2013, p. 29.

153 See Van den Bergh 2008, p. 294 and Van den Bergh 2013, p. 30.

154 Shavell and Rosenberg 1985; Schäfer 2000, p. 187ff.

plaintiffs also fear such costs, especially when their claim is weak, they might not have a credible threat of litigation to start with.[155]

Mass litigation has to be funded and this entails another challenge.[156] In the American style class action this funding is often done via contingency fees. Because such fees are generally not allowed in Europe, other forms of financing mass litigation are relevant.[157] Representative organizations may have an own budget, but this might not be enough to cover the costs of a mass claim. If the budget is financed out of membership fees, the important question is whether members find mass litigation important enough to be willing to pay for it via the higher fee. Especially if non-members also benefit from the mass litigation and hence can act as free-riders, this is doubtful. If the budget of the representative organization is not large enough to cover the costs of mass litigation, other sources of finance are needed. Besides private sponsors, the government could fund such claims. Keske, Renda and Van den Bergh provide the example of the German consumer associations which are almost entirely financed by the government. The authors do not regard this as a 'miracle solution' because government funding is also limited and because it makes the association vulnerable to capture by politicians, whose interests might depart from those of the represented parties.[158] Another possible way of financing mass litigation is allowing the representative organization to receive a part of the damages award, which resembles a system of contingency or conditional fees.

5.3 Evaluation of the current Dutch situation

Given the potential benefits of mass litigation which are described above, in my view it is good that Dutch law (article 3:305a Civil Code) allows mass litigation. It helps to overcome the rational apathy problem and avoids having a (costly) series of individual lawsuits on similar issues. Section 5 of this article contains an opt-out possibility,

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155 Hay and Rosenberg 2000, p. 1402ff; Silver 2003, p. 1409ff; Campos 2012, p. 780ff.

156 See Keske, Renda and Van den Bergh 2010, p. 68ff.

157 As mentioned in footnote 140 above, it lies beyond the scope of this lecture to fully discuss the advantages and disadvantages of contingency fees. For an overview of relevant literature, which also compares contingency fees with conditional fees, see e.g. Issacharoff and Miller 2009, p. 197ff; Faure, Fernhout and Philipsen 2010; Keske, Renda and Van den Bergh 2010, p. 73ff; Van den Bergh 2013, p. 20ff.

158 Keske, Renda and Van den Bergh 2010, p. 69. Also see Issacharoff and Miller 2009, p. 200ff and Van den Bergh 2013, p. 30ff.

which in the Law and Economics literature is preferred over an opt-in procedure. The possible principal-agent problems between the represented victims and representative organization are addressed by requiring that the representative organization has to be a foundation or association with full legal capacity that, according to its articles of association, has the objective to protect specific interests. In addition, such an organization is denied standing if the interests of the represented victims are insufficiently guaranteed by the claim. It might be desirable to limit standing even further, for example only to organizations which have already proven to be truly representative for their members. In cases of mass damage, many *ad hoc* organizations may be formed which claim to represent the interests of victims but where it is difficult or impossible for the victims to assess the quality of these organizations.[159] The requirements posed to representative organizations, however, should not result in such high barriers to entry that in fact a (near) monopoly of one representative organization results.[160]

An interesting and attractive feature of the Dutch situation is that the representative organization has no standing if it has not made a sufficient attempt to achieve the object of the action through consultations with the defendant. From an economic perspective, voluntary transactions are generally preferred over involuntary transactions. Parties themselves are assumed to know their own preferences best, so that the price that is reached in a voluntary transaction is preferred over the 'forced price' (i.e. damages) that a judge might set in a tort case. After all, in a voluntary solution both objective and subjective interests of the parties will be incorporated, because otherwise they would not have reached an agreement. In a forced solution such as a court decision, it is not certain that all interests are adequately included, because courts are not able to perfectly assess subjective elements.[161] It is therefore better to try to solve a conflict via negotiations than via litigation. However, high transaction costs might frustrate a voluntary transaction from being reached.[162] Because consultation with one representative organization entails lower

