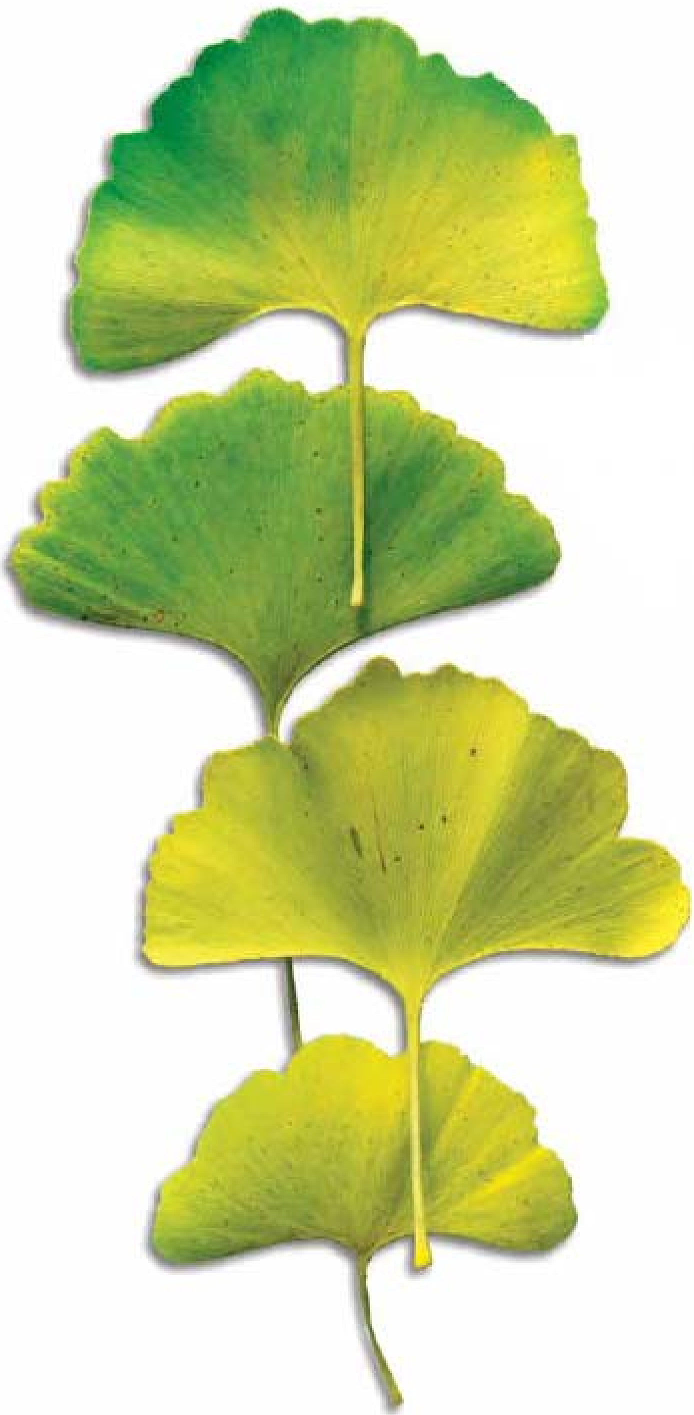


Chapter 14

Labor

Chapter Outline

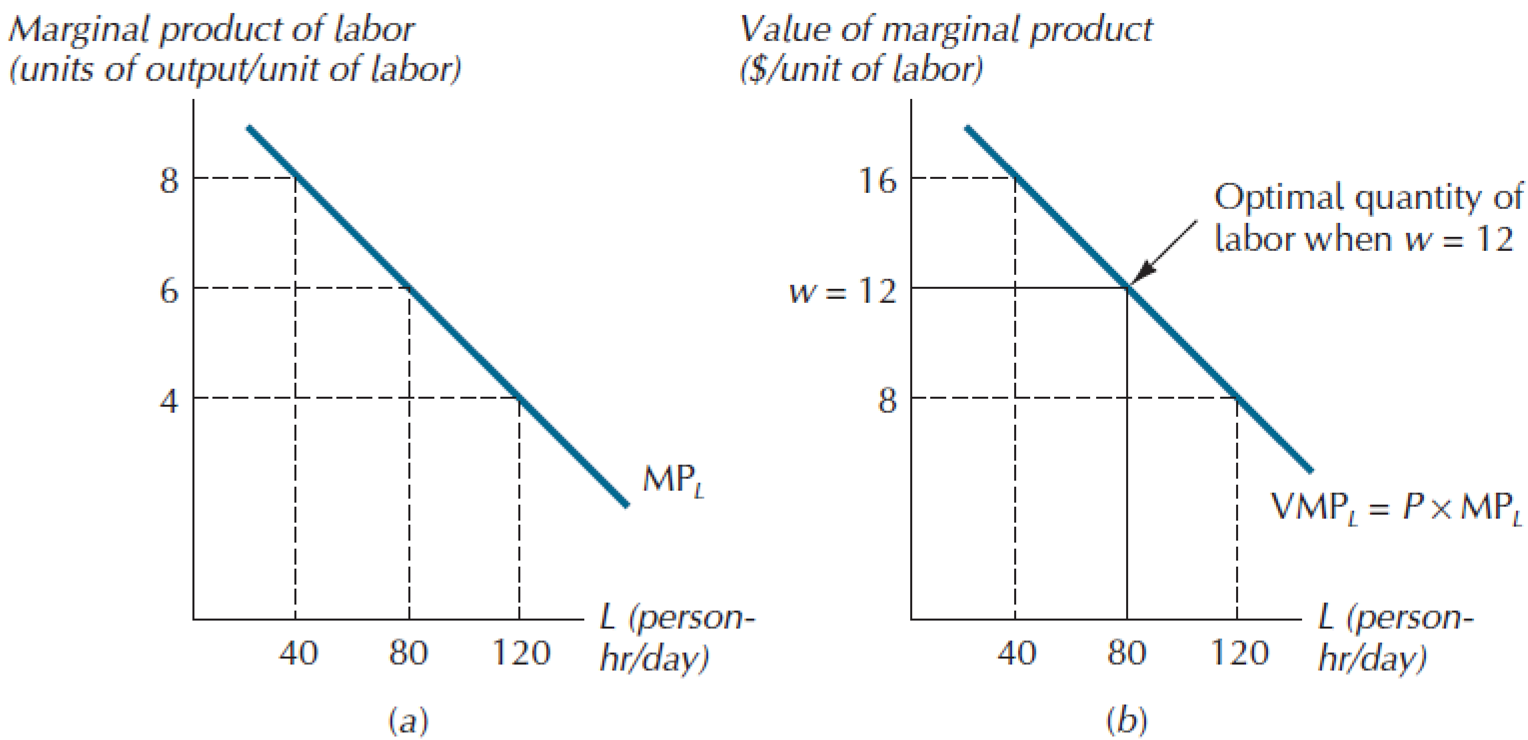
- The Perfectly Competitive Firm's Short-Run Demand for Labor
- The Perfectly Competitive Firm's Long-Run Demand for Labor
- The Market Demand Curve for Labor
- An Imperfect Competitor's Demand for Labor
- The Supply of Labor
- The Noneconomist's Reaction to the Labor Supply Model
- The Market Supply Curve
- Monopsony
- Minimum Wage Laws
- Labor Unions
- Discrimination in the Labor Market
- Statistical Discrimination
- The Internal Wage Structure
- Winner-Take-All Markets

A Perfectly Competitive Firm's Demand for Labor

- ***Value of marginal product (VMP):*** the value, at current market price, of the extra output produced by an additional unit of input.

- The hiring rule for the firm is to choose that amount of labor for which the wage rate is equal to the VMP

Figure 14.1: The Competitive Firm's Short-Run Demand for Labor



Labor Demand in the Long-Run

- The firm's demand for labor will tend to be more elastic the more elastic the demand is for its product.

- The firm's demand for labor will tend to be more elastic the more it is able to substitute the services of labor for those of other inputs.

