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TILEC Discussion Paper

Compensation is not just about money

and

neither should its economic assessment be

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Abstract

Financial compensation awarded in tort cases is meant to make a victim whole again. It, however, is rather complicated to assess the amount of compensation that actually accomplishes this goal. According to renowned economists, one should determine court compensation by identifying how much first-party insurance people would have bought voluntarily in order to compensate similar losses. This 'theory of insurance' is the subject of this paper. In the first part I shall expound the theory itself and in the second part I shall demonstrate how it falls short because of its focus on outcomes. I do so by showing how a court *process* affects an individuals well-being just like a court *outcome* does. Finally, I will show how 'procedural utility' interacts with the amount of compensation needed to make a victim whole again, and how it, therefore, seems no longer accurate to disregard this type of utility when it comes to determining court compensation.

Introduction

'Lotto rapist' Iorworth Hoare had no money when he was jailed for life in 1989 for the attempted rape of Mrs A (who cannot be named for legal reasons). But during day release from prison, shortly before being freed on parole in 2004, he won 7 million UK pounds after buying a lotto ticket. At the time of Hoare's imprisonment, Mrs A had not sued for damages because she had been told Hoare's lack of funds would have made it worthless (Reuters, 2007). However, now Hoare is a free man and a millionaire, she tries yet to get compensation for psychiatric injury; the attempted rape damaged her self-esteem and ruined her life, she says (BBC, 2007).[1]

Imagine Mrs A succeeds and Hoare is made to pay damages, will Mrs A then be returned as closely as possible to her condition before the attempted rape, or made 'whole again', as compensatory damages are intended to do (King, 2004, p. 165)? More general, is it possible to compensate non-economic losses, like Mrs A's psychiatric injury, through monetary transfers, as it is possible to compensate economic losses? After all, whereas economic losses are incurred by the loss of money and of goods for which substitutes can be bought (Shavell, 2003, ch. 4, p. 12), there are no market substitutes available for 'pain and suffering': physiological pain, mental anguish, distress, loss of enjoyment of life, and non-economic effects of disfigurement (King, 2004, p. 164).[2] So how could the appropriate level of financial compensation be determined?

In this article, I shall describe the economic perspective on the above formulated questions. Prominent in the economic theory concerning compensation is the presumed link between tort law and first-party insurance markets. Reasonably, this link is based on the assumption that tort law and first-party insurance markets act as alternative solutions to the problem of allocating accident costs (Calabresi, 1970). Put differently; both systems, tort law and first-party insurance, are means to the same end: financial compensation of incurred losses. Consequently, data on first-party insurance purchases could be used to ascertain appropriate levels of compensation in court. Moreover,

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[1] At first, a legal limit of six years made impossible for Mrs A to claim compensation. Recently, however, the Law Lords (the highest legal court in the United Kingdom) ruled that such a limit is unfair and that Mrs A has the right to claim compensation (Guardian Unlimited, 2008).

[2] As Cook & Graham (1977, p. 144) explain; there are no markets for continuing sources of utility, such as good health, the life of a friend, or freedom of speech. Although an individual may be able to assess the monetary value of such "assets" (and may indeed be faced with decisions that in effect require such assessments), his personal valuation is not tied to any market price.

according to renowned economists, identifying the amount of first-party insurance that would have been bought voluntarily (on an actuarially fair basis) in a world without tort laws, is the only appropriate method to assess how much a victim should be compensated in court (Viscusi, 2000, p. 121; Shavell, 2003, ch. 5, p. 2-3). This line of reasoning is what I call 'the theory of insurance', and shall be explained in more detail in the remainder of this paper.

The conclusions drawn from insurance theory are quite straightforward. The theory shows, for instance, how people only wish to buy insurance against economic losses (Cook & Graham, 1977). Therefore, according to insurance theory, the only losses that should be awarded compensation in court are those of the economic kind. In other words, no compensation should be granted for pain and suffering. Hence, whether or not there exists an amount of financial compensation that could make Mrs A, or other victims who incurred non-economic losses, whole again, on insurance grounds it is only optimal to award zero compensation. As a result, lotto-rapist Hoare should not be forced to turn over (some of) his money to Mrs A, not now nor twenty years ago.

While insurance theory shows clearly how people only wish to buy insurance against economic losses, scholars still disagree about the actual interest of consumers for first-party insurance against pain and suffering. According to some it is due to market failure that there exists no such insurance. The insurance theory itself, however, as a method for determining court compensation, has never been, to my best of knowledge, contested. In my opinion this is rather surprising, since the process of a court procedure differs significantly from that of an insurance payment. Where tort law offers plaintiffs the possibility to tell their story, to ask questions, get acknowledgement and not in the least to hold someone responsible for their losses, insurance payment entails not much more than filling in some forms. And as extensive research has shown how, irrespective of instrumental outcomes, different processes affect an individuals well-being differently, (Frey, Benz & Stutzer, 2004), it seems inaccurate to not take 'procedural utility' into account when determining court compensation. The insurance theory, however, does not do so.