[159] Also see Tzankova and Kortmann 2010, p. 119.
[160] Van den Bergh 2008, p. 294 and Van den Bergh 2013, p. 30.
[161] See e.g. Landes and Posner 1987, p. 31: 'When the costs of voluntary market transactions are low, the property approach is economically preferable to the liability approach because the market is a more reliable register of values than the legal system.'
[162] See among many others Calabresi and Melamed 1972; Coleman and Krauss 1995; Kaplow and Shavell 1996b.

transaction costs than consultation with many individual victims, voluntary solutions become more feasible when representative actions are allowed. Hence, in accordance with economic principles, primacy lies with consultation.

This primacy of consultation is also desirable because it lowers the danger of blackmail settlements. After all, an organization which does not sufficiently attempt to achieve the object via consultation might be denied standing. It is not likely that in the case of a meritless claim, the organization can meet this criterion. The risk of frivolous suits is furthermore reduced by the requirement that the action should sufficiently guarantee the interests of the victims, as well as the fact that the losing party has to pay the litigation costs of the winner.

However, if the consultations fail and the representative organization and the defendant(s) do not reach a settlement, the representative organization cannot claim monetary compensation in collective litigation, due to the restriction of Section 3. Hence, there is no action for damages possible, which could act as a 'big stick', inducing unwilling defendants to settle. Even if a collective claim is initiated and results in a declaration that the tortfeasor(s) acted wrongfully, it will still take separate procedures to claim damages. Due to possible rational apathy of the individual victims and the other above-discussed problems, it is doubtful if such procedures would actually be initiated.

Even though current Dutch legislation does not allow mass damages litigation, it is certainly possible to deal with a case of mass losses collectively. If the parties reach a settlement agreement, they can jointly request this agreement to be declared binding for the entire group of potential claimants via a *Collective Settlement of Mass Claims*, in short the WCAM-procedure ('*Wet Collectieve Afwikkeling Massaschade*').[163] The representative organization and the defendant(s) jointly petition the Amsterdam Court of Appeal for approval of their settlement agreement. The court verifies that the organization is sufficiently representative of the interest of the victims and the court ensures notification of the settlement agreement to interested persons. Unknown parties must be informed through advertisement in the media. The court reviews the fairness of the proposed settlement

[163] Article 7:907-910 Civil Code and Articles 1013-1018 Code of Civil Procedure.

agreement, which is important because absent potential claimants are also bound by the agreement, if declared generally binding. In that case, interested parties must be notified that they can opt out from the settlement.

The WCAM has a clear economic advantage: the system costs are reduced because subsequent procedures are no longer required. The fact that damages are not determined exactly in all cases individually is no problem for the incentive function of tort law, as long as it is correct on average.[164] The opt-out option of the WCAM enables potential plaintiffs whose losses substantially exceed the agreed amount to start an individual claim after all, which avoids systematic under-compensation. As explained above, the Law and Economics literature generally holds that opt-out procedures are preferred over opt-in procedures because they result in more victims being included in the settlement. This feature of the WCAM hence can be evaluated positively when compared to the opt-in alternative. However, if many victims opt out, the cost-saving potential of mass actions could be jeopardized. The free-riding problem might consequently still exist in the WCAM, because victims can remain passive until it is fully clear what the WCAM-settlement yields them, after which they could decide to opt out. Given that empirical research suggest that opt-out rates in general are low, the problem might not be so severe, but one cannot rule out the possibility that especially victims with large losses would opt out. It remains to be seen to what extent victims who do opt out can use information from the collective settlement in their subsequent individual claim.[165] Furthermore, opting out is not without risk, because if the victim does not reach a better result in his individual claim, he cannot resort to the WCAM settlement.

A potential problem is that the WCAM-procedure requires a *joint* request from the representative organization and defendant(s), and unwilling defendants cannot be forced to do this. The Dutch situation hence still lacks a 'big stick' to induce unwilling defendants to

[164] Kaplow 1994; Kaplow and Shavell 1996a.