Figure 14.2: Short and Long-Run Demand Curves for Labor

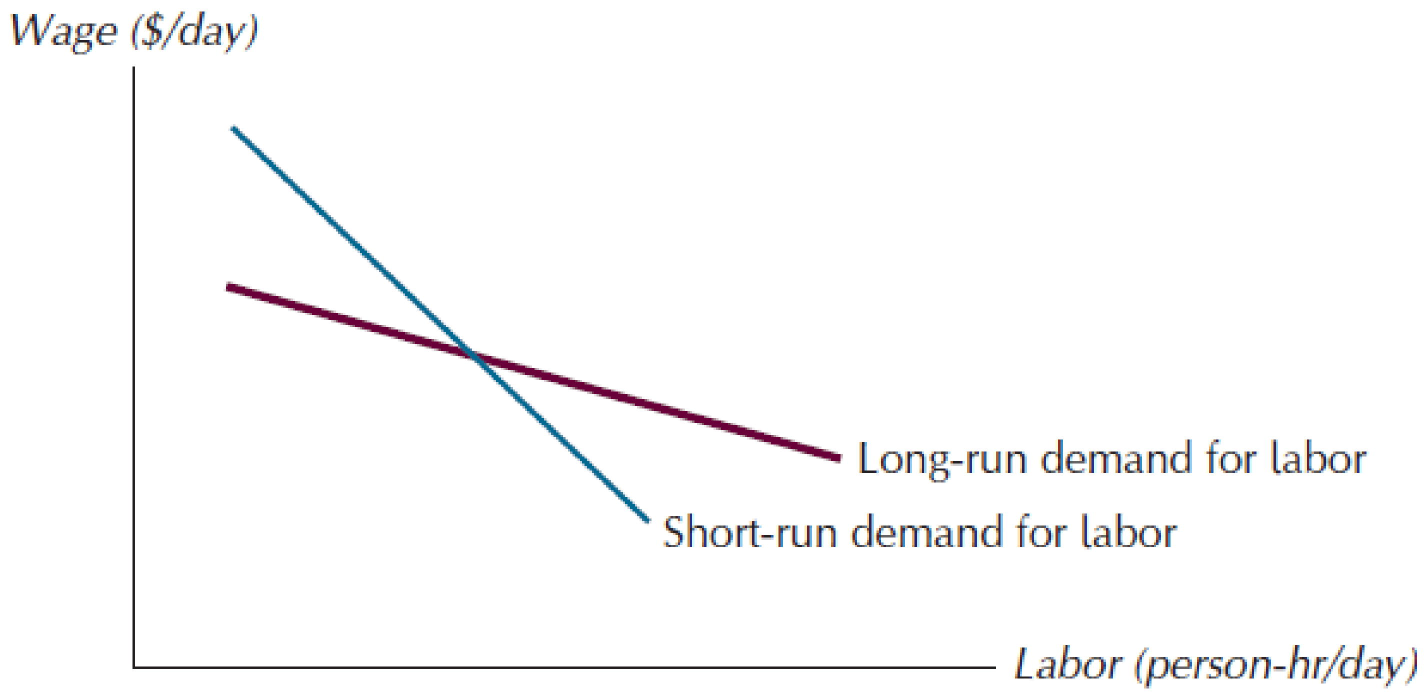
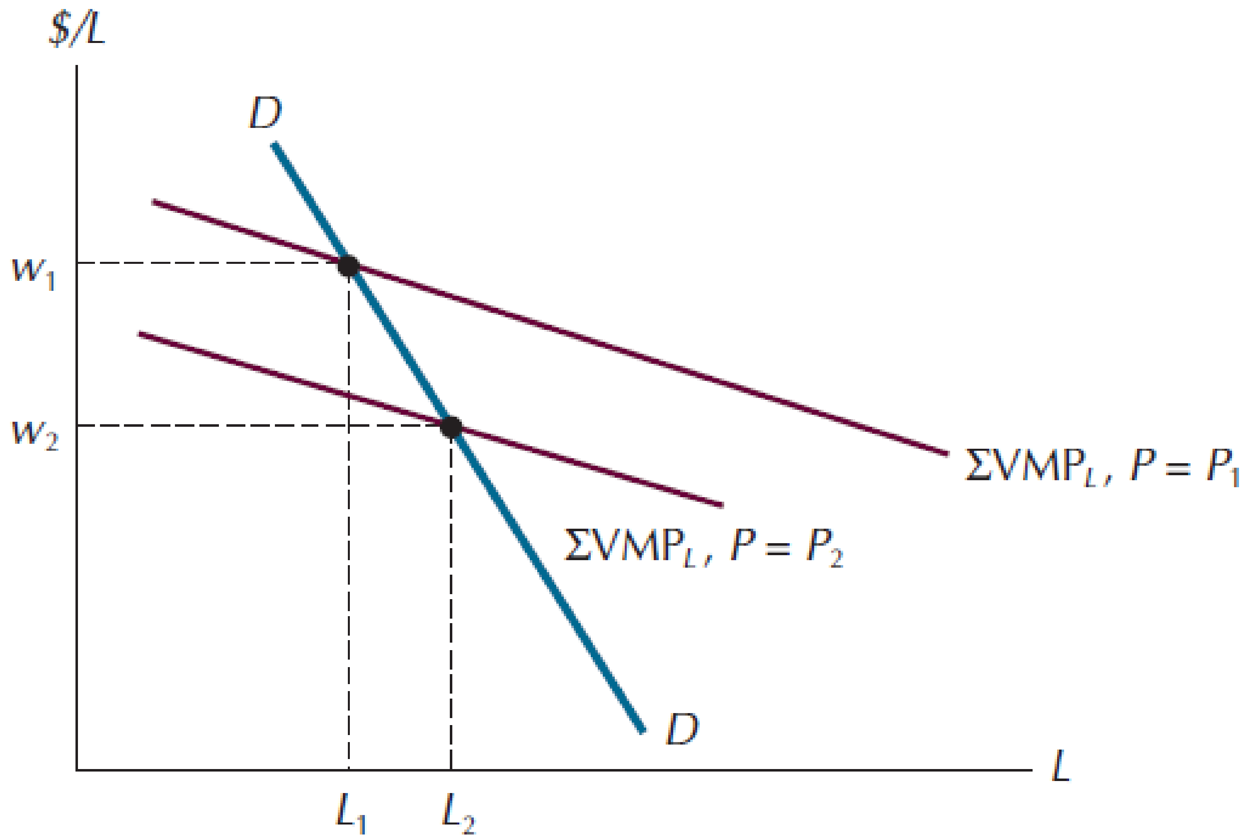


Figure 14.3: The Market Demand Curve for Labor



An Imperfect Competitor's Demand for Labor

- ***Marginal revenue product (MRP):*** the amount by which total revenue increases with the employment of an additional unit of input.

- The firm will hire that quantity for which the wage rate and MRP^L are equal.

The Supply Of Labor

- ***Leisure activities:*** which here include play, sleep, eating, and any other activity besides paid work in the labor market.

- The choice is between two goods we may call "income" and "leisure." As in the standard consumer choice problem, the individual is assumed to have preferences over the two goods that can be summarized in the form of an indifference map.

