

Strategic Judgment Proofing

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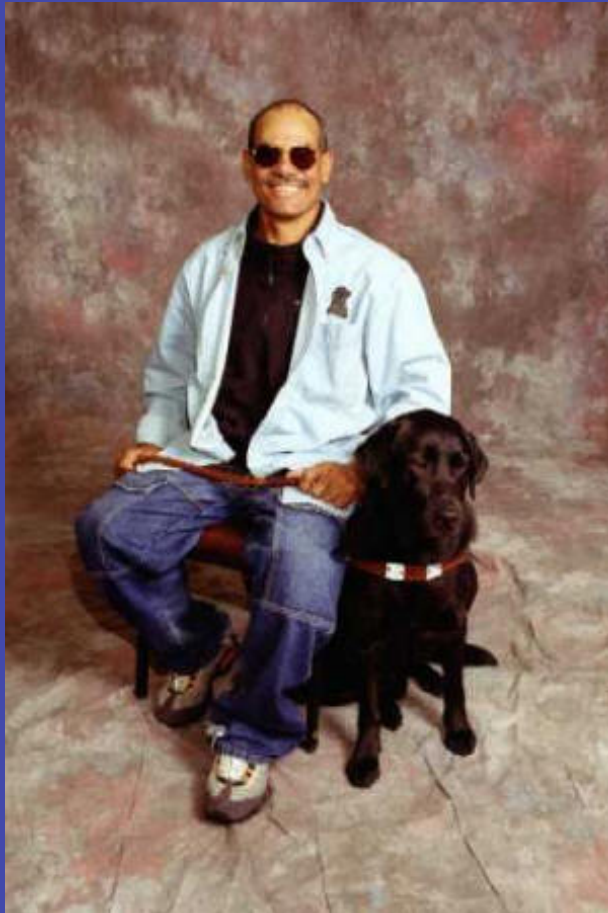
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The Taxi Industry



- There was a 41% rise in taxi and livery accidents in New York City between 1990 and 1998.
- Many of the victims were unable to collect their awards after receiving favorable judgments at trial.
- High profile cases included Edward Shalala (Donna Shalala's cousin) and **Thomas Armstrong**



Mr. Armstrong received only \$10,000 of his \$1,000,000 award.

Why was this happening?

- There were two main reasons. Taxis held minimal insurance and the taxi medallions, worth \$275,000 each, were unreachable by the victims.
 - Taxi medallion owners used the medallions as collateral for loans.

“Even when the rare victim tries to seize a medallion in court, it is common to find that the owner has attached so much debt to it that there is little money left to recover.”
 - Owners of large fleets organize their operations into collections of much smaller taxi companies, owning maybe two or three medallions.
- In the words of Pam Liapakis, former president of the New York State Trial Lawyers Association,
 - **“When one owner can own 100 cars in different corporations, and then mortgage them to protect his assets from accident victims, that’s wrong ... The purpose of the corporate law is being subverted.”**

Background: “Judgment-Proofing” Strategies

- **Asset Segregation**

- Horizontal segregation
- Vertical segregation (parent/subsidiary structures)

- **Secured Debt**

- Tort victims are forced into a subordinated position in bankruptcy.

- **Securitization of Cash Flow**

- The issuance of securities based on future cash flows
- Equipment leases, franchise fees, cash flows from oil and gas reserves.
- “**Bowie Bonds**”

Overview of Paper

- Develop a model where an owner of a business can **strategically judgment proof** itself against tort victims through:
 - The **type of debt** chosen (senior, junior ...).
 - The **level of debt** chosen.
- Explore how these financial decisions affect the owner's subsequent **care to avoid harming others**.
- Evaluate several **public policy responses**, including:
 - Changing **bankruptcy priority rules**.
 - Extending **liability to lenders**.
 - “**Limited Seniority Rule**.”

The Model

Consider an owner-managed firm.

v the cash flow from the project; *deterministic*.

$k < v$ the outside capital required to finance the project.

The capital market is competitive.

The risk-free rate of interest is normalized to zero.