[165] For example in the DSB-WCAM, in the settlement agreement it is explicitly stated that this agreement is closed 'sans prejudice and without acknowledging liability' (p. 3 of the '*Akkoord op hoofdlijnen*'). Furthermore, in the WCAM petition itself in section 6.2 it is stated that parties are not asking the court to give its opinion on the issues on which they disagree, because they have chosen to end their dispute via a settlement. Section 6.4 explains that the fact that the parties have reached a settlement does not imply that they agree on all the factual and legal issues at stake and section 6.5 states that the compensation amounts in the settlement are reasonable when compared to the uncertainty that litigation entails.

cooperate. It is exactly this issue that forms one of the main reasons for the proposed draft bill.

5.4 Evaluation of the proposed draft bill from July 2014

The proposed draft bill does not merely strike the prohibition on collective damages litigation from article 3:305a. It introduces a procedure which is aiming at reaching a settlement, but it adds the possibility for the court to establish a scheme for collective redress of the mass damages claim based on damage-scheduling if no settlement is reached. The consultation document explains that the lack of a possibility of collective damages litigation was widely felt as a problem in the Netherlands, but also that there was widespread concern regarding the possible negative consequences of such a mechanism. The proposed draft bill tries to avoid the negative consequences (such as frivolous suits and blackmail settlements) and to protect the justified interests of injured parties and of defendants.[166] A full discussion of the draft bill lies beyond the scope of this inaugural lecture. In this Section I will focus on the issue of allowing mass damages litigation but I will not assess whether the proposed procedure is optimal from an economic point of view.

As said, in the proposed draft bill, primacy still lies with jointly settling the case. Several additional requirements as compared to the current situation are introduced. The representative organization has to show that it has adequate expertise in the area of the claim and that it can be assumed to represent the interests in a careful way. The group of persons represented has to be large enough to justify a collective damages action and these persons must not have other efficient and effective means to get compensation of their losses. The representative organization must have tried to solve the conflict via consultation with the defendant(s).

The court first has to assess whether all the requirements are met for the representative organization to have standing. In the second step, the court has to judge whether the defendant(s) is/are liable. If the court indeed finds the defendant(s) liable, he orders the parties to investigate whether a collective settlement can be reached. If this fails, in the third step the court hears the parties and tries to help them to reach a collective settlement. Legal issues can be discussed in this phase and mediation can be tried. If still no collective settlement

[166] Consultation document, p. 1 (www.internetconsultatie.nl/motiedijksma/document/1177).

is reached, in the fourth step the court orders the parties, at the request of (one of) them, to submit a proposal for a collective settlement. In this phase, mediation can again be tried. If mediation is not deemed useful or if a collective settlement still is not reached, in the fifth step the court itself may establish a scheme for collective redress of the claim. This scheme can be based on the proposals submitted by the parties in step four.

This fifth step is the crucial new step, namely that the court decides upon a collective resolution of the losses. This is the 'big stick' that should solve the current problem that unwilling defendants cannot be induced to settle and that mass damages litigation is not possible. If a collective settlement is reached, a victim is only bound by it (i) after accepting it (so opting in) or (ii) after the settlement is declared generally binding in a WCAM-procedure and the victim did not opt out. If a collective settlement is *not* reached and the court itself has to establish a scheme for collective redress, the court may order victims to opt in before the scheme indeed is established. If too few victims opt in, the court may decide not to establish a scheme after all.

In my view the proposed draft bill is an improvement of the Dutch situation. The problem of a lack of a credible threat of litigation, the 'big stick', is addressed because if no collective settlement is reached, the court may establish a scheme for collective redress itself. Unwilling defendants therefore can no longer avoid a collective resolution by not settling.

The risk of blackmail settlements is limited, because the whole procedure is aimed at reaching a collective settlement. In all phases, if the party who requests the procedure to proceed to the next phase did not try enough to reach a collective settlement, the request is denied. I therefore do not share the fear of Van Duin and Lawant that the proposed procedure would induce blackmail settlements to avoid a long procedure.[167] The representative organization cannot threaten to force the procedure to proceed all the way to the collective scheme because if it does not try enough to reach a collective settlement, the procedure stops. Of course, it cannot be ruled out that a defendant prefers a settlement over being involved in a mass procedure after all, even if the claim is weak, but the fact that representative organizations have to try to reach a collective settlement limits this risk.

