

The Value of Life and Priorities for Public Policy

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How should we think about value of risks to life?

- Early studies – present value of lost earnings.
 - ◆ Easy to calculate
 - ◆ Used in court cases
- Benefits principle for all policies – society's willingness to pay for the benefit.
- Benefit is risk reduction – risk/money tradeoff.

Searching for the Value of Life

- \$7 million consensus estimate
- Not one number
- Heterogeneous preferences
- Note income variation
- Different samples
- Different methodologies

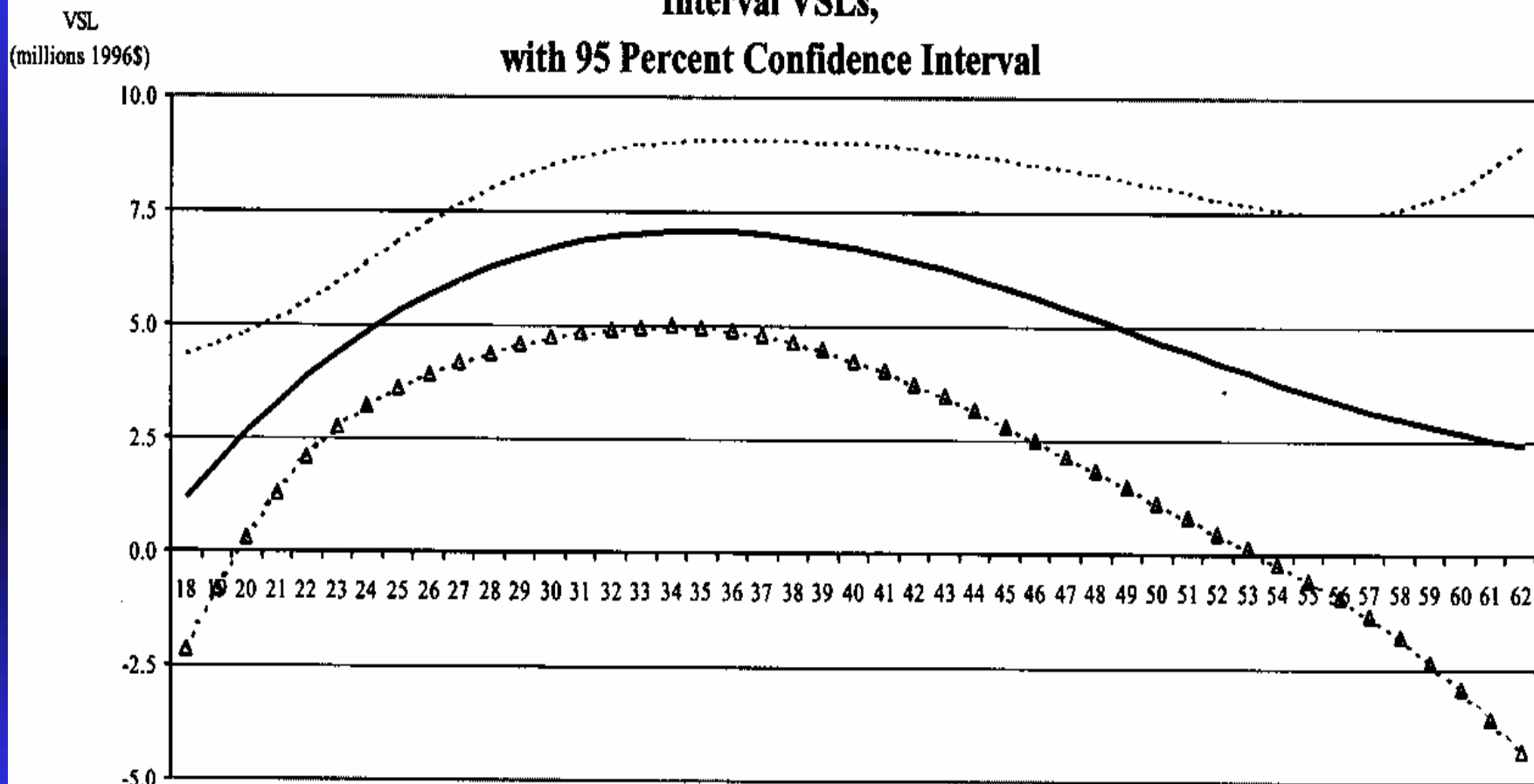
Valuing Life for Policy

- Present value or willingness to pay?
- 1982 OSHA-OMB debate over hazard communication regulation
- “Life too sacred to value” led to underestimation of value

Age Effects

- Seniors on sale, 37% off
- Young people more highly valued?
- Quantity of life
- Value per discounted life year
- Quality of life
- Really a minor issue?

Figure 6. Value of a Statistical Life, Minimum Distance Estimator Based on 1-Year Interval VSLs, with 95 Percent Confidence Interval



Notes: First stage based on 45 year-specific hedonic wage regressions to construct age-specific VSLs. Second stage based on fitting VSLs to a third-order polynomial in age.

Table 5. Age Group Effects on Clear Skies Initiative Benefits

Age Group	Reduced Annual Fatalities in 2010	Benefits of Reduced Mortality (\$ billions undiscounted)		
		Constant Value of Life	Value with Senior Adjusted	Consumption-Adjusted Value of Life
Base Estimates – Long-Term Exposure:				
Adults, 18-64	1,900	11.6	11.6	11.6
Adults, 65 and older	6,000	36.6	23.1	37.1
Alternative Estimate – Short-Term Exposure:				
Children, 0-17	30	0.2	0.2	0.1
Adults, 18-64	1,100	6.7	6.7	6.7
Adults, 65 and older	3,600	21.9	14.7	22.3

Note: The reduced annual fatalities figures are from the U.S. EPA (2003), Table 16. The 37 percent senior discount is from the U.S. EPA (2002), p. 35, and the \$6.1 million figure per life is from the U.S. EPA (2003), p. 26. The consumption-adjusted benefit estimates are based on the relative valuations implied by Appendix Table 3, without industry controls, with total consumption, IV, applied to the \$6.1 million value of life estimates for the working age population.

Should Income Levels Matter?

- Yes for lost earnings approach.
- Willingness to pay increases with income.
- Provide policies poor don't value?
- Airline safety – should we regulate it more stringently than highway safety?

How Could the Courts Use Correctly?

- Value of fatalities prevented by greater product safety.
- Compare to costs of design change.
- If benefits below costs company wasn't negligent in setting risk-cost balance.