Figure 14.4: The Optimal Choice of Leisure and Income

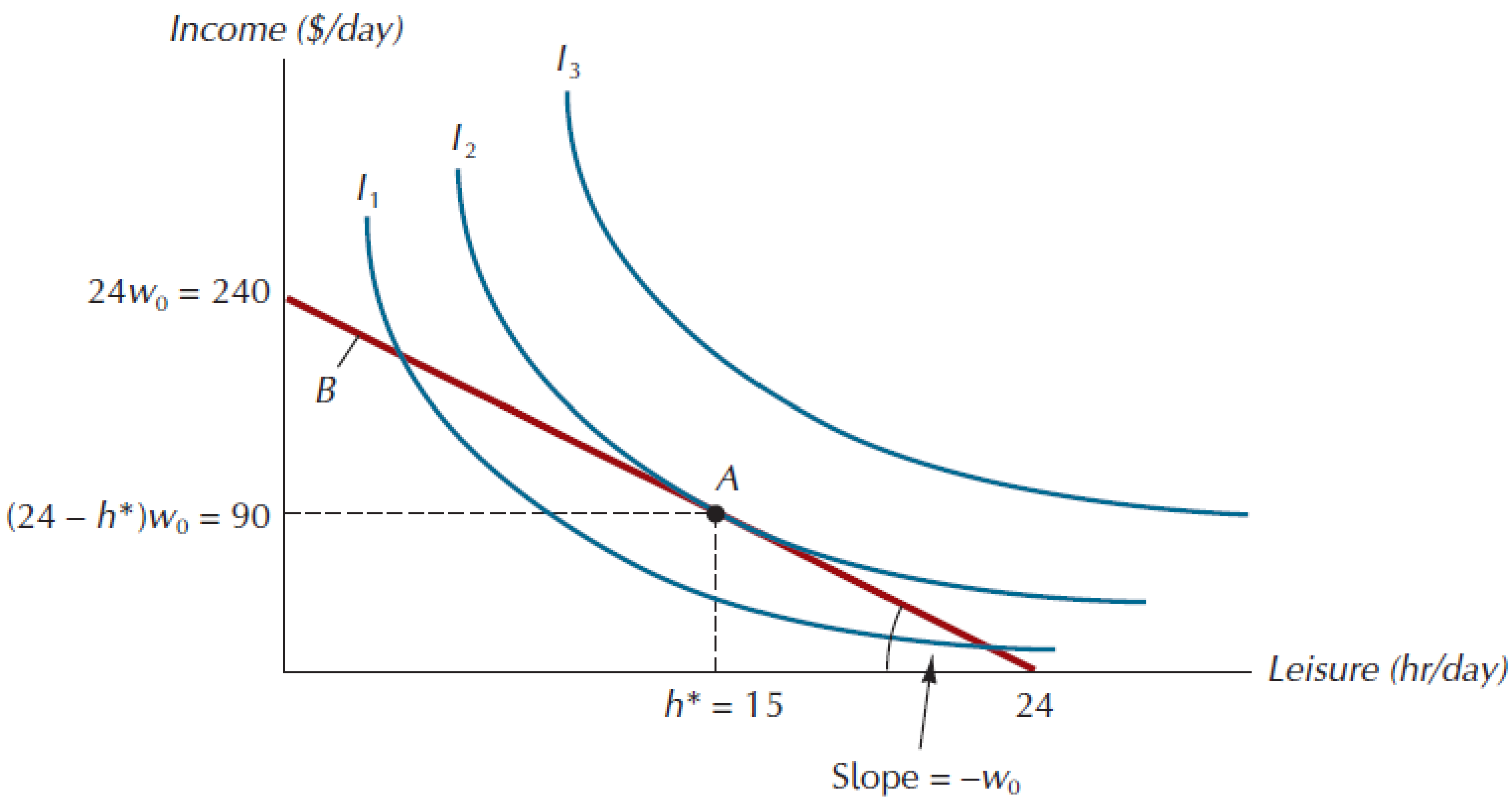


Figure 14.5: Optimal Leisure Choices for Different Wage Rates

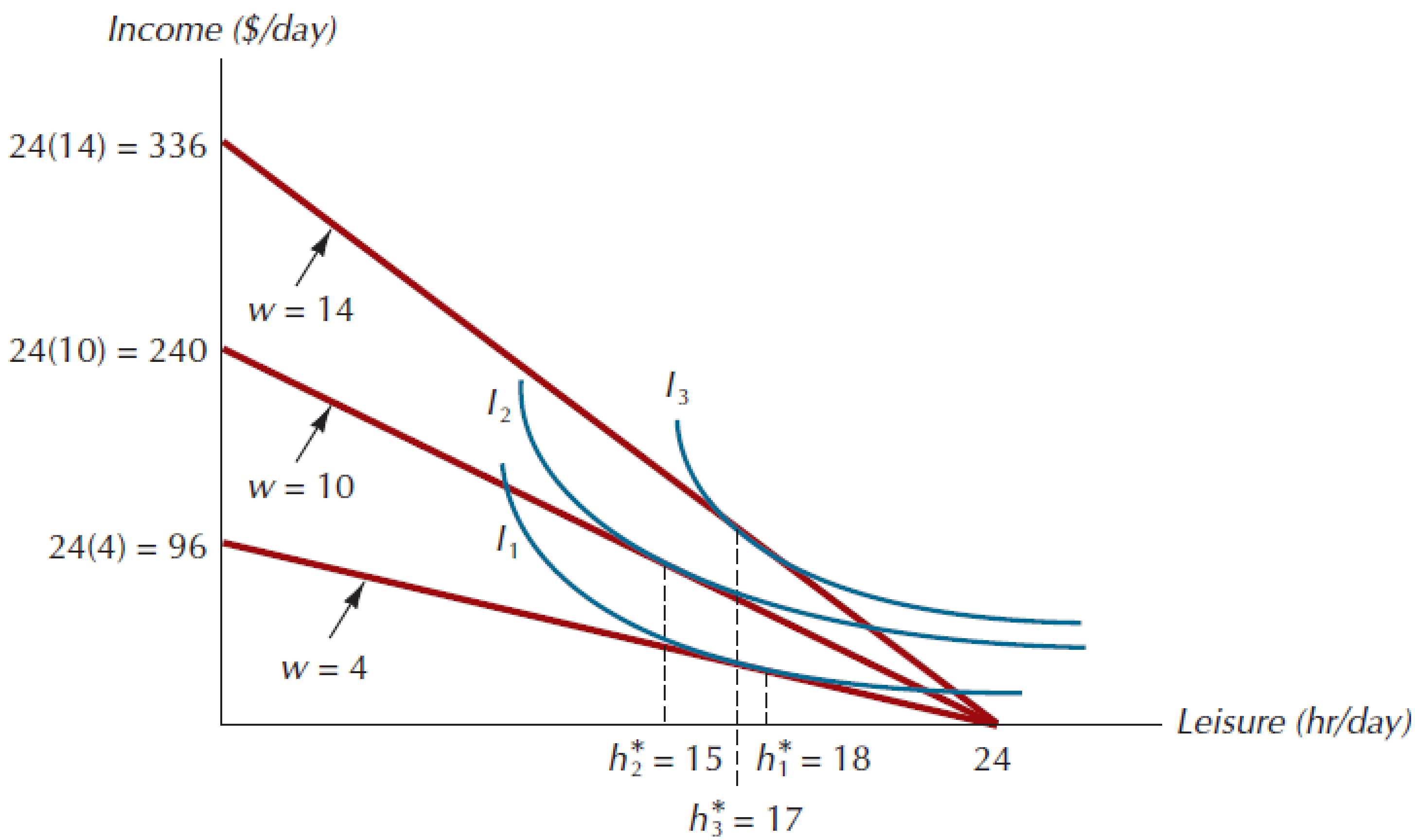


Figure 14.6: The Labor Supply Curve for the *i*th Worker

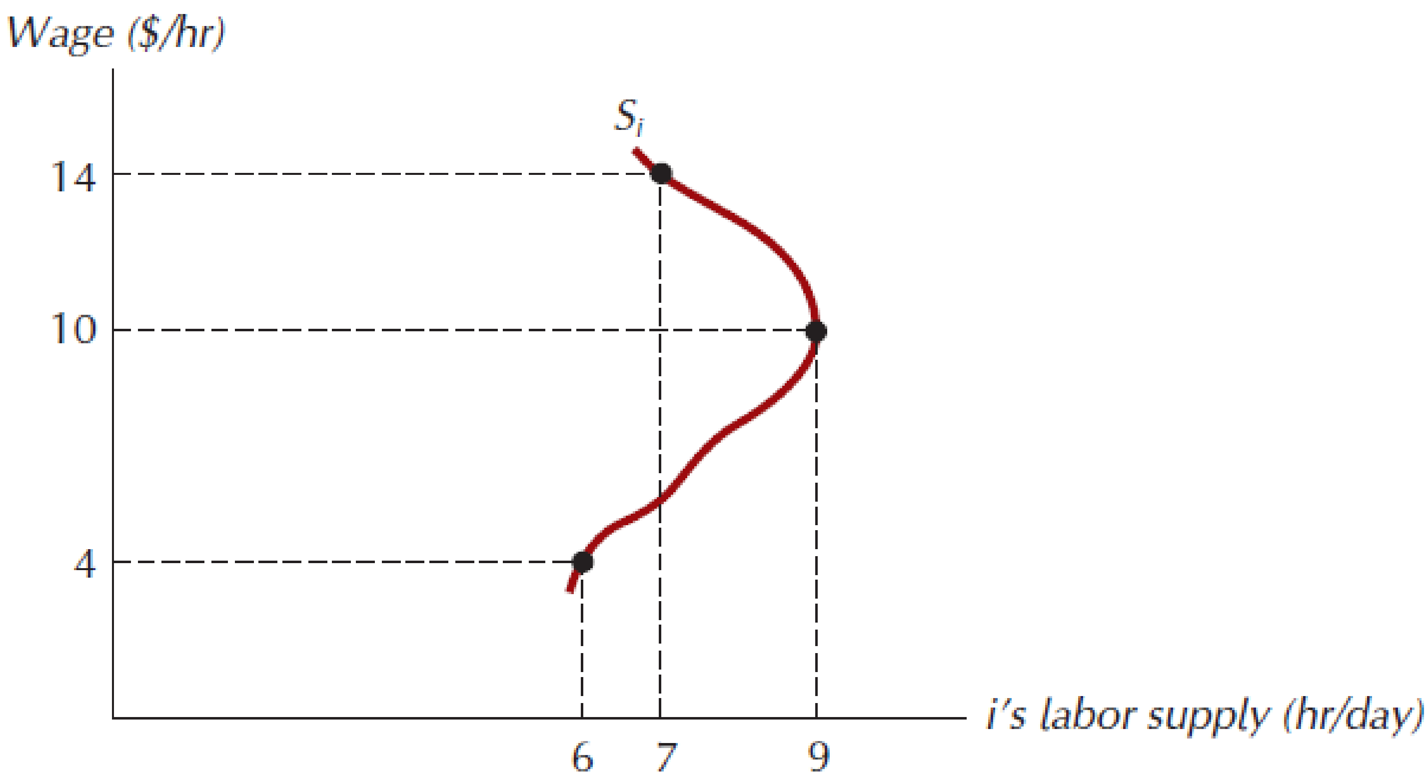


Figure 14.7: The Labor Supply Curve for a Worker Seeking a Target Level of Income

