

Introduction to Labor Economics

Introduction to Labor Economics – Structured Notes

1. What Is Labor Economics?

- **Definition:** The branch of economics that studies how labor markets function, how wages are set, and how workers and firms interact.
 - **Key Questions**
 - How do workers decide how much to work?
 - What determines the price of labor (wages)?
 - Why do unemployment and labor market frictions exist?
 - How do policies (minimum wage, taxes, training programs) affect labor outcomes?
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2. The Labor Market Model

Component	Description	Typical Graphical Representation
Labor Supply (S_L)	Households decide how many hours to work based on wages, preferences for leisure, and non-labor income.	Upward-sloping curve (higher wages → more labor supplied).
Labor Demand (D_L)	Firms hire workers to maximize profit; demand depends on the marginal product of labor (MPL) and the wage rate.	Downward-sloping curve (higher wages → less labor demanded).
Equilibrium	Intersection of supply and demand determines the market wage (w^*) and employment level (L^*).	Standard supply-and-demand diagram.

- **Shifts in Supply**
 - Demographic changes (population growth, aging).
 - Changes in preferences (more leisure, work-life balance).
 - Policy changes (taxes on labor, welfare benefits).
- **Shifts in Demand**

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- Technological progress (automation, AI).
 - Changes in product demand (recessions, booms).
 - Input price changes (capital costs, raw materials).
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3. Labor Supply Theory

1. Individual Labor Supply Decision

- Utility function: $U = U(C, L)$ where C = consumption, L = leisure.
- Budget constraint: $C = w \cdot (T - L) + V$ (V = non-labor income, T = total time).
- **Key trade-off:** Higher wages increase the “price” of leisure, inducing more work (substitution effect) but also raise income, possibly inducing less work (income effect).

2. Elasticity of Labor Supply

- **Elastic:** Small wage change $\rightarrow$ large change in hours worked (e.g., secondary earners, part-time workers).
- **Inelastic:** Hours change little with wage (e.g., primary breadwinners with high fixed costs of leisure).

3. Factors Influencing Elasticity

- Availability of alternative work arrangements.
 - Presence of overtime pay or piece-rate contracts.
 - Cultural norms regarding work hours.
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4. Labor Demand Theory

1. Profit-Maximizing Firm

- Choose L to satisfy: **$MPL = w$** (marginal product of labor equals wage).
- If $MPL > w \rightarrow$ hire more; if $MPL < w \rightarrow$ cut back.

2. Derived Demand

- Labor demand depends on the demand for the final product and the productivity of labor.

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- **Shift Factors:** Changes in product price, technology, input prices, and expectations.

3. **Elasticity