

Western University

Law and Economics

Lecture 7



Negligence rule: summary

- Assuming perfect compensation and each legal standard equal to the efficient level of care, every form of the negligence rule gives the injurer and victim incentives for efficient precaution.



4. Extensions of the model

- 1) Activity level
- 2) Judicial error
 - Imperfect assessment of care
 - Imperfect assessment of damages
- 3) Insurance
- 4) Regulation



1) Activity Level (p.211)

Activity level	Total utility	Total costs of care	Total accident losses	Social welfare
0	0	0	0	0
1	40	3	10	27
2	60	6	20	34
3	69	9	30	30
4	71	12	40	19
5	70	15	50	5

Shavell – Accident law (Table 4)



Residual bearer

- Some liability rules induce some actors to avoid liability by satisfying the legal standard of care. In the end, someone must bear the cost of accidental harm.
- We call that person the **residual** bearer.



Residual bearer

- Who is residual bearer of harm?
 - Under the simple negligence rule
The **victim** is the residual bearer of harm.
 - Under the rule of strict liability with a defense of contributory negligence
The **injurer** is the residual bearer of harm.
- In general, the residual bearer of harm internalizes the benefits of any of his or her actions that reduce the probability or severity of accidents, including more precaution and less activity.



2) Errors (p. 217)

- In tort disputes, mistakes are often made concerning
 - The extent of harm,
 - The cause of the accident, and
 - The actors fault.



Errors and Strict Liability rule

In general,

- Court errors in setting damages under a rule of strict liability cause the injurer's precaution to respond in the same direction as the error.
- Court errors in failing to hold injurers liable under a rule of strict liability cause them to take less precaution.



Errors and Negligence rule

In general, Injurer's precaution

- does not respond to injurer's modest errors in predicting damages under a negligence rule
- does not respond to modest court errors in setting damages under a negligence rule.
- responds exactly to court errors in setting the legal standard under a negligence rule.



Example

Care level	Cost of care	Probability of accident	Expected accident losses	Total social costs
None	0	15%	15	15
Moderate	3	10%	10	13
High	6	8%	8	14



Random errors

In general,

- The injurer who minimizes expected costs does not change his or her precaution in response to random errors in computing or predicting damages under any liability rule.
- Small random errors in the legal standard imposed by a negligence rule causes the injurer to increase precaution.



Judgment-proof problem

- The possibility that injurers may not be able to pay in full for the harm they cause.
 - (ex. persons who are insolvent)
 - Incentive to take care tend to be diluted.
 - Incentive to engage in risky activities will be greater than otherwise.
- Vicarious liability: imposition of liability on a party related to the actual author of harm
 - Firms are held responsible for the losses caused by their employees.



3) Insurance (p. 236)

- **Strict liability**
 - The (risk-averse) injurer has an incentive to purchase third-party liability insurance.
 - Possible moral hazard problem
- **Negligence rule**
 - The (risk-neutral) victim has an incentive to purchase first-party accident insurance.



4) Regulation: another method of controlling risk

- **Ex ante Regulation**
 - The state restricts permissible behavior.
- **Ex post liability rules**
 - Strict liability and Negligence
- **Relative desirability of these methods depends on**
 - Quality of the state's information
 - Information available to victims
 - Level of activity of an injurer
 - Administrative costs



McDonald's Hot Coffee Case

- On February 27, 1992, Stella Liebeck, a 79-year-old woman from Albuquerque, New Mexico, ordered a 49-cent cup of coffee from the drive-thru of a local McDonald's restaurant. Liebeck was in the passenger's seat of her Ford Probe, and her grandson Chris parked the car so that Liebeck could add cream and sugar to her coffee. She placed the coffee cup between her knees and pulled the far side of the lid toward her to remove it. In the process, she spilled the entire cup of coffee on her lap.
- Liebeck was wearing cotton sweatpants; they absorbed the coffee and held it against her skin as she sat in the puddle of hot liquid for over 90 seconds, scalding her thighs, buttocks, and groin. Liebeck was taken to the hospital, where it was determined that she had suffered third-degree burns on six percent of her skin and lesser burns over sixteen percent.



