The Inefficiency of Decoupling Liability

enrico baffi

universita Guglielmo Marconi

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The Failure of Decoupling Liability

Enrico Baffi Baffienrico@hotmail.com

Guglielmo Marconi University

Preliminary version: please do not quote without the authorization of the author

Law and Economics literature on the subject of party liability has identified a number of criteria which have come to be seen as cornerstones of this branch of law. One of these cornerstones is the principle by which it is not possible that there be efficient levels of diligence and equally efficient levels of activity under tort party liability. The reasoning behind this is simple, and Coase had already established it in his 1960 article. A party which does not bear all of the social costs drives his activity to higher than optimal levels. The Chicago economist provided the example of homes being built near an airport, and wondered whether there was a need for double taxation. Over time, experts have identified scenarios in which at least one party chooses an efficient level of activity, but not both.

These scenarios must be divided into different kind of hypothesis: unilateral accidents and those known as bilateral accidents.

In the event of unilateral accident, the rule which leads to efficient care levels and equally high optimal activity level is the rule of strict liability.

In the event of bilateral accident, we can imagine the following rules: strict liability with a defense (for instance with a defense of contributory negligence) or simple negligence.

Let us consider the first case, that of the unilateral accident and a liability, where the injurer indeed chooses an efficient activity level insofar as he is liable for all social costs: the expected damage and the costs of precautions. In an attempt to minimize the private cost, he will contemporaneously choose the efficient activity level. It should be noted that in this case, precisely because the accident in question is a unilateral one, the victim or victims cannot therefore take precautions, which are borne by the injurer, where other costs are not suggested.

If we now consider the case of bilateral accidents we must keep in mind, first and foremost, that these types of accidents are characteristic because the social optimum is achieved if both parties take precautions.

The most common line of reasoning in the case of strict liability with a defense (for example, in the case of contributory negligence) is that the injurer chooses the efficient activity level while the victim drives his activity to a level higher than the optimal. This is the point where the reasoning appears to be faulty. The injurer, in the case of strict liability with a defense, internalizes a large
number of the social costs, but not all. To be more specific, the injurer internalizes the expected
damage and the costs of his precautions, but not the costs of the victim’s precautions. The
consequence is that the private cost of the injurer is less than the social cost of his activity, and he
will therefore choose an level of activity which is too high.

Consider the following example:

<table>
<thead>
<tr>
<th>Injurer’s level of activity</th>
<th>Injurer Marginal utility</th>
<th>Expected damages</th>
<th>Injurer’s precaution costs</th>
<th>Victim’s precaution costs</th>
<th>Victim’s utility</th>
<th>Variation social welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>-10</td>
<td>-2</td>
<td>-4</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>-10</td>
<td>-2</td>
<td>-4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>-10</td>
<td>-2</td>
<td>-4</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

If we consider line three, we can note that, even when the injurer is strictly liable, however there
is also the burden of the victim’s cost of precautions, the subject’s activity can be driven too high.

Indeed, even if social welfare increases with level-3 activity, this does not represent a first-best
solution. If the injurer had failed to implement activity, the victim would not have taken
precautions and the variation in social welfare would have been represented by the increase in
the victim’s welfare, which is 6. The problem of liability for simple negligence now becomes
apparent. In this case, the widespread tenet is that the injurer chooses an activity level which is
too high while the victim identifies an efficient level of activity. The idea which lies at the basis of
this reasoning is that the victim, in the case of simple negligence, bears all the total costs and
therefore, in an attempt to minimize his private costs, minimizes the social ones as well. Even this
reasoning, however, does not take into account the fact that some costs are not actually borne by
the subject who should bear the burden of all the social costs. Indeed, the victim does not thus
bear the injurer’s precaution costs and does not therefore choose an optimal activity level but
pushes too far beyond it.
Consider the following example:

<table>
<thead>
<tr>
<th>Victim’s level of activity</th>
<th>Victim’s utility</th>
<th>Victim’s Expected damages</th>
<th>Victim’s costs of precaution</th>
<th>Injurer’s costs of precaution</th>
<th>Injurer’s utility</th>
<th>Social welfare variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>-10</td>
<td>-4</td>
<td>-5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>2</td>
<td>18</td>
<td>-10</td>
<td>-4</td>
<td>-5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>-10</td>
<td>-4</td>
<td>-5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>15</td>
<td>-10</td>
<td>-4</td>
<td>-5</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

In this example as well, the last level of activity taken into consideration leads to an increase in welfare, but it is not the best solution. The result would have been more desirable if the level-4 activity had not been implemented. Indeed, the victim would have refrained from action, with the consequence that the injurer would not have taken precautions in the amount of 5 and the increase in social welfare would have been 6. With the fourth level of activity, the increase in welfare is, on the other hand, only 2.

The line of reasoning we have developed up to this point is of consequence if the victim in the first case and the injurer in the second are able to avoid taking precautions in the event in which the other party does not implement a further level of activity. If, on the other hand, precautions must be taken ex ante or, in other words, it is not possible to save on those precautions which are marginal, then social welfare is maximized if the injurer in the first example and the victim in the second implement their activities.

It can therefore be stated that when one party, not bearing the costs of precaution because the other subject does not implement his activities, receives an increase in welfare greater than that which that party would have had if both parties had taken action. It is therefore better for society that the subject bearing the and transaction costs (but not those of the other party) not take action.

We might wonder whether the Pigouvian tax, which effects beneficial decoupling, suffers from similar issues.

The answer is yes. Indeed, the victim does not take into account the injurer’s costs of precaution. If we consider the following example:
<table>
<thead>
<tr>
<th>Injurer’s level of activity</th>
<th>Injurer’s utility</th>
<th>Pigovian tax= victim’s</th>
<th>Injurer’s costs of precaution</th>
<th>Victim’s cost of precaution</th>
<th>Victim’s utility</th>
<th>Victim’s expected damage</th>
<th>Social welfare variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15</td>
<td>-6</td>
<td>-2</td>
<td>-3</td>
<td>14</td>
<td>-6</td>
<td>18</td>
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<tr>
<td>2</td>
<td>14</td>
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<td>-2</td>
<td>-3</td>
<td>11</td>
<td>-6</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>-6</td>
<td>-2</td>
<td>-3</td>
<td>10</td>
<td>-6</td>
<td>7</td>
</tr>
</tbody>
</table>
It is apparent that level gives a social benefit of 7, although, if the victim had not implemented his action the increase in social welfare would have been 8 (in other words, only the benefit of the action for the injurer in absence of any cost). On the other hand, if the injurer had not implemented his action at level 4, there would have been an increase of 10 in welfare instead of that which was achieved, which was 7.

It would be socially desirable for both parties to limit its activity, even in the presence of Pigouvian tax, because both parties do not consider precaution costs of the other. Therefore, in the presence of a Pigouvian tax, if the injurer or the victim, going against their interests, refrains from implementing their activity, once a certain level of action is achieved, social welfare will increase.

The question which remains open and merits more in-depth study is the issue regarding regulatory instruments which can be used to achieve an improvement in collective welfare in every case, although the well-known lesson that it is impossible to have efficient levels of care and contemporaneously efficient levels of activity remains valid.