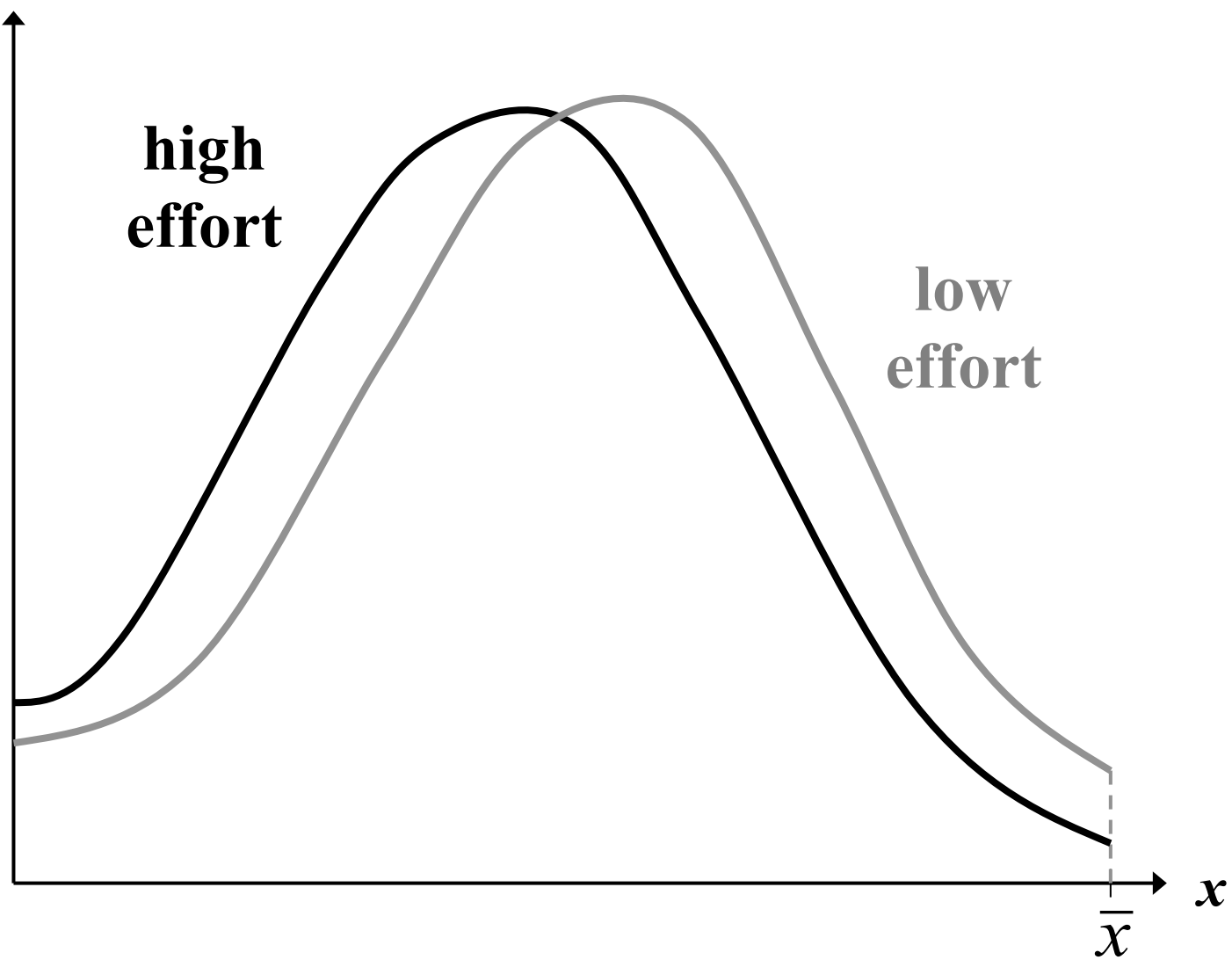
e the effort of the owner-manager (non-contractible).

$c(e)$ the owner-manager's (non-pecuniary) cost of effort. $c(0) = 0$,
 $c'(e) \geq 0$, $c''(e) > 0$, $c'(0) = 0$, $c'(\infty) = \infty$.

x the harm to society, $x \in [0, X]$.

The harm is distributed according to $f(x|e)$, $F(x|e)$
satisfying the monotone likelihood ratio property (MLRP)
in $(x, -e)$.