The aim of this paper is to expound insurance theory as a determinant for court compensation and to explain how it falls short as a result of its focus on outcomes. The

paper, therefore, is structured as follows; first of all I shall explain how in economics an individual's well-being is expressed in terms of utility and how utility can be used to assess the amount of compensation that is needed to make a victim whole again. I thereby distinguish economic losses from non-economic losses, as their respective effects on utility differ. Next I shall explain what kind of role insurance theory plays in determining court compensation and what this theory entails. After this I will show how a tort *process* affects an individuals utility just like a tort *outcome* does. Finally, I will show how procedural utility affects the amount of compensation needed to make a victim whole again, and how it, therefore, seems no longer accurate to disregarded this type of utility when it comes to determining court compensation.

As I am aware of the fact that many different terms are used to distinguish categories of losses,[3] I would like to stress that the term 'economic losses' is used in the remainder of this paper to indicate material losses for which replacements can be bought, while the terms 'non-economic losses' and 'pain and suffering' are used to reflect emotional losses.

1. Making whole

Victims of tortuous acts can claim compensation for their losses through tort (civil) law procedures.[4] Such compensatory damages are intended to "return the plaintiff as closely as possible to his or her condition before the wrongful act" and "make the plaintiff whole" (King, 2004, p. 165). Surprisingly enough, legal instructions provide very little guidance to ascertain the award of damages that could make a victim 'whole' (Vicusi & Born, 2005, p. 25; Viscusi, 2003, p. 2). Jurors in the United States, for example, are instructed "that the object of an award of damages is to place the plaintiff, as far as money can do, in the situation he would have occupied if the wrong had not been committed" (Douthwaite, 1988, p.3, as cited by Shuman, 1994). But how can a victim be

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[3] Many different terms are used to represent damages, for example: economic-damages, loss, compensation, award, deterrence value, value of life, hedonic damages, pecuniary damages, and monetary damages (Schieren, 1998, p. 37-8). Although they are often used as synonyms, I would like to stress that these terms *can* represent different concepts (e.g. Sunstein, 2007).

[4] In some countries it is possible for victims of crime to claim compensation during the criminal trial. When the compensation awarded in these criminal cases is also meant to make a victim whole again, my analysis is applicable to such criminal cases as well. However, often only victims with simple claims can claim compensation in a criminal court. More complex claims are then still to be referred to a civil court.

put in such a situation after the accident? Renowned economic scholars have tried to answer this question and in the following section I shall purport their analysis.
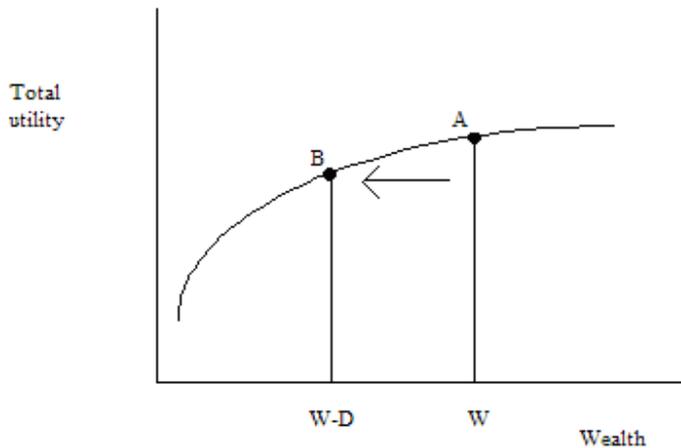
1.1. Compensating utility

In economics the concept of utility is used to analyse the well-being of individuals. In general, utility is understood as pleasure and pain, positive and negative affect or life satisfaction (Frey, Benz & Stutzer, 2004, p. 379). In other words, utility indicates how well-off an individual is. Utility is denoted by U and the utility of individual i, by U_i. Given that the amount of utility individual i perceives depends on his wealth (W), i's utility is expressed by $U_i(W)$. The more wealth i becomes, the more satisfied he will be. So an increase of wealth (W), for instance when i gets promoted, will raise utility (U_i) consequently, as shown in Figure 1.

Figure 1: utility curve
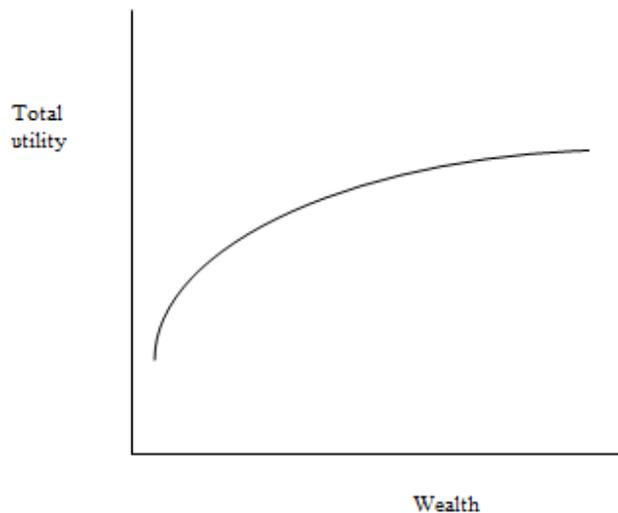
Now imagine person i's car becomes damaged in a traffic accident. The costs of repair (D) will decrease his wealth (W) to an amount that equals W-D. Consequently, i's utility will change from $U_i(W)$ in situation A (before the accident), to $U_i(W-D)$ in situation B (after the accident), as graphically shown in Figure 2.

