

Unit 5: Factor Markets

Introduction to Factor Markets

- **Definition:** Factor markets are where resources (factors of production) are bought and sold. For example:
 - Labor market (workers and wages).
 - Capital market (machinery and equipment).
 - **Derived Demand:** The demand for a factor of production is derived from the demand for the goods or services it helps produce. For example:
 - Increased demand for smartphones leads to greater demand for skilled labor in manufacturing.
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Changes in Factor Demand and Factor Supply

- **Factors That Shift Factor Demand:**
 - **Changes in Demand for the Product:** If demand for a product increases, demand for the factors used to produce it also increases.
 - **Productivity of the Factor:** Technological improvements that make a factor more productive increase its demand.
 - **Prices of Other Factors:** Substitutes or complements in production can affect demand. For instance, if automation becomes cheaper, the demand for labor may decrease.
 - **Factors That Shift Factor Supply:**
 - **Population Changes:** An increase in the working-age population increases labor supply.
 - **Education and Training:** Improved skills can increase the supply of qualified workers.
 - **Cultural or Social Factors:** Attitudes toward work, immigration policies, and social norms can influence labor supply.
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Profit-Maximizing Behavior in Perfectly Competitive Factor Markets

- **Key Characteristics of Perfectly Competitive Factor Markets:**
 - Many buyers and sellers of the factor.
 - Firms are wage takers (cannot influence the wage rate).
 - Workers have perfect mobility and full information.
- **Marginal Productivity Theory of Resource Demand:**
 - Firms hire factors until the **marginal revenue product (MRP)** equals the **marginal resource cost (MRC)**:
 - **MRP:** The additional revenue generated by hiring one more unit of a factor.

- **MRC:** The additional cost of hiring one more unit of a factor.
 - **Profit Maximization Rule:** Hire resources where $MRP = MRC$.
 - **Graphical Analysis:**
 - The labor demand curve is downward-sloping, representing diminishing marginal returns.
 - The labor supply curve is upward-sloping in perfectly competitive markets.
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Monopsonistic Markets

- **Definition:** A monopsony is a market structure in which a single buyer (e.g., a large employer) dominates the market for a factor of production, such as labor.
- **Characteristics:**
 - A single buyer of labor or other resources.
 - Workers have few alternative employment options.
 - The firm has wage-setting power.
- **Profit-Maximizing Behavior in Monopsony:**
 - The monopsonist hires fewer workers and pays lower wages compared to a perfectly competitive labor market.
 - The firm maximizes profit where $MRC = MRP$, but because the MRC curve lies above the labor supply curve, the wage paid to workers is lower than their MRP.
- **Examples of Monopsonies:**
 - A coal mine in a small town that is the only major employer.
 - Industries where a few firms dominate the hiring market.
- **Economic Implications:**
 - Lower wages and reduced employment compared to competitive markets.
 - Potential for government intervention to correct market inefficiencies (e.g., minimum wage laws).