MLRP implies $F_e(x|e) > 0$.



The Timing

- $T = 0$ Firm offers a contract (K, r) to a lender.
The lender accepts or rejects.
- $T = 1$ Firm chooses effort e .
- $T = 1.5$ The harm to the tort victims, x , is realized.
- $T = 2$ The assets of the firm are liquidated, according to APR:
- Senior Debtholders
 - Tort Victims
 - Junior Debtholders
 - Shareholders (Outside & Inside Equity).

A Simple Example

- An **Entrepreneur** needs to **raise capital** to finance a project.
 - He requires **\$300** from outside investors.
 - The capital market is **perfectly competitive** with a **risk-free rate of 0%**.
- If the project is undertaken, there will be an **additional cash flow of \$200**.
- The project is risky – it may harm other people.
 - **10% probability** of an accident.
 - **\$1,000 in damages**.
 - The business is **judgment proof**: $\$1,000 > \$300 + \$200$.

The Entrepreneur Prefers Senior Debt

- **SENIOR DEBT.**

- In the event of an accident, the debtholders are paid first.
- The Debtholders require an **interest rate of 0%.**
- The Entrepreneur's expected profit is **\$180.**

$$90\% (\$500 - \$300) + 10\% (\$0) = \$180.$$

- **JUNIOR DEBT.**

- In the event of an accident, the tort victims are paid first and the junior debtholders receive nothing.
- The Debtholders would require an **interest rate of 11%.**

$$90\% (\$333) + 10\% (\$0) = \$300.$$

- The Entrepreneur's expected profit is **\$150.**

$$90\% (\$500 - \$333) + 10\% (\$0) = \$150.$$

Precautions

- Suppose that the Entrepreneur can affect the probability of an accident.
 - If he takes **no precautions**, the probability is **20%**.
 - If he **exerts effort** – which personally costs the entrepreneur **\$18** – the probability falls to **10%**.
- **Will the Entrepreneur take precautions?**
- The answer hinges on the type of debt issued – whether it is junior or senior

