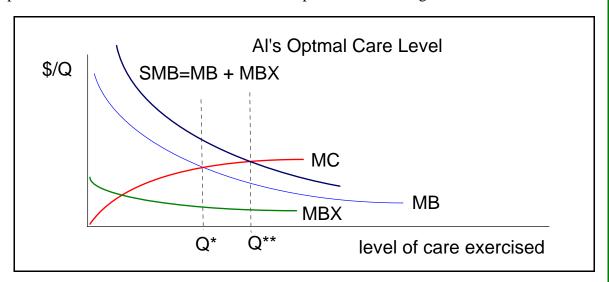
- **A. RECAP**: To this point, we have found that there are economic rationales for legal systems that (i) give use and exclusion rights to producers and over land, (ii) make those rights tradable rights for persons who produce goods and services, and (iii) make promises (contracts) enforceable, by threatening fines or imposing other fees on persons who violate (renege) on their promises (contracts).
 - i. Communities that have such systems will tend to be far more prosperous than those that do not.
 - Such communities would be better able to defend themselves from attacks (and also to attach or conquer their neighbors).
 - Both these effects tend to make such communities more likely to survive in the long run.
 - ii. Thus through "survivorship" and incentives to copy legal systems that work, such property systems would tend to become more and more common through time.
 - [In this sense at least, some laws may be regarded as establishing "natural rights."]
- **B.** We also have explored why law enforcement helps economic development and why the optimal law enforcement is less than perfect.
 - i. Note that crimes will occasionally pay in such an environment
 - ii. Crime could be further reduced but not without spending more on the legal sytem than it saves through reduced damages and increased production and exchange.
- **C.** We next turn to what is probably a less critical areas of law, but one which may still have significant effects on economic prosperity, namely accidents.
 - A person or firm's carelessness may damage another's life or property.
 - How should accidents be treated by the law?
 - Who should be liable for damages?
 - [It is interesting to note that the Code of Hammurabi includes provisions for compensating victims from accidental damages caused by their neighbors. So principles of tort law emerged early.]

I. Accidents as Externalities

- **A.** There are **two kinds of accidental events**, ones that the likelihood of and potential damages from could have been reduced by changing one's behavior and ones that could not be.
 - a. In the first case, one's decisions about taking steps to reduce the likelihood of accidents is something that can be modeled using our rational choice model.
 - b. There will be expected benefits from exercising care and expected costs of exercising care.
 - c. A rational "man" will adopt the care level that sets his or her expected marginal benefits equal to his or her marginal cost.
 - d. (In the second case, there is nothing to be done, and we'll ignore that case until later.)
- **B.** A lot of accidents affect only the person "responsible" for it. (When one trips over something on the floor, it is "you" that gets damaged by the fall.)

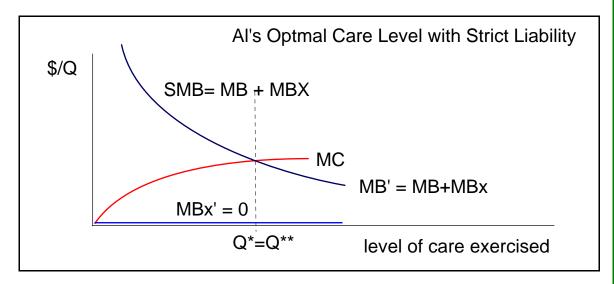
- i. In such cases, you will exercise care up to the point where the expected marginal benefit of care equals its expected marginal cost.
- ii. A forward looking man or woman will in such cases take "optimal" precautions, those that reasonable men and women undertake.
- **C.** However, there are many cases in which once care affects other people--indeed there are cases in which your care or lack of care mainly affects other people.
 - i. A's care may affect the probability and extent of damages borne by B.
 - Note that the damages borne by B may still be regarded as an accident, insofar as A's care did not cause the phenomenon that harm's B. A tires may "blow out" cause him or her to swerve into B and damaging B's car.
 - A did not intentionally damage B's car, but if A had invested in new tires or rotated the old tires, that sort of accident would have been less likely.
 - ii. In such cases, one's level of "care" or "due diligence" generates externalities, spillover benefits for other persons.
 - The economic theory of externalities implies that persons are unlikely to adopt the "socially optimal" level of care--unless there are laws in place that encourage them to.