Figure 2: Economic losses (D) cause a downward shift on the utility curve

To return individual i as closely as possible to his situation before the accident, his utility in situation B needs to be increased to the initial level of $U_i(W)$. How could this be accomplished? Is there an amount of compensation (C) that equals i's utility level after the incident with his pre-incident level, so that:

$$U_i(W) = U_i(W-D+C)$$

Yes, there is such an amount: when compensation C equals i's incurred losses D, than i would be returned from point B to A. Hence, when compensation is set equal to the cost of i's car restoration, i will be made whole again. This conclusion is illustrative for all types of economic losses; full compensation of incurred damages, valued by the cost of repair or replacement, will bring victim i back to his initial level of utility (Cook & Graham, 1977).

More complicated is the situation in which person i incurs non-economic losses. First of all, the utility function $U_i(W)$ has to be extended with a factor that symbolises i's emotional state (E). After all, non-economic losses are not a matter of wealth, but of emotions. The utility function, therefore, becomes: $U_i(W, E)$.

Improvement of individual i's emotional state (E) raises utility, just like an increase in wealth (W) does. However, emotional transitions do not cause i's position to

shift on the utility curve, as we saw wealth changes do; emotional changes effect the position of the utility curve it-self (Cook & Graham, 1977). For instance, when person i falls in love, his emotional state betters considerably and consequently, his utility curve shifts upwards, from U_0 to U_1 (as shown graphically in Figure 3). After all, when i falls in love, he sees life differently throughout: he is so happy that everything becomes more valuable. An upward shift of the utility curve reflects this alteration in i's view on life. In case of non-economic damages the opposite occurs; i's utility curve drops to a lower level, from U_0 to $U_{1'}$, implying that individual i is, all things considered, less well off than before (Cooter, 1989; Geistfeld, 1995). A person who suffered in such a way may well be rape victim Mrs A, whose case I described in the introduction. Mrs A claims her life is ruined after the attack of Iorworth Hoare (BBC, 2007), and since Mrs A does not claim any economic damages, it seems reasonable to assume that the incident shifted Mrs A's utility curve downwards, as shown in Figure 3, causing everything in her life to be less valuable than before.

Figure 3: Utility curve moves vertically with an increase/decrease of ones emotional state
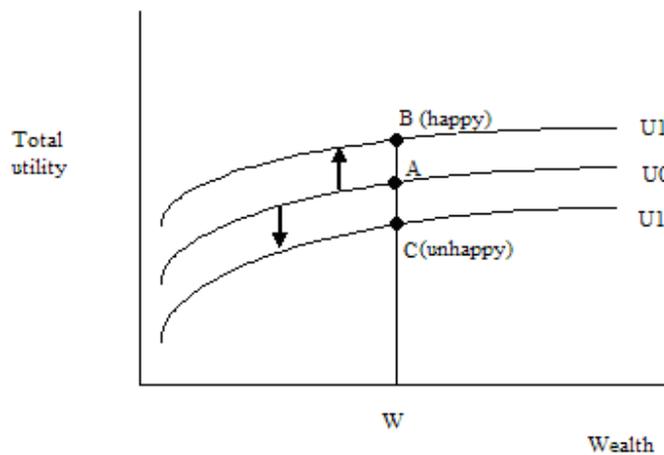
As this article focuses on the compensation of incurred *losses*, we will concentrate on the situation where i's emotional state deteriorates after an particular incident and not on those where his emotional state improves. We denote individual i's emotional state after experiencing pain and suffering by E', and his utility level, consequently, by $U_i(W, E')$. The utility loss incurred due to the pain and suffering is equal to the difference between

his utility for the incident, $U_i(W, E)$, and that after the incident, $U_i(W, E')$. To return individual i as closely as possible to his situation before the incident, this difference in utility needs to be compensated, so that:

$$U_i(W, E) = U_i(W+C, E')$$

But is there an amount of compensation C that could make individual i whole again, like there was in the example of the traffic accident? In other words, could *financial* compensation offset an *emotional* loss? If so, how could we determine the appropriate amount? After all, contrary to the loss of economic commodities, it is not possible to buy a new item or to hire someone to repair the non-economic damage. Hence, compensation cannot be assessed with the use of market prices.

Several methods are suggested to overcome this lack of data.[5] But according to renowned economists there is only one appropriate method to assess court compensation: identifying the amount of first-party insurance that would have been bought voluntarily (on an actuarially fair basis) in a world without tort laws (Viscusi, 2000, p. 121; Shavell, 2003, ch. 5, p. 9). I shall explain this approach in the next paragraph.