Senior Debt Leads to Higher Effort

- **SENIOR DEBT.**

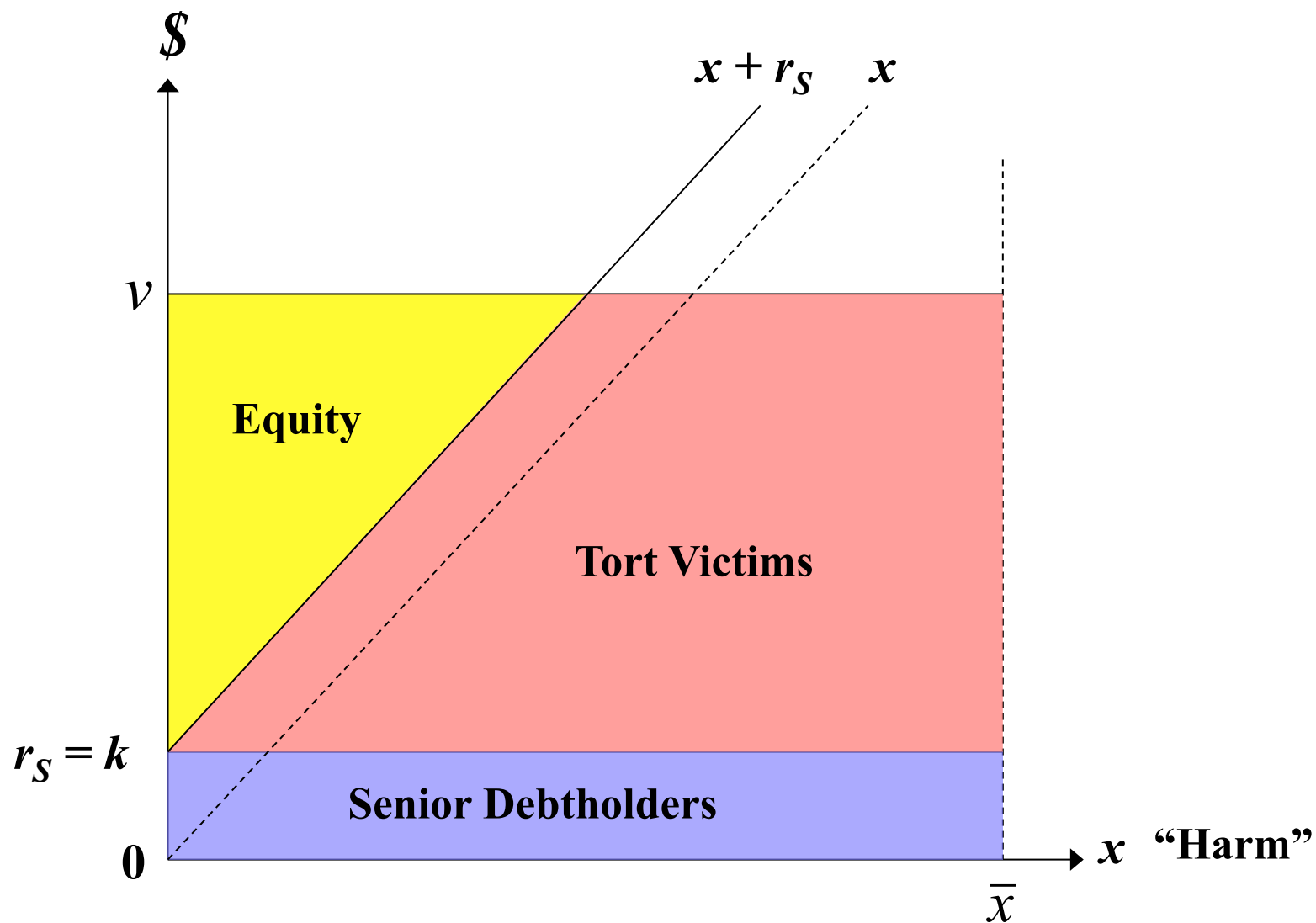
- Recall the interest rate is **0%**.
- If there is **no accident**, the Entrepreneur gets $\$500 - \$300 = \$200$.
- His **marginal benefit of effort**: $(20\% - 10\%)(\$200) = \mathbf{\$20}$.
- He puts in high effort because the marginal benefit exceeds the marginal cost, \$18.

- **JUNIOR DEBT.**

- The interest rate must be higher; suppose it is **11%**.
- If there is **no accident**, the Entrepreneur gets $\$500 - \$333 = \$167$.
- His **marginal benefit of effort**: $(20\% - 10\%)(\$167) = \mathbf{\$16.70}$.
- He will not put in high effort.