- iii. The above diagram illustrates this "**moral hazard**" problem by adding an external MB curve for the "spillover" damages that your care helps avoid.
 - The privately rational choice is Q*
 - This is the level of care that maximizes the individual's own expected net benefits, but that level of care does not take account of spillovers that one's behavior has on the expected damages of others.
 - Given Al's level of care, Q*, some accidents still occur and so Al bears some losses (The area under his or her MB curve beyond Q*).
 - The external damages are not compensated in the absence of tort law, but given Al's level of care the accidents that happen impose expected losses on other persons (such as Bob) equal to the area under the MBx curve beyond Q*.

- iv. Externality theory (together with the SNB norm) implies that it UNLIKELY that Al's leve l of care is socially optimal.
 - To find the social net benefit maximizing level of care, one has to determine the SMB and SMC curves associated with care.
 - The SMB curve can be found by adding the MBal and MBx curves (vertically).
 - If there are no external costs, then the SMC is the same as the MC curve.
 - The SNB maximizing level of care occurs at the quantity, Q^{**} , where SMB(Q) = SMC(Q)
 - In the diagram above Q* is the privately optimal level of care and Q** is the level of care that an individual should adopt to take account of the damages that his or her accident impose on third parties.
 - Note that $Q^* < Q^{**}$
 - Thus, there is an "externality problem." Social net benefits are not being maximized.
 - [Identify the area that represents expected losses from sub-optimal care.]
- v. The persons exercising care often get personal benefits from care (accident avoiding behavior) but, in the absence of tort law, such persons have little or no incentive to take account of the effect of his or her care on others. Thus, care tends to be underprovided.
 - Even in cases in which the person harmed may also take precautions that also reduce the probability or extent of damages, the care taken without tort law often differs from the best combination of precautions (as illustrated below when we discuss negligence principles).
- vi. How important such at least partly controllable accidents are for a society varies with the accident and society of interest.
 - The probability of damages and their magnitude vary with technology and, to some extent, population density.
 - Avoiding accidental damages could be critically important in a society that exists at subsistence levels or a minor inconvenience for one that does not.
 - But, even if avoiding accidents is not critical for society, it is clear that a society that induces proper levels of care will tend to be a bit wealthier, healthier, and more pleasant to live in than ones that do not.
 - That elements of tort law exist in the Codex of Hammurabi suggests that avoidable accidents are important enough to attract the attention of law makers even in relatively simple agricultural societies.
- vii. **Strict Liability** holds the owner of the asset that "causes" the accident to liable for damages regardless of the behavior of the victim.
 - In cases in which only the owners can take precautions that reduce the probability and extent of damages (one way causality), such laws can induce efficient levels of care by "internalizing the externality."
 - Under strict liability, Al has to compensate those damaged for the there losses insofar as Al or Al's property causes the harm, even though the harming others is not Al's intent.
 - Strict liability rules, in effect, shifts the losses from others (such as Bob) to Al.
 - This cause's Al to take account the effect of his or her care on the expected damages faced by others.

- In the case in which causality is one-way (from Al's care to Bob's expected damages), a Strict Liability rule "internalizes" the externality.
- In the figure below, Al's MB curve now includes his or her own marginal benefits from reducing his or her expected losses from the accident plus the amounts that has to be paid to others



- If we use primes to denote the new MBal and MBx curves, Al's MB curve becomes the SMB cruve from the previous diagram (MB' = MB + MBx) and if damages are fully compensated the new MBx curve goes to zero.
- So, MBa = MB + MBx in the diagram, rather than just MBa=MB as was the case without a tort law.
- As a consequence Al's choice, Q* is now the same as Q**, the SNB maximizing level of care.
- **D.** In settings where the expected damages are jointly determined, rather than determined by AL's care alone, strict liability may induce those affected by the accident to invest too little in care.
 - Strict liability (with perfect compensation) reduces the value of care taken by others to zero, in which case others will take no precautions.
 - In cases where their efforts also affect the probability or extent of damages, they will take too little care.
 - Thus strict liability is not the ideal assignment of responsibilities for damages in all cases.
- E. Contemporary public economics shows that a wide range of policies can solve externality problems, including Pigovian taxes and subsidy, cap and trade systems, and direct regulation. Nonetheless, prior to the twentieth century, Tort law was the primary way that negative externalities (spill over damages) were addressed.
 - i. For students that have had Public Economics or similar courses, it should be clear that strict liability rules often have effects that are very similar to solutions involving Pigovian taxes or

subsidies. Strict liability induces decisionmakers to "internalize" externalities associated with their efforts to reduce the probility or extent of damages.