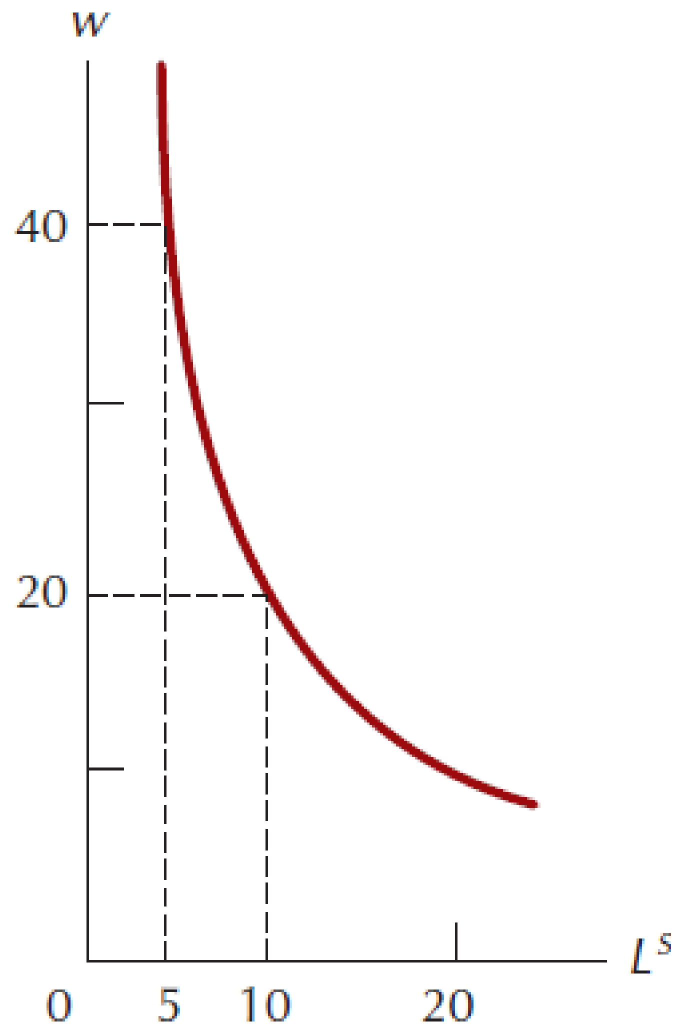


Figure 14.8: When Leisure and Income are Perfect Complements

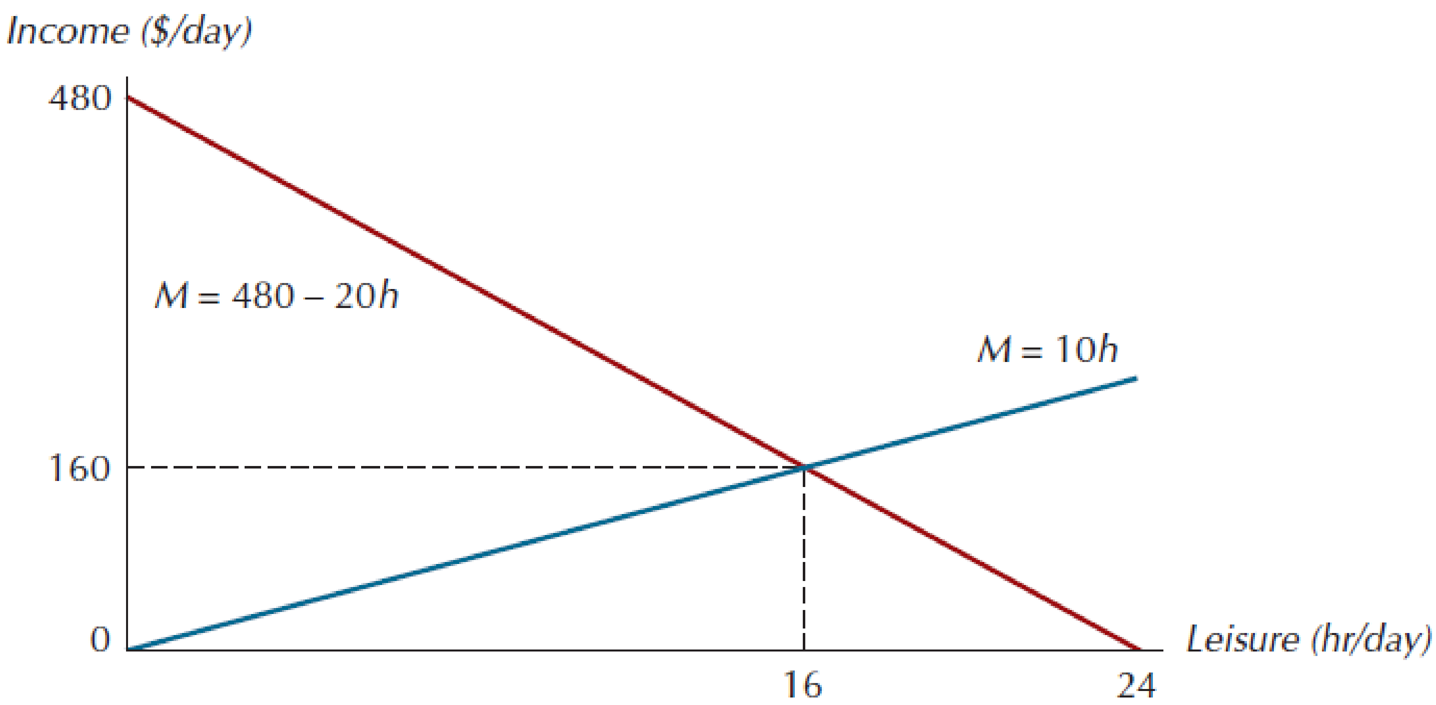
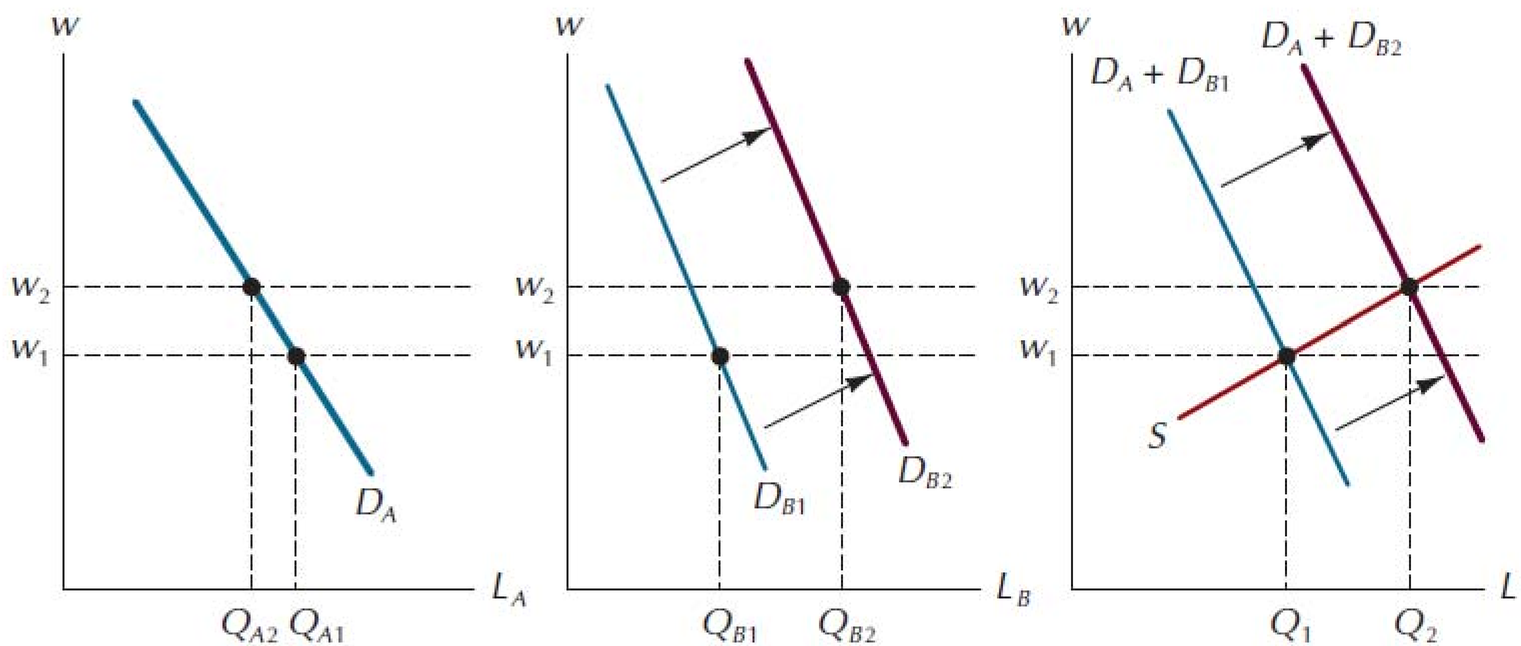


Figure 14.9: An Increase in Demand by One Category of Employer



Monopsony

- ***Average factor cost (AFC):*** another name for the supply curve for an input.

- ***Total factor cost (TFC):*** the product of the employment level of an input and its average factor cost.

- ***Marginal factor cost (MFC):*** the amount by which total factor cost changes with the employment of an additional unit of input.

Monopsony

- ***The optimal level of employment for a monopsonist is the level for which MFC and the demand for labor are equal.***
  - For the monopsony firm wages will be lower than under competition.