2. *Theory of insurance*

In order to assess the amount of compensation that should be awarded in court, many economists have used the thought experiment of how much insurance coverage a victim

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[5] To overcome the lack of market data, it has been suggested to simply ask victims how much financial compensation they would need in order to overcome their loss. Unfortunately, extensive research has shown how such 'stated preferences' lead to unreliable conclusions; people tend to exaggerate their loss (rent seeking) on the one hand and to give socially acceptable answers on the other (e.g. Diamond & Hausman, 1994; Hammitt and Graham, 1999, show how people are insensitive to changes in risk). An approach that does not lead to the desired estimates either, is the one used by some courts in the United States, namely extracting value of life numbers (Viscusi, 2000a). The value of life can be constructed by examining how much individuals are willing to pay to avoid a certain risk (WTP) or how much compensation they need to accept a certain risk (WTA). The idea is simple; suppose that a worker is willing to accept an additional annual fatality risk on the job of one chance in 10,000 in return for an extra $500 in compensation. The estimated value of life is the amount of this compensation divided by the probability, in this case $500 divided by 1/10,000, which yields a result that the value of life is $5 million (Viscusi, 2000). Noteworthy is that all that this number indicates is that people are willing to trade off small risks of death against money. What it does not imply is that people are willing to trade their life for $5 million nor that victims who state that they enjoy life after the incident only half as much as before, should be awarded $2.5 million. Like Viscusi (2000, p. 115-6) states: the value-of-life estimates are not a retrospective measure of compensation.

would have chosen to provide *after* the accident, if offered the opportunity to buy such insurance on an actuarially fair basis *before* the accident (Viscusi, 2003, p. 2-3).[6] In this section we shall do the same; but first I will explain more about buying insurance.

When individual i decides to buy an actuarially fair first-party insurance policy, i chooses to incur a certain but relatively small loss now (the cost of the insurance premium) in order to avoid an uncertain but relatively substantial loss in the future (the full cost of an incident). Yet, individual i will only choose to buy such a policy when he will value an extra dollar more in the post-accident situation than he does in the pre-accident situation (Shavell, 2003, ch. 5, p. 9-10). Let us explain. Figures 1-3 showed us the utility curve: unmistakeably this curve is not a straight line but a concave one. This particular characteristic of the utility curve indicates how, although utility increases as wealth grows, there is a point from where individual i values every extra dollar less than the dollars he already possesses. Put differently; the value of an extra dollar decreases as wealth increases. This phenomenon is what economists call 'decreasing marginal utility of wealth': the marginal utility of a dollar, symbolized by $mU_i(W)$, decreases as wealth increases. As said, by buying insurance individual i shifts money from the pre-accident state A to the post-accident state B, clearly i will only do so when he values an extra dollar more in B than he does in A. How this works out for the compensation of economic and non-economic losses respectively will be explained in the upcoming sections.

2.1.   Economic damages

Imagine again that individual i's car becomes damaged in a traffic accident. As shown in Figure 4, i's wealth and thus his utility will be reduced because of the economic losses he incurs. Knowing this in the ex ante situation, will i choose to buy insurance to compensate his losses?

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[6] In actuarially fair markets, premiums are equal to expected benefit payments. This could only occur if insurance was costless to administer, losses were statistically independent, there was no moral hazard or adverse selection, and if insurance markets were perfectly competitive. The reason for assuming actuarially fair markets is explained by Frech (1994, p. 263): the assumption of insurance on an actually fair basis is made to rule out moral hazard and adverse selection; by doing so the focus lies on risk spreading and consequently, the condition for efficient insurance is that the marginal utility of wealth with and without an accident are equal.

Figure 4: optimal level of insurance and compensation in case of economic losses
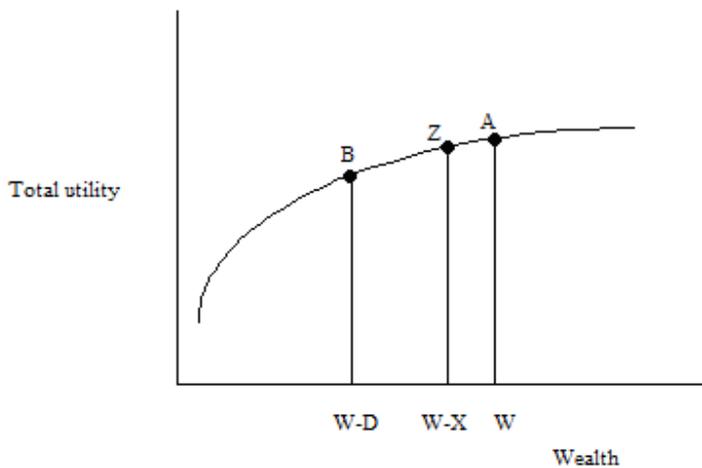

Due to the traffic accident, individual i will move from pre-accident state A to post-accident state B on the utility curve, as his utility drops from $U_i(W)$ to $U_i(W-D)$. As explained, marginal utility of wealth is higher in B than it is in A: $mU_i(W) < mU_i(W-D)$. Assuming i can oversee this wealth impacting effect upfront, i knows he will value an extra dollar more in point B than he does in A, and therefore he will prefer to shift money from the pre-accident state to the post-accident state, up till the point where marginal utility of money in both states are equalized (Arrow, 1971). As explained, by buying an insurance policy he can do so. The optimal level of insurance will be the amount that equates the marginal utility of income after the accident with the marginal utility of wealth before the accident (Viscusi, 1996, p. 148). If insurance were free the result would be a return for individual i to level A. However, insurance is costly, and assuming it is actuarially fair, i will have to pay an insurance premium that equals the expected benefits times the chance on incurring the corresponding losses. This insurance premium is denoted by X. Due to X, i's initial level of wealth drops from W to W-X. Irrespective of whether an accident occurs, i will experience this income level W-X and the associated utility level, $U_i(W-X)$ (Viscusi, 1996, p. 148). After all, i will choose to buy 'full insurance' in order to equalize marginal utility before and after the accident. All and all, one could say that buying insurance leads to a *state of indifference,* as represented by point Z in Figure 4.

