

Double Liability for Autonomous Vehicles?

Gerhard Wagner

Accident law was among the first areas of the legal systems that caught the attention of economists. Authors like Shavell and Landes & Posner published books on this topic during the 1980s.

A major topic within the economic analysis of tort law was the choice between liability rules, i.e. between the negligence rule and strict liability. In a famous paper from 1980, Shavell argued that strict liability was superior to negligence liability (9 J. Legal Stud. 1). While both principles generated incentives to exercise due (efficient) care, only strict liability offered the additional potential to also influence the decision to engage in activity or, for that matter, the amount of an activity. Shavell also demonstrated that no perfect liability rule existed, i.e. one that offered incentives for the choice of efficient care and efficient activity levels for both parties. In particular, negligence liability failed to generate incentives for the injurer to curtail the amount of the harmful activity while strict liability coupled with a defense of contributory negligence proved incapable to incentivize the victim to restrict the amount of her activity. Shavell concluded that the selection of an efficient liability rule was a “choice between the lesser of two evils” (9 J Legal Stud., at 7). Thus, he suggested that liability in damages be supplemented by taxes or fines, payable to the state.

In a recent contribution, Shavell has revisited his earlier account with a view to liability for motor accidents caused by autonomous vehicles (49 J. Legal Stud. 243). In this paper, he builds on the existing literature that has demonstrated that the arrival of self-driving cars should be accompanied by a shift away from liability systems that target the driver or the keeper of the car, and her motor liability insurer. Instead, the auto manufacturers should internalize the costs of traffic accidents. The self-interest of auto manufacturers, but also economic efficiency, requires that they pass on the expected costs of liability to the buyers or users of their cars, in proportion to the scale of usage. The more you drive, the more you pay, in terms of a mileage fee reflecting expected harm. Shavell also agrees, without any discussion, that manufacturer liability should be strict, i.e. not require proof of fault or, rather, of product defect.

In such a world, when two vehicles collide, A will be liable to B for the harm sustained by B, and B will be liable to A for the harm incurred by A. Assuming (for simplicity) that the amount of damages is the same, the two payments cancel out. Thus, Shavell argues that strict liability generates the same incentives and outcomes as no liability. It is received wisdom in law and economics that no liability is the worst of any liability regimes, as it generates no incentives to take care and no incentives to restrict the amount of harmful activities.

Revisiting the ideas developed in his 1980 article, Shavell suggests that liability for damage caused by self-driving cars should be strict indeed, but that damages should be payable to the state, and not to the injured party. In this case, he argues, both parties would internalize the full social loss from their respective activities. And incentives to take care and to engage in the harmful activity of driving, or rather: travelling in an autonomous vehicle, would be ideal.

Shavell's proposal echoes a thesis presented in 1990 by Finsinger & Pauly, who suggested what they called a "double liability rule" as a general principle of liability (15 Geneva Papers on Risk and Insurance Theory, 159). The authors argued that both parties should be held liable for the full social loss. If both parties involved in an accident suffered losses, each party should be liable for the loss of the other, but all damages payments should be collected by the state, rather than by the respective victim (*ibid.*, at 162). Losses should be left uncompensated.

It seems obvious that the proposal to hold injurers liable vis-à-vis the state is so outlandish that its appeal to lawmakers is highly improbable. Shavell acknowledges as much. If anything, one could imagine that traditional liability for harm caused be abolished altogether and a system of public fines and penalties be put in its place.

The interesting question is, however, whether a "double liability rule" or a principle of damages payable to the state is able to stand its ground as a matter of theory. Is it really true that efficiency requires that harm be left uncompensated and that damages be paid to the state or, for that matter, dumped into the deep sea? If true, liability systems had evolved into the wrong direction for more than two-thousand years. In fact, the fundamental feature of any liability system – that one party has to compensate another for its loss – would turn out as misguided. For these reasons, Shavell's critique of strict liability for autonomous vehicles is much more than an unrealistic proposal for a developing niche of tort law. It pulls the rug under liability systems as we know them.

The question to be explored in this contribution is whether Shavell's account is sound as a matter of economic analysis. Is it true that, in cases of bilateral accidents, damages must be paid to the government for incentives to be ideal?