Figure 14.10: Average and Marginal Factor Cost

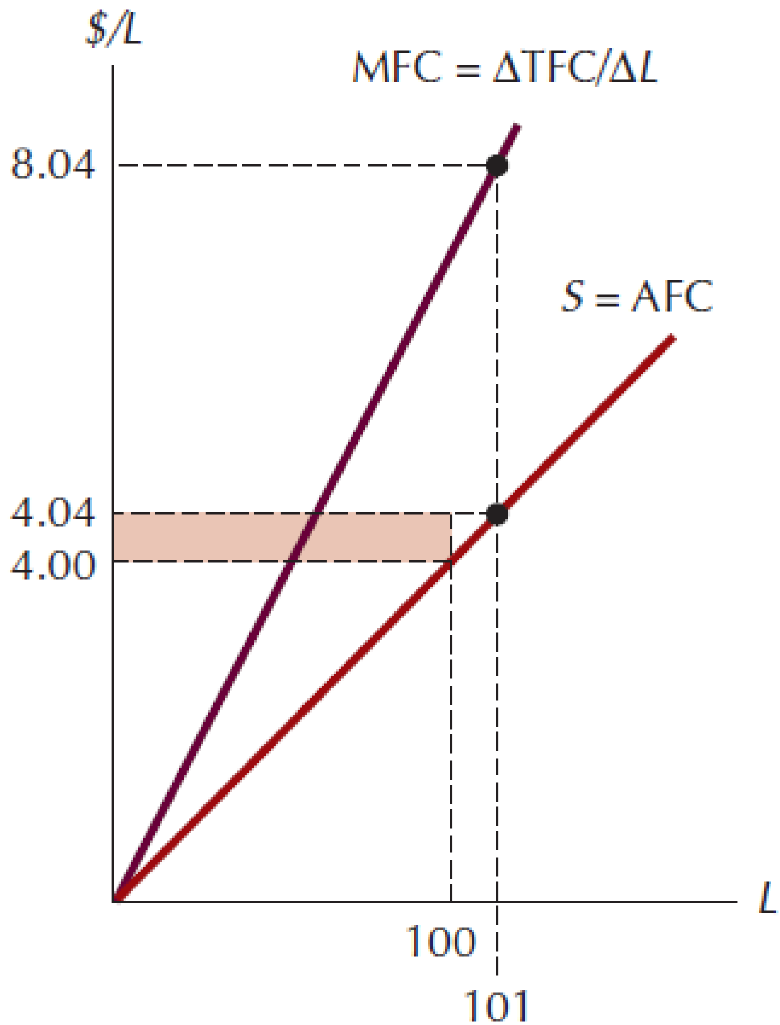


Figure 14.11: The Profit-Maximizing Wage and Employment Levels for a Monopsonist

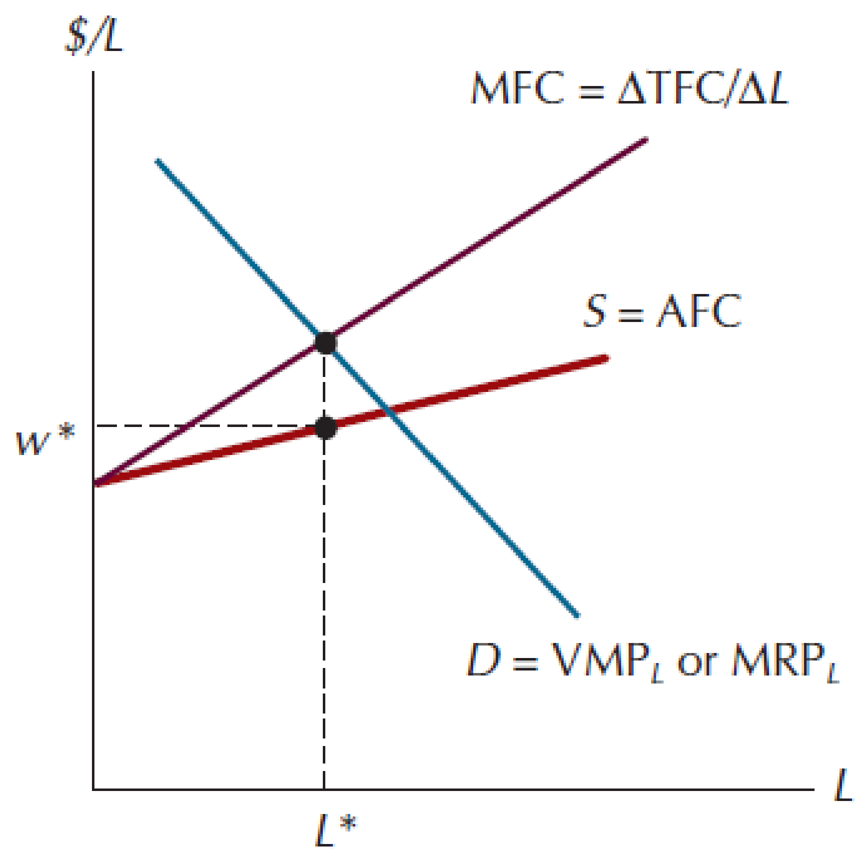
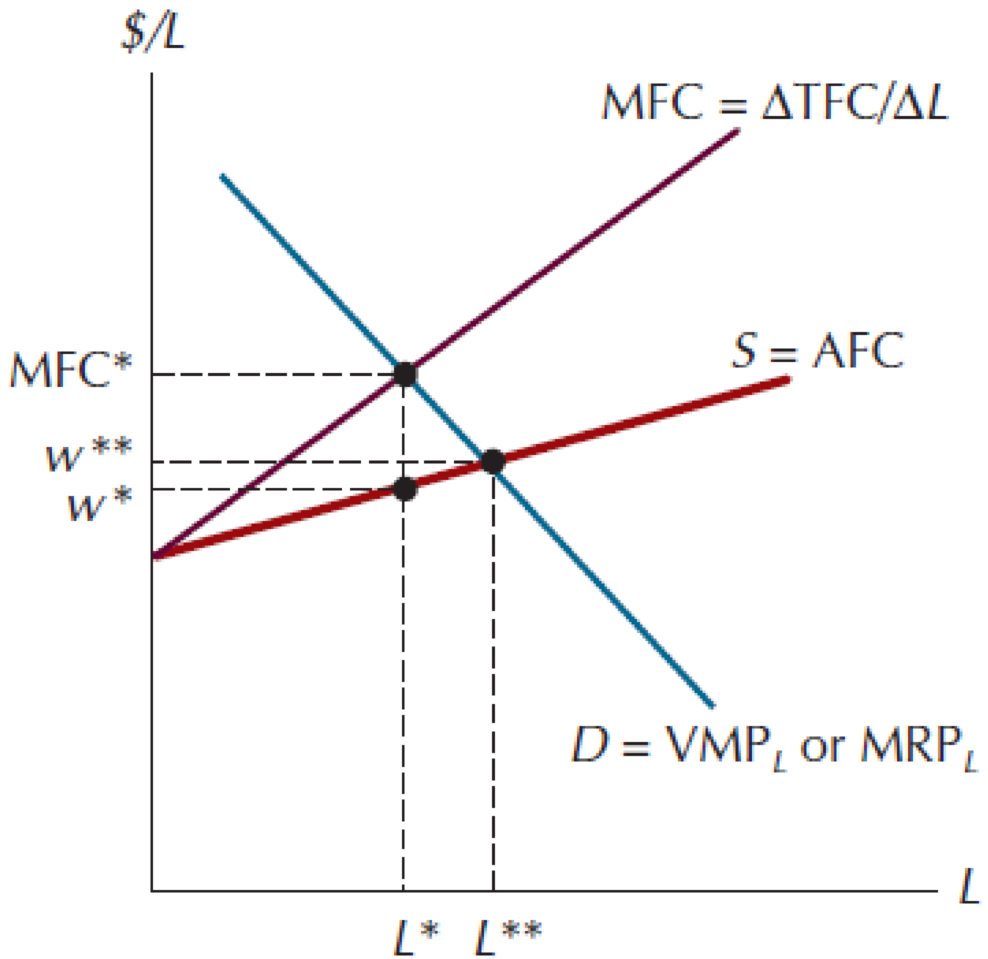


Figure 14.12: Comparing Monopsony and Competition in the Labor Market



Minimum Wage Laws

- In 1938 Congress passed the Fair Labor Standards Act.
  - One of whose provisions established a minimum wage for all covered employees.

- Whether the net effect of the minimum wage is to increase the amount of income earned by unskilled workers depends on the elasticity of demand for that category of labor.