So the question whether i will choose to buy insurance, we can answer positively. And as *full insurance* is the amount of insurance that individual i would buy voluntarily (on an actuarially fair basis), we can conclude that *full compensation* is the appropriate amount to award in court in case of economic losses. After all, the theory of insurance tell us that compensation awarded in court should equal the amount of insurance bought voluntarily. So in case of economic losses the amount of compensation (C) should equal that of incurred losses D (C=D) (Viscusi, 2005, p. 2-3). As we saw in the previous section, this level of compensation will make i whole again as well.

2.2.   Non-economic damages

Now imagine again the example in which individual i incurs emotional losses. Would i buy full insurance against these losses as well? As explained earlier, when i incurs non-economic losses, he will not shift to another position on his utility curve, but his utility curve itself will shift downwards (as shown in Figure 5). How does this affect his demand for insurance?

Figure 5: Optimal insurance level and compensation in case of non-economic losses
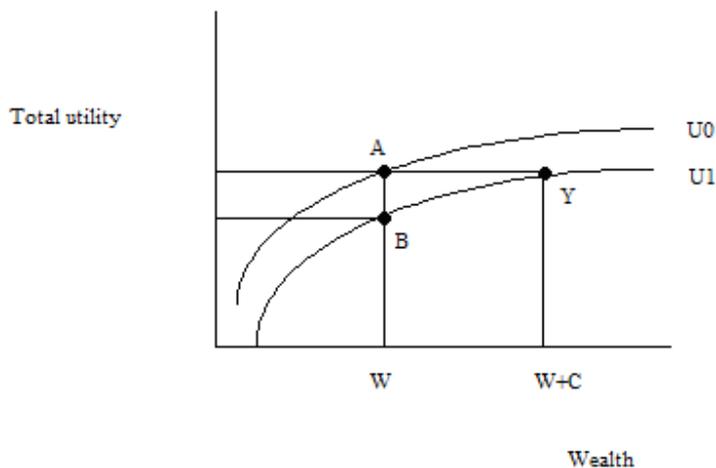
Well, as we can see in Figure 5, i's utility level at post-accident point B is lower than it is at pre-accident point A, as $U_i(W, E) > U_i(W, E')$, implying that i is worse of after the accident than he was before. However, the marginal utility of money is the same in both states of the world ($mU_i(W, E) = mU_i(W, E')$). Consequently, there is no incentive for i to

shift dollars from the pre-accident state to the post-accident and thus no motive to buy insurance. Moreover, one could pose that an uninsured person facing pain and suffering is already optimally insured (because marginal utility of wealth is the same whether or not the loss occurs) (Calfee & Rubin, 1992, p. 375). As a result, the level of insurance that an individual would buy voluntarily in case of non-economic damages is zero. Hence, according to insurance theory, the level of compensation awarded in court should equal zero as well.

Yet, as can be seen in Figure 5, there does exists an amount of compensation that would bring individual i back to his pre-accident level of utility; namely the amount that shifts i from point B on U_1 to Y on U_1. By awarding C, i could be made 'whole again', as $U_i(W, E) = U_i(W+C,E')$. However, "the goal of full compensation to victims of violent crime or accidents that result in injury or death is not compatible with economic efficiency" (Cook & Graham, 1977, p. 151), as it leads to excessive *overinsurance*. After all, insurance theory shows how individuals wish to buy no insurance at all and awarding them any compensation would thus lead to 'overinsurance'. So, although there is an amount that could make a victim whole again, it is stated that courts should not compensate pain and suffering at all (Viscusi, 2008, p. 9-10).

2.3.   *Discussion on actual effects of pain and suffering on the value of money*

Based on insurance theory one could conclude there exist optimal levels of compensation, namely full compensation in case of economic losses and no compensation at all for non-economic losses. Yet, among scholars there is still a lively debate on the actual demand for non-economic insurance and thus on the levels of compensation that should be awarded in court. Some say, for instance, that pain and suffering has no effect on the marginal utility of wealth, in line with the theory expounded earlier. Others say non-economic damages have a positive effect; an often cited example is that of an individual who is crippled by an accident and who might need money more, even after being compensated for medical expenses and forgone income, because of a need to obtain household help, special transportation services, and the like (Shavell, 2003, ch. 5, p. 9). Unfortunately, this example does not support the hypothesis that pain and suffering increases the need for money since the types of consumption items

mentioned are generally included as part of rehabilitation package, and they need not be considered under the pain and suffering component of an award (Viscusi, 1993, p. 179). There is also a group of scholars who claim that pain and suffering has a negative effect on the need for money (e.g. Friedman, 1982). Death, for instance, reduces utility drastically, without heirs even to zero (Schwartz, 1988, p. 364; Arlen, 2000; Shavell, 2003, ch. 5, p. 9). However, as Viscusi (1993, p. 179) points out: one cannot generalize to all nonfatal injuries such as disabilities and conclude that the marginal utility of income has been diminished.