- (Torts, however, deal with only external damages, not external benefits.)
- (And as we'll se below, the strict liability rule works like a Pigovian solution only in cases in which causality is "one way.")
- ii. Of course, one can justify the recovery of damages using norms other than the social net benefit maximizing one that we'll be using in this class. Other social norms may also require persons to "apologize" or make amends with persons harmed through their carelessness.
 - The civil law uses law suits to recover damages as a means of reinforcing "proper behavior" from those other normative standpoints.
 - However, for this course, we'll be exploring the extent to which economics arguably provides the underlying logic behind Tort law as it arguably did for property and contract law discussed above.

F. Rules that assign responsibility and liability for accidents have been very common historically.

- Strict liability is not the only way to assign liability for accidental damages.
- Other rules exist at least partly because some accidents require more complicated damage assigning rules to encourage SNB maximizing levels of care on the part of several parties, each of whom can affect the probability or extent of damages.
- For example, the code of Hammurabi includes provisions that impose penalties on persons who do not **properly** maintain their dikes and their neighbor's field is flooded as a consequence. (See IIC below.)
- **G.** The best rule for assigning responsibility for an accident and damage claims varies with the specific type of accident.
 - Unfortunately, there is no single principle for assigning liability that can perfectly solve all accidental damage problems.
 - For the remainder of the section on torts, we will examine the economic effects and (SNB) normative logic behind alternative rules for assigning liability.
 - (For the legal, as opposed to economic rationales, one should read a book or two on torts, or take a torts course in a law school.)

II. Negligence and Contributory Negligence Rules as a Means of Addressing Joint Causality such as Reciprocal Externalities from Exercising Care

- **A.** Until the beginning of the industrial age, the person whose property caused an accident was held fully liable for damages imposed on others.
- **B.** Exceptions were made for cases in which there was no possiblity of avoiding the accident..
 - i. In cases in which no one "caused" the accident ("acts of god") no damages were awarded to the victim.
 - ii. This principle is not always applied today, but there are still many instances of it.

- Example: Al's tree falls on Bob's house as a consequence of a wind storm.
- Although Al's tree caused Bob's damages, in most cases All will be held blameless for the tree falling down. The strong wind, rather than Al's carelessness, caused the tree to fall.
- In such cases, care does not generate externalities--indeed it has no effect on the probability of the accident or the damages.
- [Draw a diagram that shows why such rules make good "utilitarian" (SNB) sense. There is no "care" externality.]
- iii. However, if one's actions or property caused harm to another, "tort feasors" (the persons or groups whose action or property caused the damages) were generally held liable for damages, unless avoiding the accident was entirely beyond human control.
- C. During the industrial age, these quite strict liability rules were modified to take account of both cases in which care would not avoid damages (acts of god) and other cases in which all "reasonable" precautions were taken.
 - a. The latter, negligence-based rules were evidently adopted to shield railroads from paying claims to farmers for fires caused by their trains.
 - (During dry periods, sparks from wheels or ashes, might light a field on fire.)
 - b. However, the negligence principle was not entirely new.
 - c. For example, the Code of Hammurabi uses "negligence" rules for assigning damages from accidents, and the rules include negligence principles.
 - 53. If any one be too lazy to keep his dam in proper condition, and does not so keep it; if then the dam break and all the fields be flooded, then shall he in whose dam the break occurred be sold for money, and the money shall replace the corn which he has caused to be ruined.
 - 54. If he be not able to replace the corn, then he and his possessions shall be divided among the farmers whose corn he has flooded.
 - 55. If any one open his ditches to water his crop, but is careless, and the water flood the field of his neighbor, then he shall pay his neighbor corn for his loss.
 - [If one's dam broke and flooded the neighbors field as a consequence of laziness, that person was liable for damages, but if unusually heavy rains rather than carelessness or laziness caused the flood, one was evidently not liable. There is clearly negligence-based reasoning in law 52, in the idea of "proper condition."]