Figure 14.13: A Statutory Minimum Wage

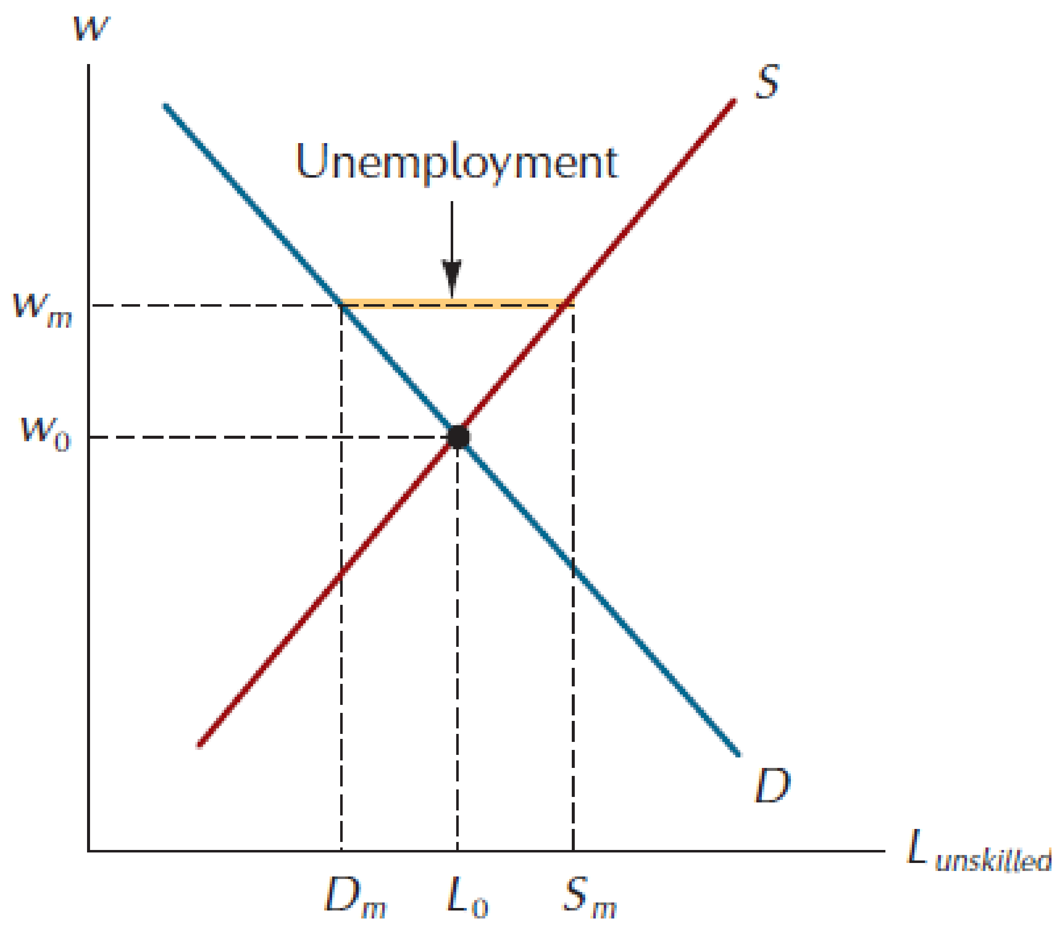
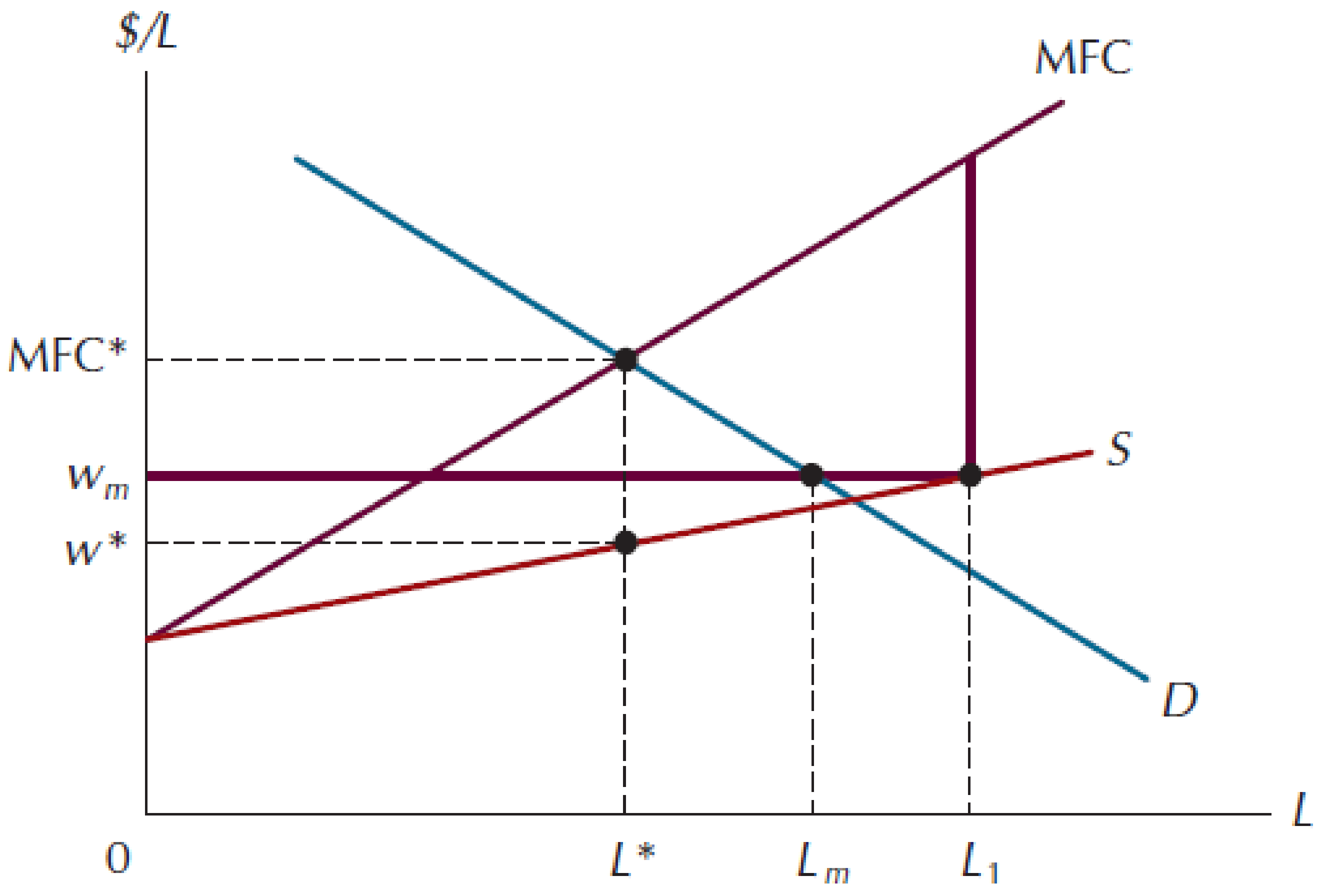


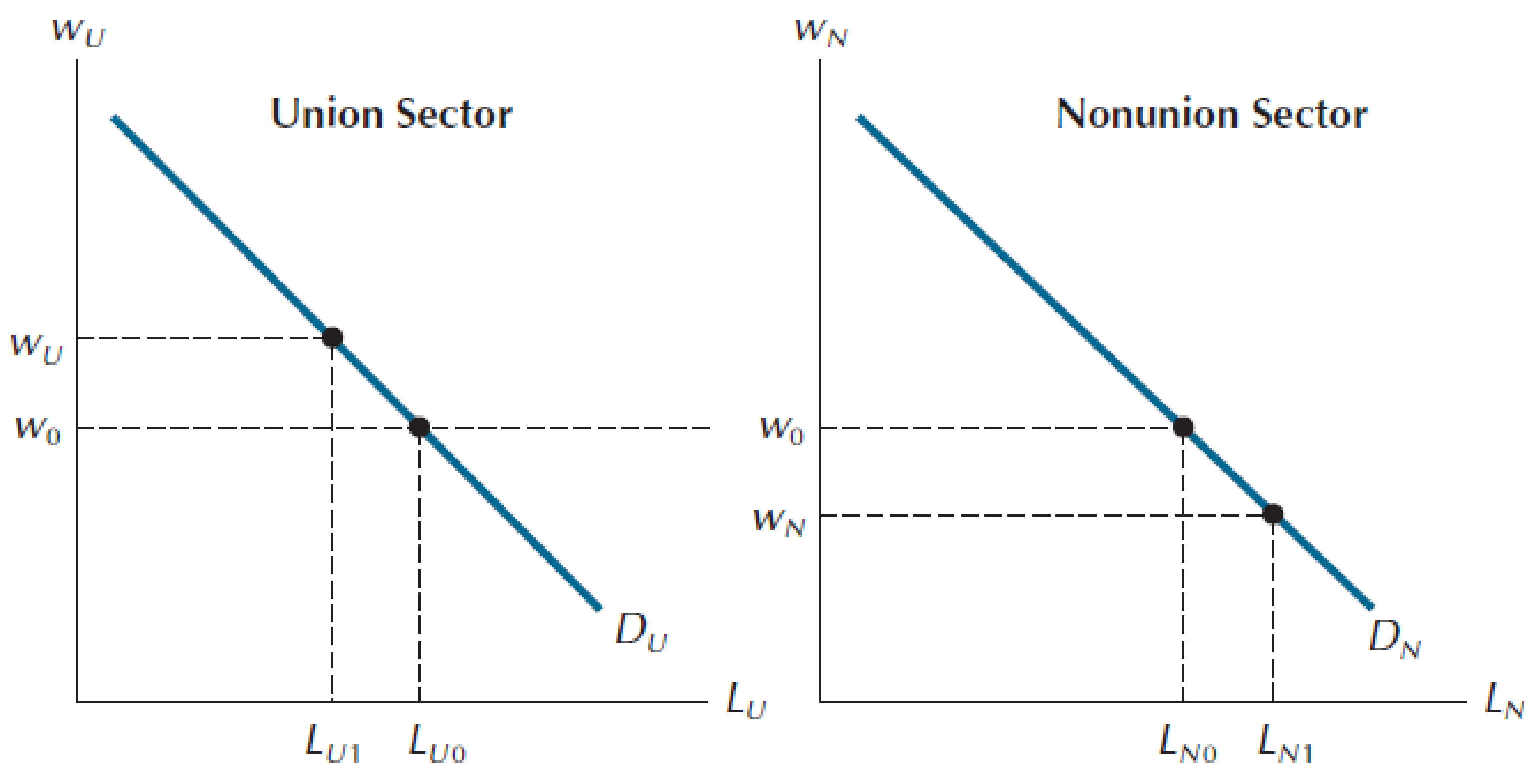
Figure 14.14: The Minimum Wage Law in the Case of Monopsony



Labor Unions

- About one in six workers in the nonfarm sector of the U.S. economy is a member of a labor union.
  - Unionized workers bargain collectively over the terms and conditions of employment.
  - Unions may also facilitate communication between labor and management.

Figure 14.15: The Allocative Effects of Collective Bargaining



Discrimination In The Labor Market

- From any individual employer's point of view examples of different wages across various population groups are examples of *nonmarket* discrimination— effects that lower productivity before job applicants even make contact with the employer.