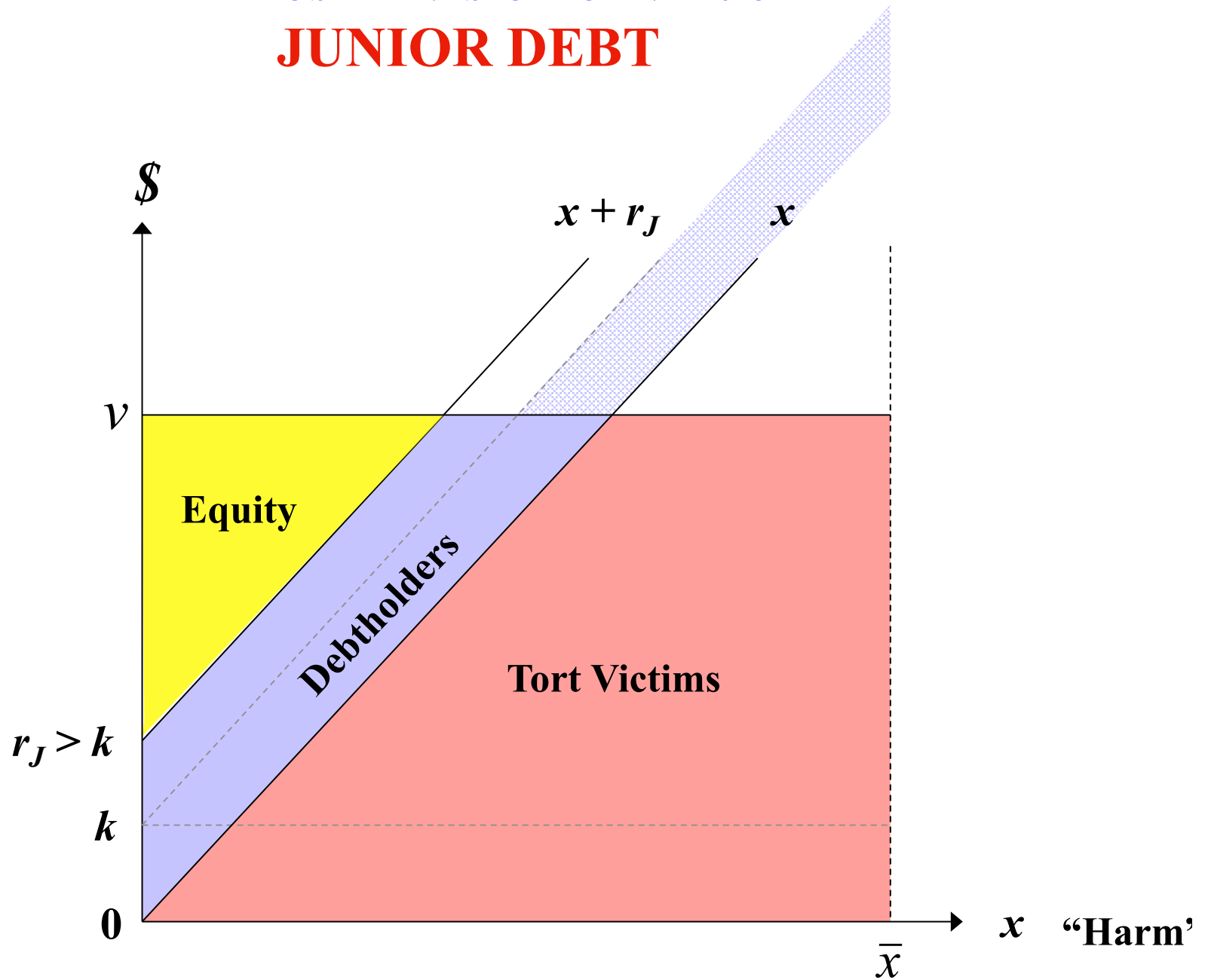
Ex Post Division of Value

SENIOR DEBT



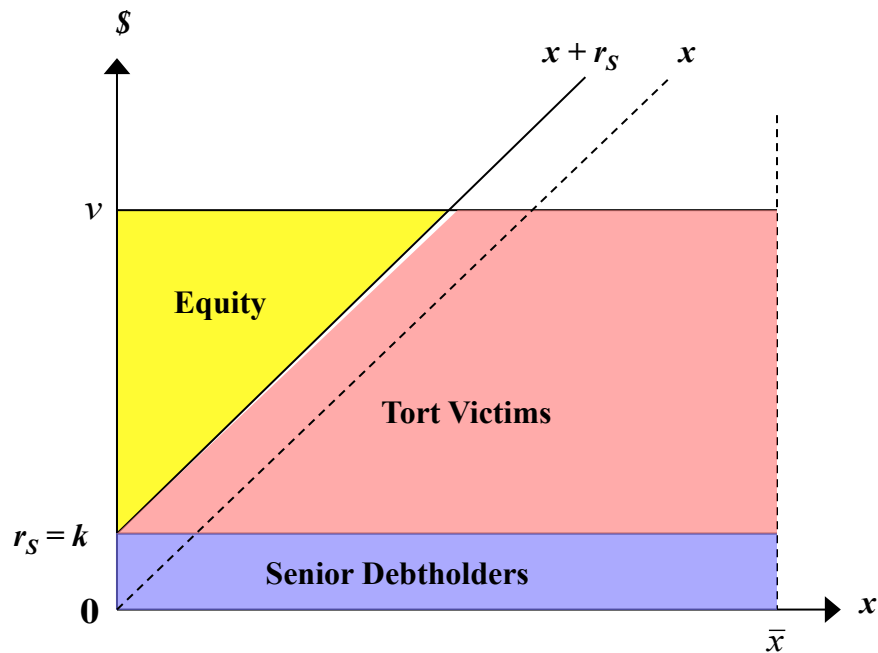
Ex Post Division of Value