D. The Economics of the Negligence Rule.

- The analysis above shows that "strict liability" damage award systems encourage efficient i. (social net benefit maximizing) levels of care, in cases in which causality is one-way and care can reduce the probability or extent of damages.
 - However, this rule does not work nearly as well in cases in which the damages produced by an accident are very costly to prevent or jointly caused.
 - In the case where causality is one way, a negligence rule shifts responsibility from the tort feasor to victim (the person or enterprise harmed) in cases where the tort feasor has exercised reasonable care.

- As will be shown below, it does so without affecting the efficient level of care, if the "reasonable man standard" is the same as the level that maximizes social net benefits.
- **E.** As we will also see, in cases in which damages are jointly produced, assigning liability to a single party tends to produce **excessive care by the party held liable**.
 - In modern industrial societies, many accidents and their associated damages are jointly caused (or only partly caused), rather than the consequence of the care exercised by a single person, firm, or organization.
 - There is a lot more team production and also more powerful machines that can generate accidents.
 - There are also a larger number of accidents that can only be partially avoided by exercising reasonable care (or taking SNB maximizing precautions).
 - i. In cases in which only a subset of factors that contribute to the accident can be controlled, the idea of **negligence** became important.
 - The negligence rule holds a person liable for damages caused by an accident, only if he, she or it failed to excercise "proper care," the care that a reasonable man would have adopted.
 - The role of causality is reduced by negligence rules, because only persons who failed to adopt "reasonable care") are held libel for damages generated by accidents they "caused."
 - ii. Negligence rules can be thought of as a logical extension of the "acts of god" principle. Beyond some point, the factors that cause an accident may not be controllable.
 - However, the principle is broader than that. Under a negligence rule, once one has taken all reasonable steps, he or she or they cannot be held liable for damages--even if there is a level of care under which the accident would not have occurred.
 - This rule, thus, indirectly tends to encourage potential victims to also take precautions that can reduce damages or the probability of an accident. If the tortfeasor (Al) is undertaking reasonable care and the Bob's expected damages can be further reduced if Bob also takes precautions, Bob will do so up to the point where his expected marginal benefits equals his expected marginal costs -- given Al's "reasonable" efforts.

iii. The game matrix below shows how a shift from strict liability to negligence rules can have significant effects on behavior and damage claims. It illustrates a choice setting in which Al's care is costly and benefits Bob, but provides no direct benefits for Al.

Illustration 1 effects of a shift from strict to liability to a negligence rule

The strategies are levels of care, payoffs are net benefits for each (A,B), damages borne by Bob are negative net benefits. The MC of care is assumed to equal 2, but care exhibits diminishing marginal returns.

Al / Bob	1	2	3	4	5
1	20, -18	20, -15	20, -14	20, -15	20, - 16
2	18, -14	18, -11	18, -10	18, -9	18, -10
3	16, -11	16, -8	16, -7	16, -8	16, -9
4	14, -8	14, -5	14, -4	14, -5	14, -6
5	12, -5	12 -3	12, -3	12, -4	12, -5
6	10, -2	10, -1	10, -1	10, -3	10, -4
7	8, -1	8, 0	8, 0	8, -1	8, -2

In the absence of tort law, Al would take no precautions and Bob takes 3 units of care. Under strict liability, Bob has no reason to pay attention to his damages. In this case, Al will assume that Bob's care is 0 and maximize his net of liability benefits (yellow equilibrium).

Under a negligence rule, Both Al and Bob have incentives to exercise care. If the negligence standard is "4" for Al, Bob will use care level 3 (green equilibrium). Note that a range exists over which Al and Bob's care both cost more than they generates in reduced damages.

- a. Explain briefly the reasoning behind the three equilibria above.
- b. What care level would Bob undertake, if Al were never held liable for this accident?
- c. Note in such cases, a shift from strict liability to negligence rules does not necessarily increase social net benefits, but does affect the distribution of wealth.
 - Note also that it is not always entirely obvious what "reasonable care" is. How should reasonable care be defined?
 - [For most economists, it would simply be C** the care level that sets SMB=SMC. Explain why.]
- d. Construct other payoff matrices that illustrate other cases in which damages occur with and without "fault" at the margin, and characterize the equilibria under various tort rules..