Discrimination In The Labor Market

- ***Customer discrimination:*** the firm's customers do not wish to deal with minority employees.

- ***Coworker discrimination:*** when some type of worker (i.e white workers) feel uneasy about working with other type of workers (i.e. blacks) and may prefer employment in firms that hire only their type.

- ***Employer discrimination:*** wage differentials that arise from an arbitrary preference by the employer for one group of worker over another.

Statistical Discrimination

- ***Statistical discrimination*** is the result, not the cause, of average productivity differences between groups. Its sole effect is to reduce wage variation within each group.

Figure 14.16: A Hypothetical Uniform Productivity Distribution

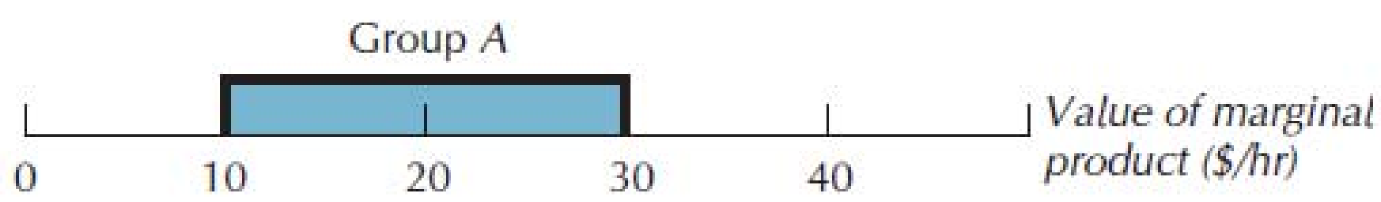
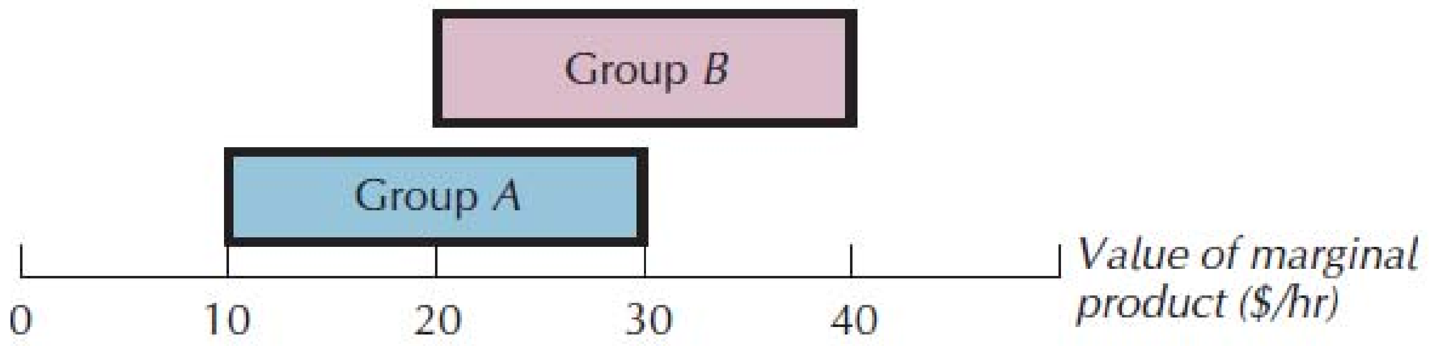


Figure 14.17: Productivity Distributions for Two Groups



The Internal Wage Structure

- The wage structure within many private firms seems much more egalitarian than would be warranted under our marginal productivity theory of wages.
  1. Most people prefer high-ranked to low-ranked positions among their coworkers;
  2. No one can be forced to remain in a firm against his wishes.