The lack of theoretical consensus makes it interesting to perceive the effects of pain and suffering on the value of money empirically. Up till now only a few studies have done so. Unfortunately, their conclusions are antipodal as well. The renowned article of Viscusi & Evans (1991), for instance, suggests that serious on-the-job injuries may reduce the victim's marginal utility of wealth, which favors the hypothesis that consumers do not wish to buy insurance.[7] Other studies, however, show how consumers do prefer insurance for certain kinds of pain and suffering injuries (Calfee & Winston, 1993; Avraham, 2005), implying that non-economic losses do increase the need for money. In fact, some forms of insurance that cover pain and suffering are actually sold (Croley & Hanson, 1994).

All and all, we can conclude that there is no solid and conclusive proof for the effects of non-economic losses on wealth, neither theoretical nor empirically. But one thing is undisputed, namely: people almost never buy insurance against pain and suffering (although the explanations for the non-existence of a market for pain and suffering insurance differ considerably).[8] This empirical fact is for most scholars reason

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[7] Moreover, the study of Viscusi & Evans provides evidence for the hypothesis of Friedman (1982) that pain and suffering decreases the marginal utility of money and that, therefore, it would be better to compensate victims ex ante (see Friedman, 1982 for more information).

[8] According to several scholars, people would be willing to buy insurance (See for example; Croley & Hanson, 1995, Avraham, 2003, 2005 & 2006 and Pryor, 1993) but is it impossible to do so because of market failure. Moral hazard, for example, would keep insurance companies from selling non-economic insurance (Croley & Hanson, 1995, p. 1848-51). Two other often mentioned constraints are; 1) consumers wouldn't be competent to assess the risks they run and their possible consequences (Avraham, 2005, p. 955; Pryor, 1993) and 2) strong social norms would prohibit the assignment of a monetary value to items not normally traded in the marketplace (Croley & Hanson, 1995, p. 1851-3). Although these constraints may seem valid, they do not explain the fact why people do buy insurance against economic loss but (almost) never against non-economic harm. After all, moral hazard and information problems are also present in the assessment of economic risks, and how can it be that social norms prohibit consumers to buy

to stick to the theory that "people prefer not to insure against 'mental' losses, because they almost never do insure against them" (Schwartz, 1988, p. 365). The general consensus, therefore, seems to be that pain and suffering should not be compensated in court because it leads to (excessive) overinsurance (e.g. Arlen, 2000; Shavell, 2003; Kaplow & Shavell, 2002; Viscusi, 2008; Viscusi, 2000 and Viscusi, 1996).[9]

3. But is insurance theory actually an appropriate method to assess court compensation?

Since tort law and first-party insurance both are means to financial compensation, one could state that insurance theory is an appropriate instrument to determine court compensation, as renowned economists have done. However, extensive literature from other social sciences seems to show how insurance theory is too limited to encompass all the beneficial features of tort compensation. Therefore, one could question whether insurance theory is actually an appropriate method to assess court compensation, let alone making someone whole again. I shall explain this line of reasoning in more detail in the upcoming section.

3.1. Plaintiffs' goals when going to court

Research has shown how people do not only go to court for economic reasons but just as well for non-economic ones. An overview of studies on litigants' goals and experiences, for instance, shows how "litigants are propelled into litigation as a result of not only material but also psychological and emotional needs to alleviate the effects of distressing experiences" (Relis, 2006, p. 193; see Huver et al., 2007 for similar conclusions). Non-economic needs even seem to be the cardinal goals of litigants in tort, divorce, injury and small claims cases (Relis, 2007, p. 19-20). A striking example is a recent study with the pronounced title "it is not about the money", which shows how plaintiffs in medical malpractice cases, when asked about their motives, fail to mention financial compensation as an objective at all, unless probed. Instead, plaintiffs recurrently repeat a

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insurance against pain and suffering but not to sue for compensation in court?
[9] From an insurance perspective it is only reasonable to awarding compensation for pain and suffering on grounds of deterrence. In that case, however, awarded compensation should be paid to the state, since payment to the victim will lead to (excessive) overinsurance (Kaplow & Shavell, 2002, p. 8).

lexicon of non-fiscal, extra-legal objectives for their litigation, for example: dignity and respect after the injury, inability to be heard otherwise, refusal to listen, dismissal and victim blaming (Relis, 2007, p.21). These findings are in line with those of other studies; prevention of similar occurrences, acknowledgement, admission that something had gone wrong and answers, are very important objectives for litigants. Compensation, on the other hand, seems one of the less important goals (Relis, 2007, p. 21-3).