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- **F.** Within the US, the standard of reasonable care (for negligence and liability) emerged in lawsuits over various industrial accidents. These became more common as the industrial revolution emerged and expanded (Friedman 2005, 223).
 - i. For example, trains evidently induced fires in farm fields.
 - Sparks from trains passing through the great plains would often light dry fields on fire and
 under strict liability the train companies would have to reimburse field owners for their
 damages.
 - A shift to negligence rules allowed train companies to escape payment of such damages if they could show that they had taken reasonable care and so were not "at fault."
 - ii. However, there was evidently nothing particularly special about the train industry or the United States, negligence standards for liability were widely adopted throughout the West at about the same time-- generally in the mid to late nineteenth century--although a few negligence cases occurred far earlier.

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- Consider this excerpt from a piece about the emergence of negligence law in Australia by Justice Peter Wood of the Australian Supreme Court.
- (http://www.supremecourt.tas.gov.au/publications/speeches/underwood/negligence):

History of Negligence Law in Australia

The tort of negligence is a relative newcomer to the law. As students of legal history are well aware, in the case of direct and immediate injury to the person and damage to property, liability was originally strict and the cause of action was known as trespass. Neither intention nor fault arose. In the case of indirect injury to person or property, liability for personal injury and damage to property depended upon proof of some element of fault in lieu of trespass. This form of action was known as action on the case.[3] With the advent of industrialization, it soon became apparent that strict liability for direct trespass could not survive the modern conditions, and liability for personal injury and injury to property came to depend upon intention and fault, instead of causation.[4] In its transitory state from the old form of action on the case, negligence was described as carelessness in a matter where carefulness is obligatory. According to one early source, "negligence and wrongful intent are the alternative forms of mens rea, one or the other of which is commonly required by law as a condition of liability".[5] By 1883, the foundation stone of the modern law of negligence was laid [for Australia]. I venture to suggest that no one in their wildest dreams, would have then contemplated its development and expansion over the next 100 years.

In Heaven v Pender,[6] a painter employed by a painting contractor was injured whilst using some staging erected by a dry dock company. The painting contractor was engaged by the ship owner and there was no contractual relationship between the dry dock company that erected the staging and the painting contractor. His men were simply using the staging erected by the defendant. In Brett MR's judgment were sown the seeds of the modern tort of negligence. He said:

"Whenever one person is by circumstances placed in such a position with regard to another that every one of ordinary sense who did think, would at once recognise that if he did not use ordinary care and skill in his own conduct with regard to those circumstances he would cause danger of injury to the person or property of the other, a duty arises to use ordinary care and skill to avoid such danger."[7]

The Master of the Rolls was in the minority when he expressed that principle in such wide terms. The other two members of the Court founded liability on the basis that the injured plaintiff was an invitee of the dry dock company and therefore an obligation arose by virtue of that relationship to ensure that appliances supplied for immediate use were not dangerous. The majority expressly eschewed Brett MR's generalisation saying that such liability was confined to goods that are dangerous per se or dangerous to the knowledge of the defendant.

Early days

From the beginning, negligence meant a failure to so something which a reasonable man would have done in the circumstances or the doing of something that such a person would not have done in the circumstances.[8] It was early recognized that negligence would afford no remedy in law in the absence of a duty of care owed, not to the world generally, but to the particular plaintiff.[9] Principally, the development of the law of negligence has been built on this foundation namely, identification of circumstances which give rise to a duty of care. At first, the existence of a duty was determined by reference to the nature of the activity being undertaken eg, keeping dangerous goods, driving on the highway, being in a shop upon an implied invitation, and so on. A hundred years ago not only were the situations which gave rise to a duty of care carefully categorized, but also, the damage recoverable was confined to injury to person and property. Acknowledging that there was an obligation not to deceive another, the author of an early edition of Salmond on Torts[10] said "but I am commonly under no obligation to take care that the statements I make to him are true."[11] How things change!

- a. For a nice overview of tort law, see your textbooks, or the Wikipedia entry under negligence.
- b. See also Lawrence Friedman (2005) *History of the American Law* or Richard Posner and Willam Landes (1987) on the *Structure of Tort Law*.
- **G.** Tort law is an area in which there are many complex and fascinating cases and rules for assigning liability, but for the purpose of this course it is sufficient to focus on three general rules. We have already discussed two of these (strict liability and negligence rules).
- i. The last tort principle we'll analyze is the **contributory negligence rule**.
- ii. In some cases, the victim's own behavior affects the extent of damages in an accident, and for the past century or so, tort law has begun to take account of the victim's negligence when assigning damages.

iii. (Several other rule are or have also been applied, but are beyond the scope of this course.)