JUNIOR DEBT

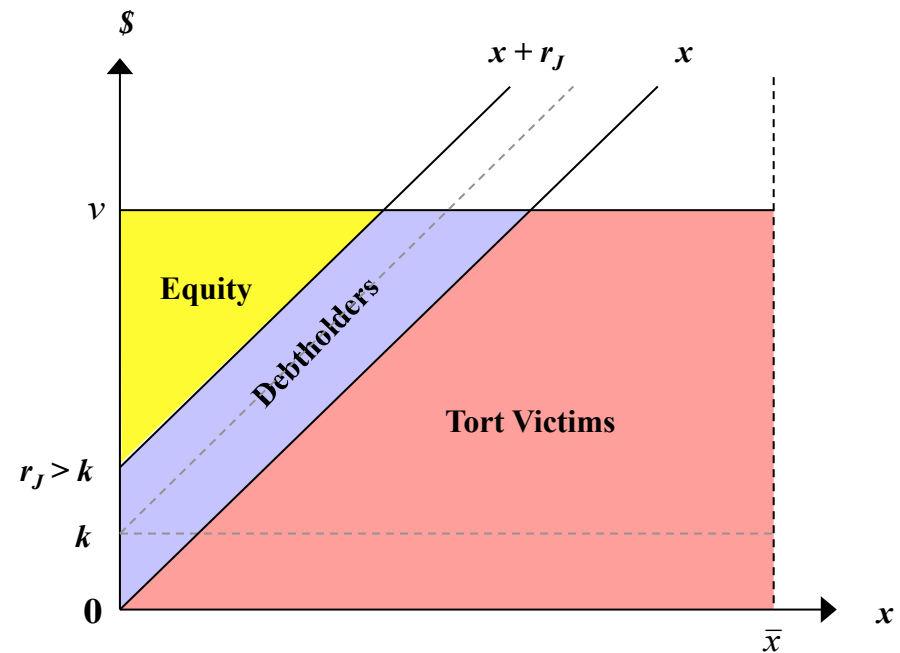


.... Holding the level of borrowing fixed,
Senior Debt gives better incentives for care!