[167] Van Duin and Lawant 2015, p. 10.

Denying standing for organizations which are not representative, do not have the necessary expertise, or which do not adequately serve the interests of the victims, also combats frivolous suits.[168] The fact that these issues are dealt with before the court judges on liability in my view is a good choice, because potential defendants do not have to feel threatened by such organizations. The 'loser pays' principle may also avoid frivolous litigation, although in the Netherlands this only regards a part of the true costs.

Before establishing a scheme for collective redress, the court may require parties to call upon victims to opt in. If the court decides not to give a resolution in case too few victims opt in, the defendant still might face no liability. Due to rational apathy, there is a non-negligible possibility that indeed only few victims opt in and this could result in a situation where the collective damages actions fails after all. In my view this is a problematic aspect in the proposed procedure, and uncooperative defendants could try to make use of this. Whether in practice this indeed happens, crucially depends on how the court applies this option. In any case, this potential problem of rational apathy seems smaller than in the current situation where mass damages litigation is not possible in the first place. After all, the costs of starting an individual claim are likely to outweigh the costs of opting-in to a proposed scheme for collective redress.

After a scheme for collective redress has been established, people on whose behalf this is done, have to opt in to be bound by it. So this is an opt-in after the result of the procedure is known. In the literature, the fear is expressed that this feature may frustrate reaching a settlement, because victims might simply wait for the outcome of the procedure before deciding whether they want to be bound by it, which makes it difficult for the defendant to assess the financial consequences of a settlement. Several authors therefore prefer an opt-in in an early stage of the procedure.[169] Again, from an economic perspective an opt-in is evaluated critically due to the risk of rational apathy. An opt-out procedure is preferred.

The proposal clearly entails a very active role for the court. It has to evaluate if the representative organization really serves the interests of the victims and not primarily of the organization itself, it has to

[168] Whether the proposed criteria are clear enough and form a stricter test than in the current situation is a matter that is being debated. See e.g. Stapel and Thuijs 2015, p. 188.

[169] Van Duin and Lawant 2015, p. 14; Stapel and Thuijs 2015, p. 189. Arons and Koster 2014 are more critical regarding the opt-in.

avoid blackmail settlements, it has to induce parties to reach a settlement and ultimately it might have to establish a scheme for collective redress of the claim. This opens the question of whether society might expect too much from judges in handling mass cases. Insights from rational choice theory and from behavioral economics suggest that this indeed is a realistic risk. I will not spend more attention on that issue in this lecture, precisely because Alexandre Biard has written his PhD thesis in the *European Doctorate in Law and Economics* on this topic.[170]

Whether or not the proposal sketches an economically optimal procedure is a matter for further research. For example the abovementioned possibility of the court to require an opt-in before ruling itself might be problematic due to rational apathy or free-riding victims. In addition it is possible that the proposal introduces too many procedural steps before the judge will rule himself, making mass damages litigation more costly than necessary.[171] Various responses in the public consultation show that interested parties still fear either blackmail settlements or rational apathy, or question whether the proposed procedure is feasible for the courts.[172] Hence, subsequent research and debate should provide more insight into the question whether the proposed procedure is a good way to deal with mass damages. However, in my view it *is* clear that the proposal is an improvement as compared to the current situation where mass damages litigation is not possible in the first place.

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[170] Biard 2014. Also see Van Duin and Lawant 2015, p. 12.

[171] Up to 55 procedural steps might have to be taken before the court establishes a scheme for collective redress. See Van Duin and Lawant 2015, p. 10, who refer to the response of the *Raad van de Rechtspraak*.

[172] See e.g. the responses of the *Raad voor de Rechtspraak*, *VNO-NCW* en *MKB-Nederland*, the *Nederlandse Orde van Advocaten* and the *Consumentenbond* on www.internetconsultatie.nl/motiedijksma/reacties.