Therefore, we can conclude that tort law entails more than just a means to financial compensation. Yet, the sole fact that litigants might have other goals besides financial compensation does not imply that insurance theory is not an appropriate method to determine such compensation. But what if the demand for financial compensation and that for non-economic needs are closely related?

3.2. *Procedural utility*

The renowned works on procedural fairness of Thibaut & Walker and Lind & Tyler, and others following in their tradition, show how plaintiffs do not only care about the outcome of a trial but also care deeply about the process by which conflicts get resolved and decisions get made, even when outcomes are unfavourable or the process they desire is slow or costly (MacCoun, 2005). In other words: plaintiffs do not only care about the outcome of a procedure, they also care about the procedures through outcomes are generated. Nobel laureate Amartya Sen (1995, 1997) was the first economist to acknowledge the beneficial effects of processes. Following in his footsteps, Frey et al. (2004) 'translated' the concept of procedural fairness into 'procedural utility'. The term procedural utility implies that people value certain procedures for obtaining outcomes more than other procedures (Frey et al., 2004). But why would people prefer one procedure over the other while they both lead to the same outcome? According to Frey et al. (2004, p. 380) "procedural utility emerges because people have a 'sense of self'", in other words: procedural utility exists because people care about how they perceive themselves as human beings and how they are perceived by others. Important information about the self is provided by procedures. Specifically, they address innate psychological needs of self-determination (Frey et al., 2004, p. 380). Three such needs are proven to be essential: autonomy, relatedness, and competence. The need for autonomy encompasses

the desire to self-organize one's own actions. The need for relatedness refers to the desire to feel connected to others in love and care, and to be treated as a respected group member within social groups. The third need, that for competence, reflects the propensity to control the environment and to see oneself as capable and effective (Frey et al. 2004, p. 380). Different procedures can be expected to support these three needs differently; procedures therefore contribute to individual well-being irrespective of instrumental outcomes (Frey et al., 2004, p. 381).

3.3.   How does procedural utility apply to compensation of losses?

Could it be that a tort law procedure contributes more to an individuals well-being than insurance payment, or the other way around? Unmistakably, the procedure of a tort case deviates from that of a first-party insurance payment. But will these different procedures affect the utility that victims derive from financial compensation? Since plaintiffs in a tort case have the opportunity to participate, to tell one's story, to experience polite and respectful treatment and to receive consideration to their needs and concerns, the answer to this question seems positive. After all, according to scholars working on the topic of procedural fairness these opportunities are preciously what makes plaintiffs to evaluate their standing and status as favorable (Tyler, 2006, p. 374). Which implies that at least their needs of autonomy and relatedness are addressed. Compensation through insurance, on the other hand, provides none of such opportunities: filling in a few forms is generally all one has (and can) do to get losses reimbursed. One could, therefore, doubt whether filing an insurance claim supports any of the mentioned psychological needs of self-determination.

So, based on the difference in process characteristics and their subsequent effect on one's psychological needs, one might suggest that people gain more well-being from receiving compensation through a tort law procedure than from a first-party insurance payment. Furthermore, it is remarkable how the concept of procedural utility and the psychological needs it refers too, are in line with the earlier described motives of plaintiffs' to start litigating. Telling your story, dignity and respect after the injury, being heard, acknowledgement, admission that something had gone wrong, and answers to ones questions; all goals that contribute to the 'sense of self'. And moreover, all goals that

cannot be accomplished through first-party insurance. The same goes for prevention of similar occurrences, and, not in the least, for making the offender responsible for the consequences of his or her actions. Research has shown how victims of crime have a strong preference for compensation directly by the offender, rather than the state, due to the offender's responsibility for the incurred harm (Shapland, Willmore & Duff, 1986). It is seen as a token of justice if the person responsible is forced to pay compensation (Huver, 2007, p. 39). Cobley (1998, p. 222) describes how this applies to victims of child abuse; financial compensation "is a symbolic statement about the offence and the harm it caused. Furthermore, if the compensation is paid by the abuser personally, the award serves as a public identification of the abuser, who is seen as being made to pay for the wrong perpetrated on the victim". In less severe cases one could imagine as well how it seems 'only fair' to hold the offender responsible for the consequences of his actions; for example in case of burglary or when your car gets stolen. After all, the possibility of holding the offender liable says something about the 'fairness' of the world we live in. Hence, it says something about 'one's sense of self'.

3.4.   *Is the theory of insurance still useful to determine court compensation?*

As different procedures contribute differently to individual well-being, irrespective of instrumental outcomes, it may seem rather odd to isolate financial compensation from the process by which it is realized. Nevertheless, this is exactly what insurance theory does; it only considers the financial outcome of an insurance payment and a court procedure, and it disregards the corresponding processes. In my opinion, insurance theory is therefore not an appropriate tool to determine court compensation. Especially since procedural utility seems to affect the amount of financial compensation that is needed to make a plaintiff whole again.

