

Chapter Eight

Compensating Wage Differentials



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Learning Objectives

- Relative Pay Rates Across Jobs
- Different Wages for Identical Skills
- Safety Regulation
- Adequate Compensation for Unpleasant or Risky Jobs

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Theory of Compensating Wages

Factors affecting compensation for wages:

- Agreeableness/disagreeableness of job
- Ease/difficulty and cost of learning job
- Turnover in a particular job
- Degree of power and trust held
- Probability or improbability of success in job
- Safety risks involved in performing the job

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Compensating Wages and Safety

Isoprofit Schedule (IP):

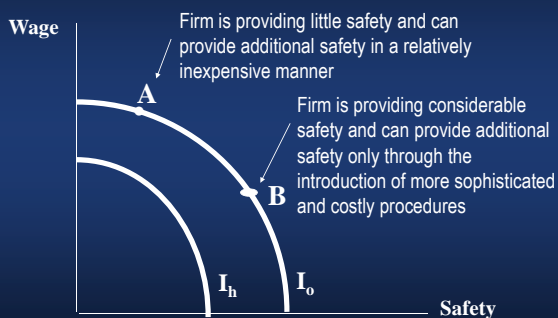
- Combinations of wages and safety that the firm can provide and maintain the same level of profit
- IP curve exhibits a diminishing marginal rate of transformation between wages and safety
- Lower curves imply higher levels of profits

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Isoprofit Schedule



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Different Firms with Different Safety Technologies

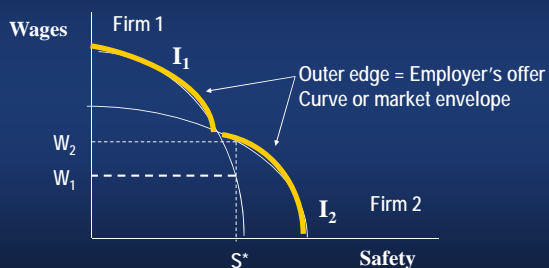
- Different firms have different abilities to provide safety at a given cost and, hence, there are different isoprofit curves for the same level of profit for different firms.

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Different Firms with Different Safety Technologies



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Individual's Preferences

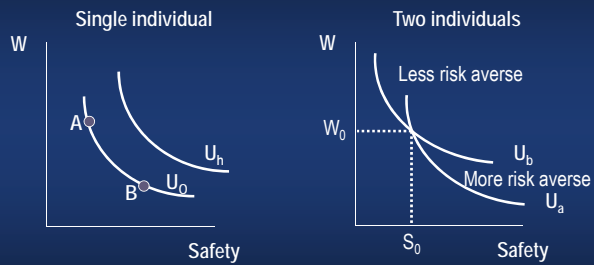
- Illustrated by an iso-utility (indifference) curve
 - combinations of safety and wage that yield the same level of utility
- Different risk preferences
- May be willing to give up safety for a **compensating risk premium**

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Worker Indifference Curves



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Equilibrium with Single Firm and a Single Individual

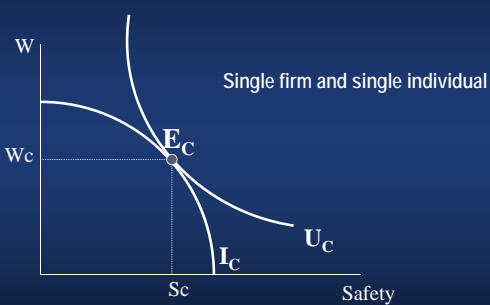
- Tangency between the iso-utility curve and the isoprofit curve
- Yields the optimal wage and safety level

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Market Equilibrium



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Equilibrium with Many Firms

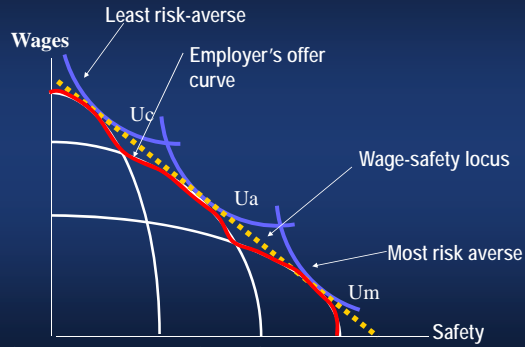
- Assuming perfect competition
- Individuals will sort themselves into firms of different risks
 - receive compensating wages
- Wage-safety locus
 - various equilibrium combinations of wages and safety

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Many Firms and Many Individuals



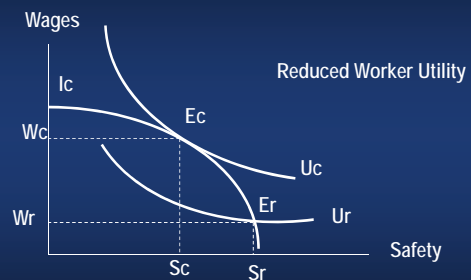
Characteristics of the Wage-Safety Locus

- Slope is negative
 - compensating wages are required for reductions in safety
- The slope can change for different levels of safety
- Determined by the workers' preferences and the firms technology for safety

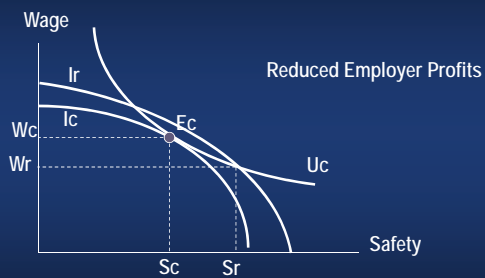
Effect of Safety Regulation

- Perfectly Competitive Markets
 - regulation requiring an increased level of safety would cause one or both parties to be worse off

Response to Safety Standard



Response to Safety Standard

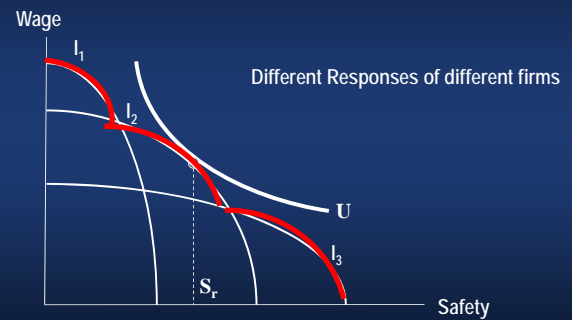


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Response to Safety Standards



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Imperfect Information

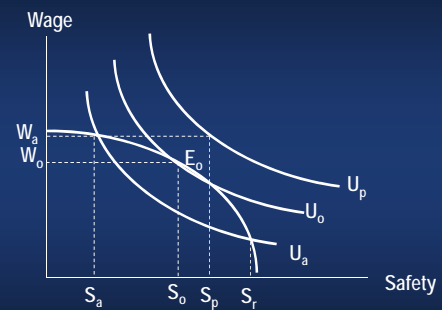
- If a worker misperceives the utility, then the imposed safety standards could improve workers utility without making employers worse off
- Providing parties with correct information would also lead to optimal amounts of safety

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Effect of Imperfect Information



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Rationale for Regulation

- Information is not perfect
- Competition may not prevail
- Worker does not bear all the cost of an accident
- Social opinion
- Worker may prefer a safer environment

Summary

- Wage differentials in an integrated labour market
- Wage differences related to factors other than productivity aspects of jobs
- A model of compensating wage differentials
- Work safety and workers attitude towards work place risk
- Market wage-safety locus
- The impact of government regulation of work place safety

End of Chapter Eight