H. The Contributory Negligence Rule.

- i. There are many accidents in which the person damaged can also take steps to reduce his or her losses from an accident. In many cases, the victim may do so at lower cost than the person causing the accident.
 - a. The aim of the contributory negligence standard, from an economic efficiency perspective, is to induce victims to take reasonable precautions.
 - There are various ways to implement a contributory negligence standard, but a common one is that if the victim has taken reasonable care, then the person or organization causing the accident is fully liable for damages.
 - (One can also combine the contributory negligence and negligence rules.)
 - b. If the aim of law is to maximize social net benefits (as utilitarians would argue) then contributory negligence laws make sense in cases in which damages are jointly determined by the care exercised by several parties.
- ii. The following game matrix can be used to illustrate the effects of various liability rules on care levels and expected (average) outcome. The payoffs are expected net benefits, with negative payoffs indicating damages (losses) from the accident being analyzed.
 - Al is assumed to "cause the accident, but Bob can reduce the damages by exercising some care. The damage numbers reflect both the damage to Bob and Bob's cost of care.

Illustration 2 of the effects of alternative rules in a contributory negligence setting (Strategies are levels of care, payoffs are net benefits, damages are negative net benefits.)

Al / Bob	1	2	3	4
1	14, -16	14, -14	14, -11	14, -10
2	12, -11	12, -9	12, -6	12, -6
3	10, -8	10, -6	10, -3	10, -4
4	8, -5	8, -3	8, -2	8, -3
5	6, -4	6, -2	6, -3	6, -4

- a. Under a strict liability law in which Bob is fully compensated for his damages, Bob would not have a reason to take any steps to reduce damages, he will have costs for taking precautions, but no benefits from them (assuming perfect courts for now).
 - In the absence of any kind of tort law, the equilibrium would be in the upper righthand corner. [Explain why.]
 - Under a strict liability law, the "yellow" lower left-hand cell would be the equilibrium, because this maximizes Al's net of damage payoff. Remember that Al has to pay for Bob's losses under strict liability, so Bob has no reason to take precautions.

- b. Under a Negligence rule with "3" as the standard for "reasonable care," Al would not be liable for care beyond 3, which would induce Bob to take steps to reduce his own injuries from the accident, resulting in the green equilibrium.
- c. Under a contributory negligence rule (combined with strict liability), Al would not recover damages unless he took reasonable steps to mitigate damages. If the standard of reasonable care for victims is Bob = 3, then the same equilibrium result would emerge as under the negligence rule. Given that Bob is exercising care level 4, it is in Bob's interest to also adopt 4, because this maximizes his net of damages benefits.
 - (Note that a negligence standard also frees Al from paying damages under a contributory negligence standard. Under contributory negligence, it simply further reduces the likelihood that Al pay's damages in any case.)
- d. In this case, the same result occurs under both negligence and contributory negligence laws, but **the burden of proof shifts** and the distribution of wealth is affected.
 - Liability rules also determine who pay's whom for losses associated with the accident, and so affect the post-accident distribution of wealth.
 - Strict liability rules would imply that Al always pays Bob for his losses.
 - Under both negligence and contributory negligence rules Bob often receives no compensation for his losses.
- iii. The behavioral equivalence between Negligence and contributory negligence standards occurs in many settings in which payoffs are interdependent, because of the nature of joint optimization problems and Nash equilibria (e.g, placing one in the "right" column or row normally creates the "right" incentives for the other person, given the remaining liability or damages.
 - (In a "free rider" problem, this is equivalent to creating incentives for one party to adopt his particular Pareto optimal strategy, and indirectly inducing the other to adopt his Pareto optimal level by making him or her liable for damages at the margin--and so internalizing spillover damages.)
- iv. Another principle for assigning liability that is less appealing to many economists (including Richard Posner) are various **comparative negligence rules**, under which compensation for damages is reduced, but not eliminated, when the victim fails to exercise reasonable care.
 - Posner has argued that comparative negligence rules raise administrative costs (court costs) without generating any benefits.
 - In such cases, the ideal partial damage rules functions like a Pigovian tax and induces persons to select their ideal levels in a more roundabout and perhaps error prone process than the above negligence rules.
 - For more on comparative negligence rules see Epstein (1997, chap 5), Shavel (2007) or Magnus, Martin-Casals, and van Boom (2004).
- v. As mentioned above, the rules for assigning liability to damages have become more and more complex in the past century or two as accidents and the organizations causing them have grown more complex.
 - For example, there may be many organizations and individual that "cause" the accident, but some may have greater influence and/or be more or less negligent than others.