In contrast to financial compensation, procedural utility seems to refer to ones emotions, which implies that it affects an individual's emotional state (E). So, when individual i experiences procedural utility during a court case, because he feels acknowledged for example, his emotional state will improve and consequently, his utility curve will shift upwards, as explained earlier, from U_1 to U_2 (see Figure 6). This upward shift will bring individual i from post-accident point B on U_1 to point J on U_2, as shown

in Figure 6. How much financial compensation is then needed to return individual i as closely as possible to his situation before the accident?

Figure 6: Effects of procedural utility on the amount of financial compensation needed to make a plaintiff whole again.
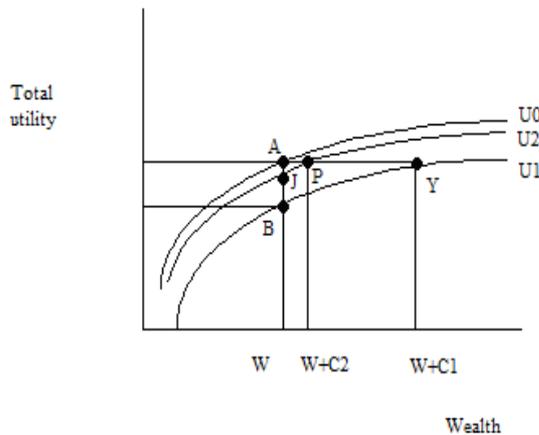
Before the accident i was at point A on U_0 and a comparable point on U_2, is point P. To transfer i from point J to point P, individual i's wealth needs to be increased with an amount of C_2. Important to notice is how amount C_2 differs significantly from C_1 (C_1 being the amount needed to make i whole again when procedural utility is not taken into account). This difference shows clearly how procedural utility influences the amount of compensation needed to make a person whole again. Consequently, it seems inaccurate to leave procedural utility out of consideration while determining court compensation.

More research is needed to study the relationship between procedural utility and financial compensation, just like more research is needed to assess the amount of procedural utility gained by a particular tort procedure and the amount of utility that is lost when one incurs substantial losses. Nonetheless, it seems clear that one cannot disregard procedural utility any longer if one wants to determine court compensation. In my opinion, insurance theory, therefore, is no longer an appropriate method to determine such compensation; neither in case of pain and suffering, nor in case of economic losses. After all, it seems reasonable to assume that in most cases where someone incurs substantial economic losses due to the actions of someone else, his or her 'sense of self' will be damaged just

as his or her wealth is. When, for instance, burglars enter one's house and steal all the valuable, non-personal commodities (tv, tivo, dvd's etc), not only one's wealth is affected: the simple fact that someone else took the liberty to enter one's private domain will affect the victim's feelings of autonomy, relatedness, and competence just as well.

Summary and conclusions

Compensatory damages are intended to return a plaintiff as closely as possible to his or her condition before the wrongful act. There, however, is very little guidance to determine such damages. According to renowned economists one should identify the amount of first-party insurance that would have been bought voluntarily (on an actuarially fair basis) in a world without tort laws, to ascertain the optimal amount of compensation. Since people will only wish to buy insurance when their marginal utility of wealth increases after a particular accident, it is only rational to buy insurance against economic damages. After all, economic damages will decrease one's wealth, thereby increasing the value of an extra dollar. Pain and suffering (non-economic damages), on the other hand, not seem to alter one's marginal utility, and as a result buying insurance is of no effect. Consequently, only economic losses should be awarded compensation in court, as people will only buy first-party insurance against this type of losses voluntarily.

Although there is disagreement about the actual effect of pain and suffering on marginal utility and thus about the demand for insurance against pain and suffering, the simple fact that people almost never buy insurance against pain and suffering, makes that the general consensus seems to be that pain and suffering should not be compensated in court because that would lead to (excessive) overinsurance.

In this paper I have shown how determining court compensation by looking at the insurance market, is an inaccurate method, as it only focuses on outcomes instead of taking the procedures to these outcomes into account. Numerous procedural fairness studies have shown how plaintiffs do not only care about the outcome of a trial but also care deeply about the process by which conflicts get resolved and decisions get made, even when outcomes are unfavourable or the process they desire is slow or costly. The economic term for the benefits derived from procedures is procedural utility. According to Frey et al. (2004) "procedural utility emerges because people have a 'sense of self'"

and important information about the self is provided by procedures: for instance, how we perceive ourselves as human beings and how we are perceived by others. Since plaintiffs in a tort case have the opportunity to participate, to tell one's story, to experience polite and respectful treatment and to receive consideration to their needs and concerns, and since these opportunities are proven to affect one's procedural utility, one might suggest that people gain more well-being from receiving compensation through a tort law procedure than from a first-party insurance payment. After all, insurance payment provides none of the above mentioned opportunities: filling in a few forms is all one has (and can do) to obtain insurance payment. Furthermore, buying insurance will not prevent any similar incidents to occur, nor will it hold the offender publicly responsible for the consequences of his or her actions.

In sum, we can conclude that receiving compensation through a court procedure raises a victim's utility not only by means of its final outcome, but probably through its process as well. Buying insurance, on the other hand, seems to affect utility in just one way: its outcome. As a result, I believe it is inaccurate to use 'insurance theory' to assess court compensation. Especially since I have shown how procedural utility significantly influences the amount of compensation needed to make a victim whole again.

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