Figure 14.18: The Wage Structure when Local Status Matters

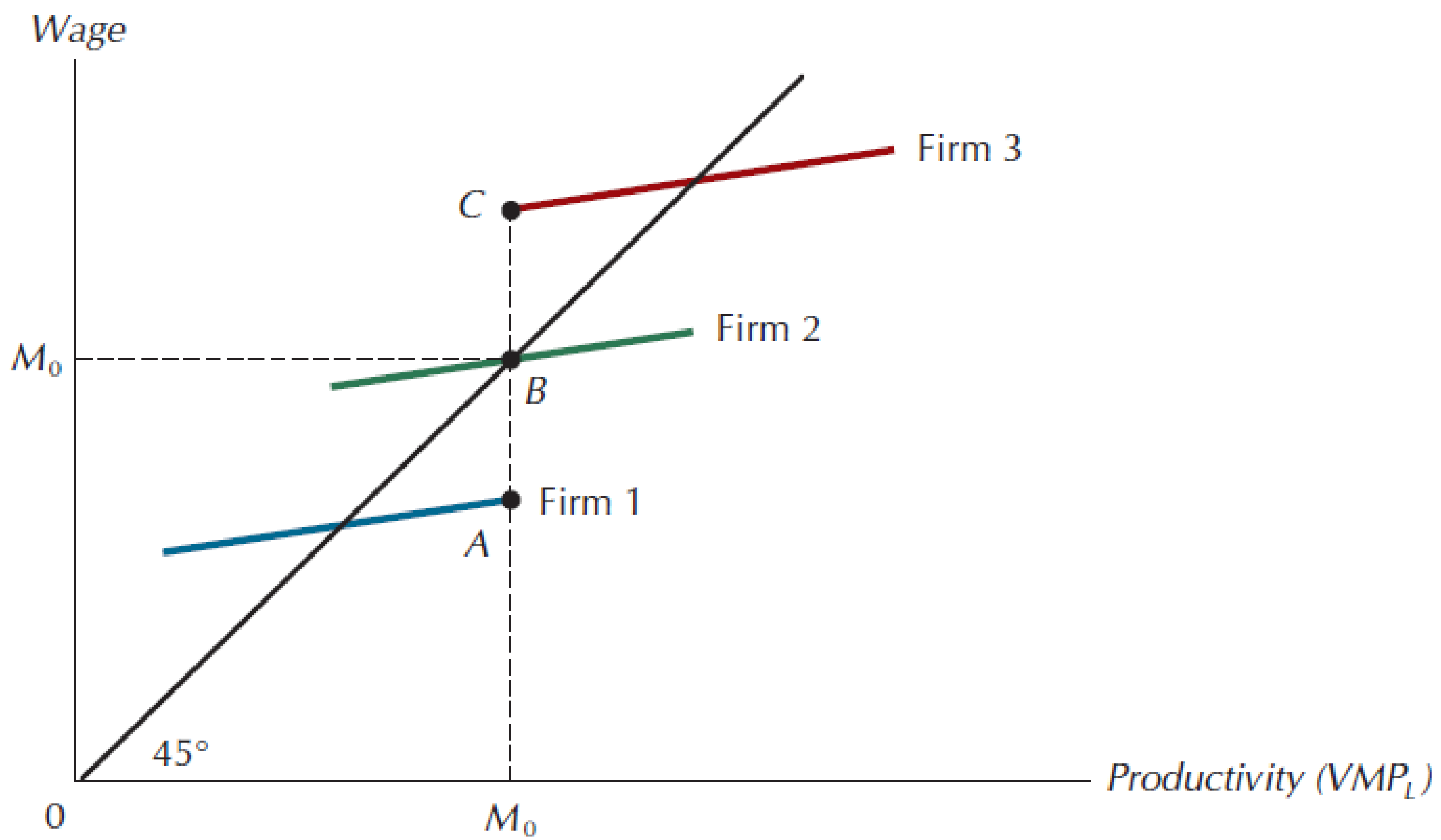


Figure 14.19: Wage Schedules and the Intensity of Interaction

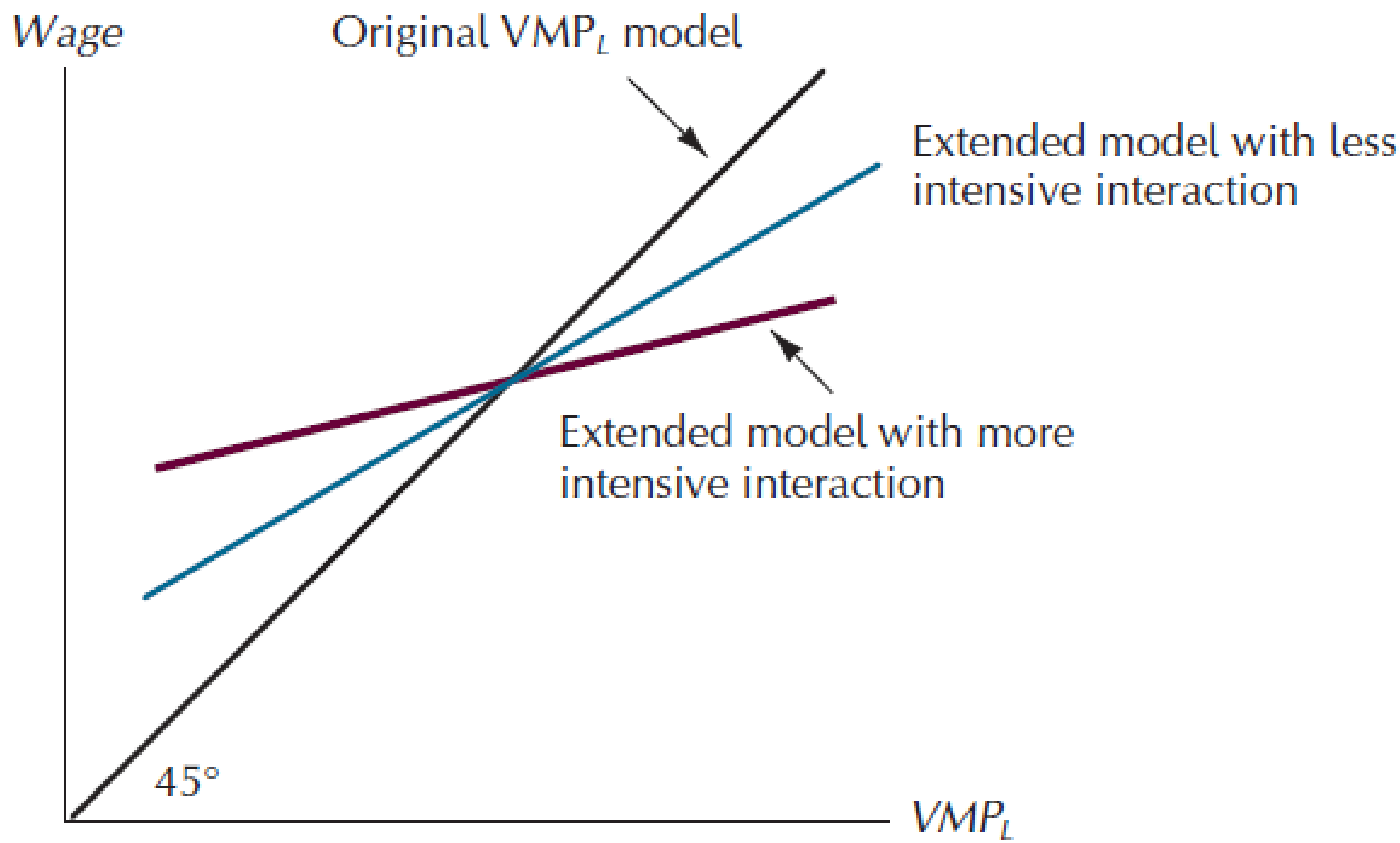


Figure A14.1: The Optimal Wage-Safety Combination

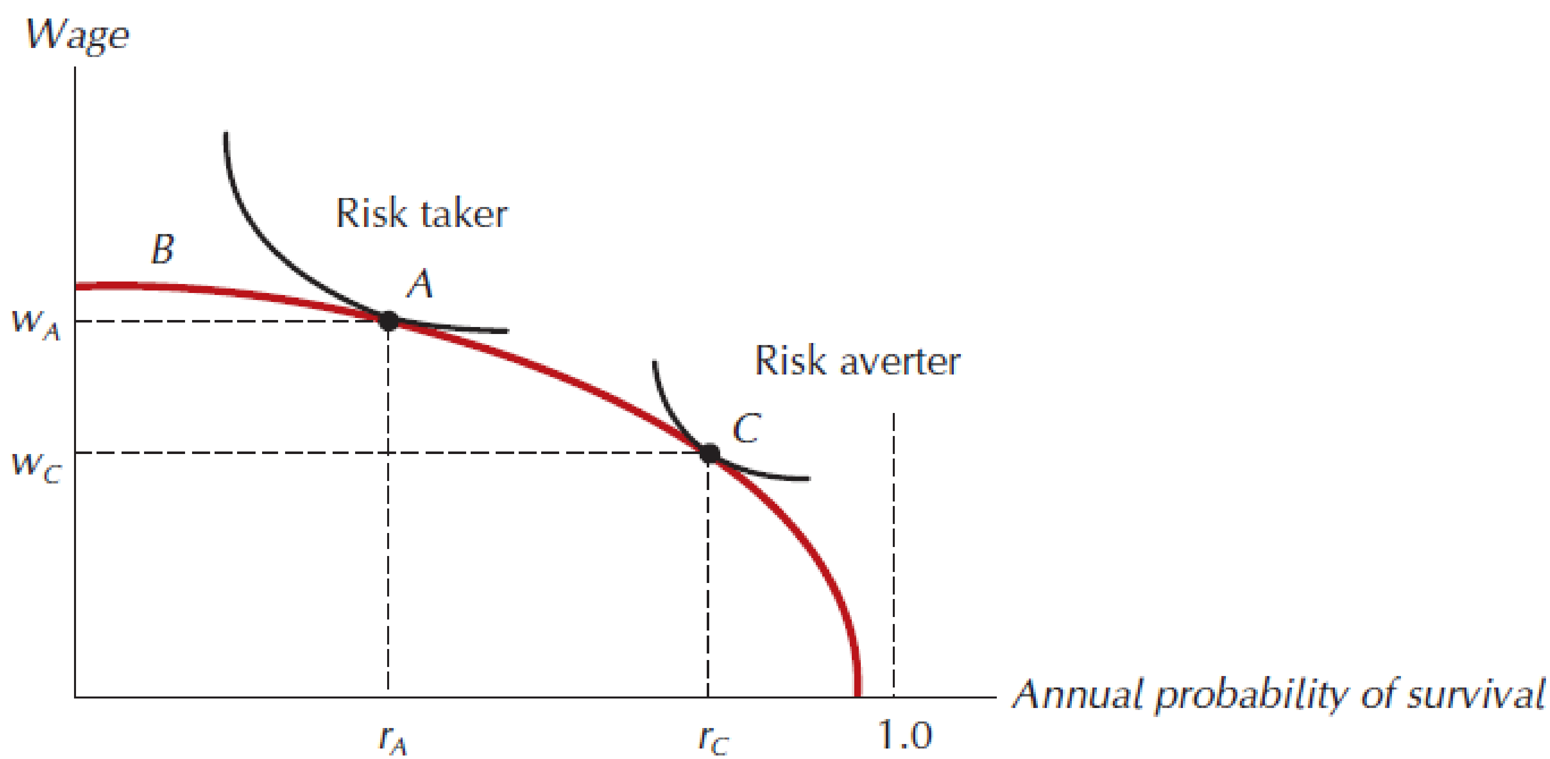


Figure A14.2: The Effect of Productivity on the Optimal Safety Choice

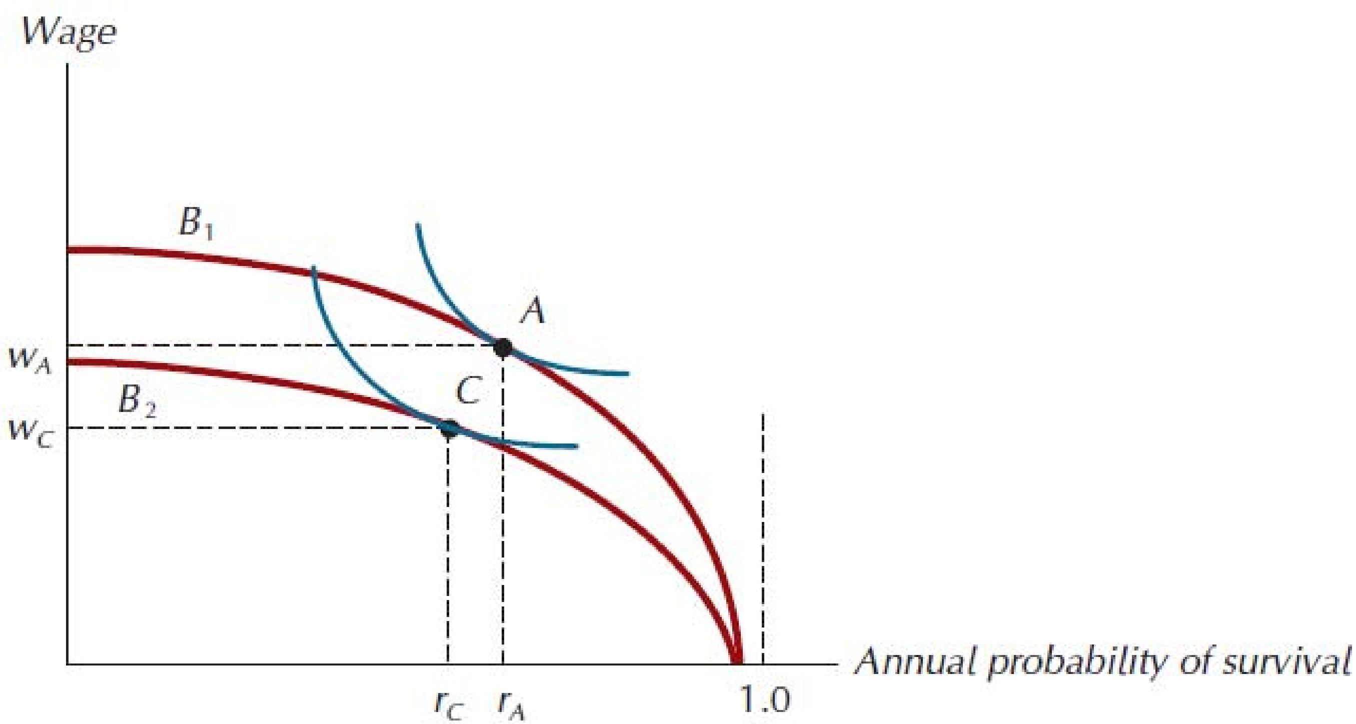


Figure A14.3: A Safety Requirement that Reduces Utility