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- Obviously, the more complex the causal setting, the more difficult it is to apply a clear (simple) damage assigning rule--and the more difficult it is for courts to develop rules that perfectly motivate all the parties involved--even if courts are perfect (costless and perfectly accurate).
- Such cases are beyond the scope of this course, although the textbooks provides a discussion of several such cases.
- The aim of this course is not to teach law but rather to show how economic principles can be used to shed light on the core general principles of both ancient and modern law.
- [If we have time, we will examine a few classic American tort cases from the text books and other references. See the web site links to cases.]
- **I.** The examples developed above also have "secondary" implications.
 - i. For example, they show the care undertaken by individuals varies with the liability assigning rules in place.
 - ii. They also show that motivating the appropriate combinations of care in complex circumstances is often difficult.
 - In reasonably straightforward cases, tort laws can function remarkably well (eg they tend to maximize social net benefits from care).
 - iii. However, in settings of joint causality, not all tort laws work perfectly (eg maximize social net benefits).
 - iv. In addition to their incentive effects, tort laws also have effects on the distribution of wealth and income.
 - v. Thus, liability rules that make sense in many (perhaps most) cases, may fail in others. Neither the law nor the courts always get "it right" in the sense of the norms used in this class (maximize SNB).
 - This may be because the law is not perfect.
 - It may also be because court proceedings are less than perfect.
 - For example, if lawyers can often persuade juries to over assess damages, the results will be excessive care--which in some cases might prevent some markets and industries from emerging (as wit the decline of the non professional aviation industry).
 - vi. As far as economic models of human behavior are concerned, tort law creates systems of "conditional rewards and punishment" though damage assigning rules attempt to (or should attempt to) induce proper levels of care.
- **J.** The range of possible accidents is so complex, that the courts choose which liability assigning principles to apply in particular cases. So, the liability assigning rules examined in this section of the course are "pure types" that are often mixed in practice.
 - i. Such "mixed principles" are often used in cases in which causality is joint.
 - In such cases, legal reasoning and outcomes do not always parallel the economic interpretation of the rules.
 - ii. However, it is possible that tort law tends to slowly evolve in a manner that promotes economic development (efficiency).

Law and Econ Handout 5: Torts: Accidents, Reasonable Care, and Damages

- iii. In principle, the best tort law is the one that most consistently reaches the "right" (SNB maximizing) conclusion, where SNB takes account of court costs (and errors) as well as the losses from the accident and the costs of reducing them.
 - Tort law continues to be among the most active (and profitable) areas of law, because there are so many types of accidents and because many of the notions currently applied are not obvious (reasonable care) have to be assessed case by case.

III. An Alternative Method of Dealing with Accidents: Regulation

i. **After the midterm exam**, we will explore another method of dealing with externalities and accidents, namely what lawyers call "public law" and economists call "regulation."

- a. One of the relevant differences between direct regulation and tort approaches is the difference between court proceedings (jury trials) and regulatory proceedings.
 - Another point of analysis is the speed and accuracy with which relevant changes in the world are accounted for in new rules.
- b. Both an idealized court system and a regulatory system attempt to create incentives that reduce the damages from accidents, net of the cost of preventing them.
 - Public law, however, is inherently a political process, whereas many of the courts institutions attempt to insulate court decisions from political ones.
 - Another difference, is that regulation usually attempts to modify particular behaviors or address particular accidents--one at a time--rather than develop general principles that can easily be applied to a broad range of cases.
- ii. The remainder of the course will explore regulatory (public law) alternatives to the classic "common law" solutions to externality, monopoly, and patent (intellectual property right) problems.
 - Your final papers may focus on civil law (what we have covered until now), regulatory law, or compare and contrast the two approaches for a specific type of problem.