6 Words of thanks and closing

After having discussed debated damages for over 40 minutes by now, I want to conclude with some words of thanks. I would like to thank the Board of the University, the Vereniging Trustfonds of the Erasmus University and the Erasmus School of Law for the trust they have placed in me. I am thankful for the support I have received in this respect from the former dean professor Maarten Kroeze, the current dean professor Suzan Stoter, vice-dean professor Fabian Amtenbrink and all the other people involved in my appointment. I thank the Beadle's Office for all the practical support they have given me in preparing for today.

Support is also something I experience on a daily basis in the Rotterdam Institute of Law and Economics, the RILE. In order to avoid embarrassing or disappointing people, I will refrain from mentioning individuals by name, but I hope you all know that I am happy to be your colleague, and that I appreciate all the support you give, both professionally and personally.

I also want to thank my colleagues from the Erasmus University and from other universities in general, and colleagues from the research programme Behavioral Approaches to Contract and Tort specifically for the stimulating environment they provide. I want to thank Willem van Boom and Michael Faure for supporting my appointment in their capacity as programme directors of the research programme.

I thank my promoters, Roger Van den Bergh and Heico Kerkmeester, for the guidance they gave me during my many, many years as a PhD candidate, and for not abandoning all hope. The way in which you have supervised me inspires me in my own supervision of PhD candidates and if they appreciate my work, they should also thank you.

Then the students, Dutch and international, on a bachelor, master and PhD-level. Teaching and supervising you is a great pleasure, and I learn a lot from you all. It is because of you that I often realize why I like this job so much! The students of the *mr.drs.-programma voor economie en rechten* deserve a special mention. I have been coordinating this programme since it started many years ago, and I am proud to see how successful you, the students, have made this programme. I am moved to see graduated students, from the mr.drs.-programma, the European Master in Law and Economics (EMLE) and the European Doctorate in Law and Economics (EDLE)

in the audience. You have travelled long distances to be here with me today and I appreciate that a lot.

Then my friends. It is great that there are friends here who I have known since Kindergarten days, but also friends who I only met in high school, university, or even later. It is sometimes said that one gets to know a person by looking at his friends. Looking back at you from this position, I can only say that I like what I see and I am glad that you share this important day with me! I will not mention individuals here either, but I do want to thank everyone with whom I have played in various bands for the many hours of fun.

I am happy that my family is here today. I am especially very glad that my father and stepmother were able to make the long journey to Rotterdam, because this day would not have been complete without your presence. For the rest of my family, stepfamily and family in law, I also refrain from mentioning people by name, because I am happy with the presence of you all. However, I do want to briefly spend attention to the family members who are no longer here. I think about my mother, my brother Abel, my stepsister Marieke and my stepniece Nienke. Four people who died much too young, and four examples that make clear that no amount of money can truly compensate the loss of a loved one. But that does not imply that we as legal scholars could not and should not think about how to deal with such difficult losses. I hope my work contributes a little to this end.

Then my children, Jeroen, Emma and Floortje. Thank you for behaving so well during this long and boring story (with a little help from tablet and smartphones). Thank you for the way in which you show me every day again what is really important in life. Thank you for providing the many examples which I can base upon you in my lectures. I cannot tell you how much I enjoy talking about you at work!

And finally Hanneke. I want to thank you for your presence here today and for your presence in my life in the past 22 years. All other things I want to say to you can wait for another time and another place.

After these words of thanks, I have to deliver upon the promise I made at the start of the lecture. I argued then that my lecture did not entail 'tragic choices', but that it does involve scarce economic resources, more specifically the time you have spent on listening to me. A while ago I wrote a paper on the question whether 'loss of time' should be included in tort damages.[173] I have argued there that it indeed should be included and that one could assess the average non-

pecuniary value of lost time at about €2.60 per hour. Given that I have taken up your time for over 45 minutes by now, I owe you damages of €2.00 per person. As a collective settlement, I propose to pay this compensation in the form of drinks, in the hall outside.

Ik heb gezegd.

[173] Visscher 2014.

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