McDonald's Hot Coffee Case

- During the case, Liebeck's attorneys discovered that McDonald's required franchises to serve coffee at 180-190 degrees Fahrenheit (82-88 degrees Celsius). At that temperature, the coffee would cause a third-degree burn in two to seven seconds.
- Liebeck's lawyers presented the jury with evidence that 180 degree coffee like that McDonald's served may produce third-degree burns (where skin grafting is necessary) in about 12 to 15 seconds. Lowering the temperature to 160 degrees Fahrenheit would increase the time for the coffee to produce such a burn to 20 seconds. Liebeck's attorneys argued that these extra seconds could provide adequate time to remove the coffee from exposed skin, thereby preventing many burns.
- McDonald's reason for serving such hot coffee in its drive-through windows was that, because those who purchased the coffee typically wanted to drive a distance with the coffee, the high initial temperature would keep the coffee hot during the trip.



McDonald's Hot Coffee Case

- The jury awarded Liebeck \$200,000 in compensatory damages. This amount was reduced to \$160,000 because the jury found Liebeck 20 percent at fault in the spill.
- The jury also awarded Liebeck \$2.7 million in *punitive damages*, which equals about two days of McDonalds' coffee sales.
- The trial court subsequently reduced the punitive award to \$480,000 -- or three times compensatory damages



5. Consumer Product liability

Assume the market is perfectly competitive.

Behavior of firm	MC of production	p	h	Full cost per unit = $MC + ph$
Use bottle	40 cents	1/100,000	\$10,000	50 cents
Use can	43 cents	1/200,000	\$4,000	45 cents

(Source: Polinsky, 2003)



Consumer Product liability: Analysis

- Efficient outcome: Use 'can', and consume at the price of 45 cents
- Equilibrium outcome
 - 1) No liability
 - 2) Strict Liability
 - 3) Negligence



Ford Pinto

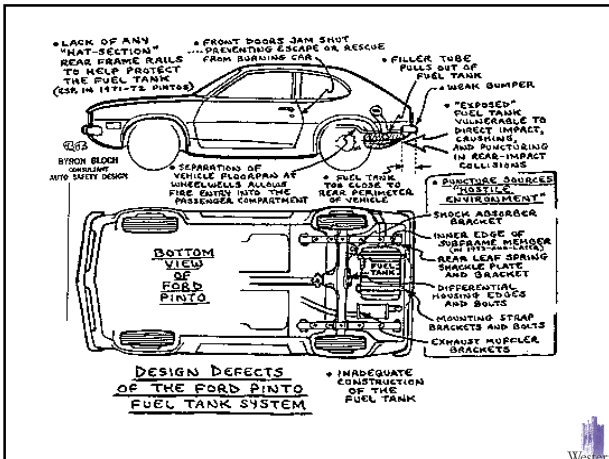
- The Ford Pinto was a subcompact car manufactured by the Ford Motor Company, first introduced on September 11, 1970, and built through the 1980 model year.



Safety design problem

- It was alleged that the car's design allowed its fuel tank to be easily damaged in the event of a rear-end collision which sometimes resulted in deadly fires and explosions.
- Critics argued that the vehicle's lack of a true rear bumper as well as any reinforcing structure between the rear panel and the tank, meant that in certain collisions, the tank would be thrust forward into the differential, which had a number of protruding bolts that could puncture the tank.





Expected Costs of producing the Pinto *with* fuel tank modifications:

- Expected unit sales: 11 million vehicles (includes utility vehicles built on same chassis)
- Modification costs per unit: \$11.00
- **Total Cost: \$121 million**
[= 11,000,000 vehicles x \$11.00 per unit]

Expected Costs of producing the Pinto *without* fuel tank modifications

- Expected accident results (assuming 2100 accidents):
180 burn deaths
180 serious burn injuries
2100 burned out vehicles
- Unit costs of accident results (assuming out of court settlements):
\$200,000 per burn death*
\$67,000 per serious injury
\$700 per burned out vehicle
- **Total Costs: \$49.53 million**
[= (180 deaths x \$200k) + (180 injuries x \$67k) + (2100 vehicles x \$700 per vehicle)]

Empirical assessment of the tort system in the U.S

- In the 1990s, tort cases passed contract cases as the most common form of lawsuit. Most tort cases are handled at the state level – in 1994, 41,000 tort cases were resolved in federal courts, while 378,000 were resolved by state courts in the largest 75 counties alone.
- Among the cases within the 75 largest counties in the U.S.,
 - about 60% had to do with auto accidents
 - about 17% were “premises liability”, for example, slip and falls in restaurants, businesses or government offices
 - about 5% were medical malpractice
 - 3.4% were product liability