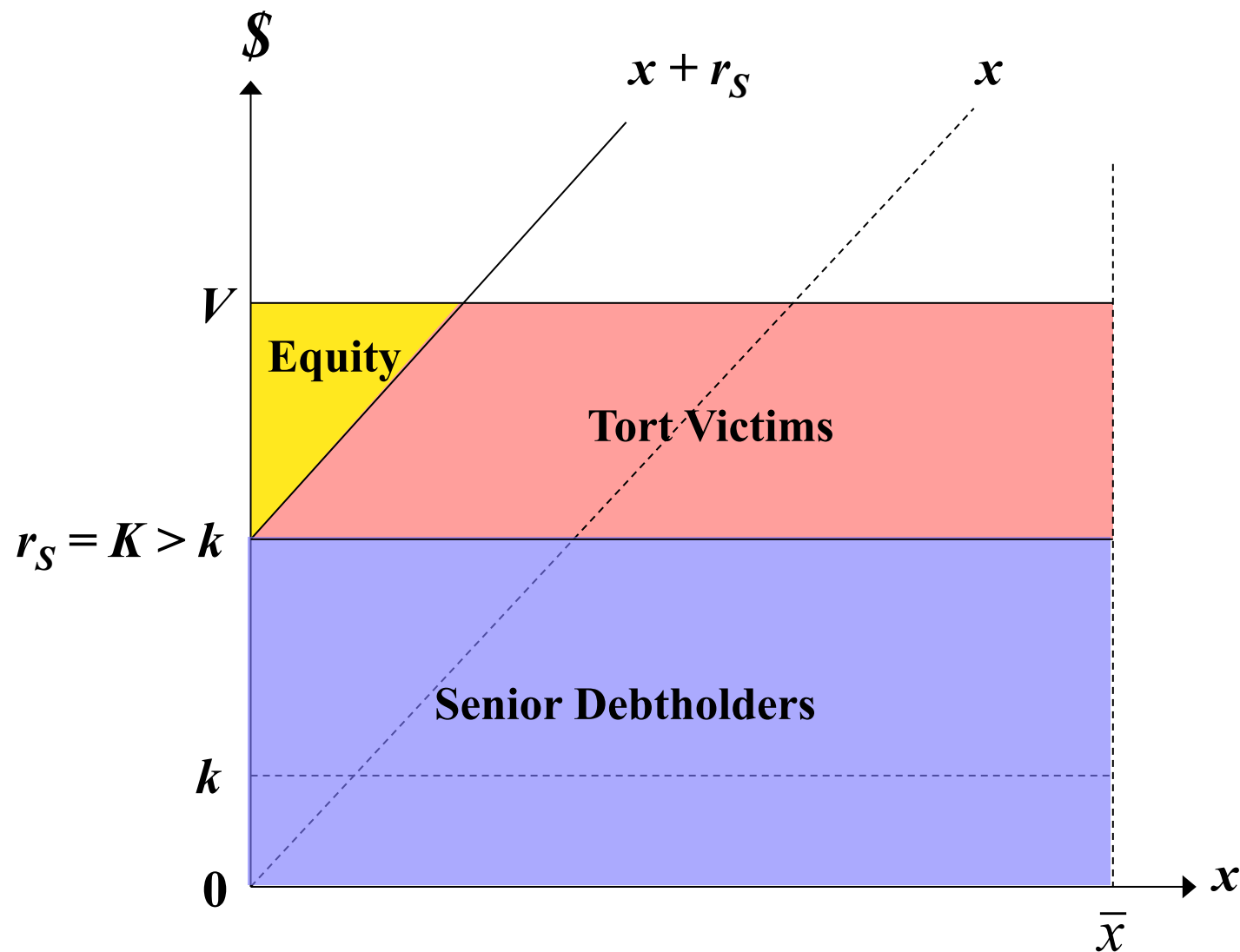
SENIOR DEBT



JUNIOR DEBT



... but with Senior Debt the firm over-leverages,
borrowing “too much”:



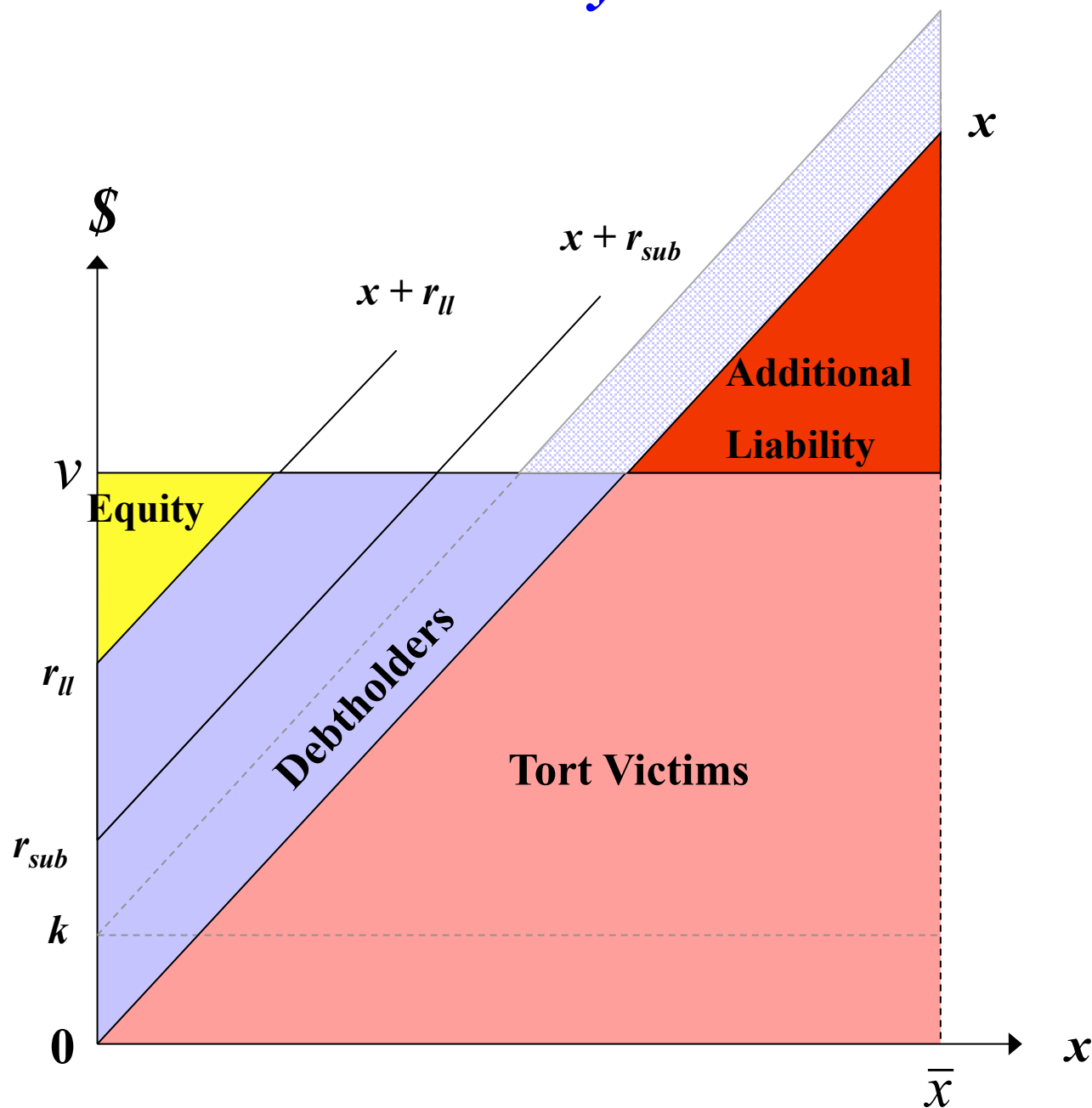
Policy #1: Debt Subordination

- Suppose that, in the event of bankruptcy, that the debt will be subordinated to the tort claim.
- Relative to the unregulated case, this can be good or bad. There is a **tradeoff**.
- Holding the level of borrowing fixed, this **worsens the entrepreneur's incentives**.
 - Junior debtholders require a higher interest rate.
 - The Entrepreneur has “less to lose” and therefore puts in less effort.
 - This **reduces social welfare**.
- The **overleveraging incentive disappears**.
 - The Entrepreneur will only borrow the necessary amount of money.
 - This leads to less wasteful spending and higher effort.
 - This tends to **raise social welfare**.

Policy #2: Lender Liability

- Suppose that the Tort Victims are made whole. In the event of bankruptcy, the lender is held responsible for the **entire shortfall in damages not covered by the Firm**.
- Lender Liability **performs worse** than Debt Subordination.
- As with Debt Subordination, the **over-leveraging incentive disappears**.
- But holding the level of borrowing fixed, Lender Liability provides even **worse incentives** for the entrepreneur than Debt Subordination.
 - With debt subordination, the lender could lose the \$300 capital investment. With lender liability, the lender is on the line for the entire \$1,000 harm to the tort victims!
 - The **interest rate is even higher** under lender liability.

Lender Liability – cont.



Policy #3: Limited Seniority Rule

- Under the Limited Seniority Rule,
 - The seniority of debt is honored only up to a “**justifiable limit.**”
 - Any **borrowing beyond this limit is automatically treated as junior** to the tort claim.
- This rule dominates the previously discussed policies. In fact, it achieves the “**second-best outcome.**”
 - The firm borrows no more than the necessary amount.
 - The firm finances the project with senior debt.
 - Both lead to a more desirable level of effort.

Some Final Words

- This paper shows that the *ex post* protection of Tort Victim's interests can sometimes lead to more accidents, not fewer.
- **Shareholder liability.**
- **Lender monitoring.**
 - Junior debtholders have greater incentives to monitor the entrepreneur to prevent accidents. Bebchuk & Fried (1996, 1997).
- **Activity levels.**
 - Also, our model assumed that the project “should” be pursued. Many projects shouldn't.
 - Debt subordination (and/or lender liability) raises the costs of doing business.
- **Empirical work** to sort out the effects.
- **Other instruments:** mandatory insurance, punitive damages, etc.