



Lesson 5 – Labor Markets

Introduction

The focus of this lesson is on the choices made by buyers and sellers of labor services, and the factors and constraints that affect these choices.

Objectives

At the end of this lesson students will be able to:

- Use supply and demand to illustrate how wages are determined.
- Explain how productivity influences wages.
- Provide examples of how technology can be a complement or substitute for labor.
- Determine the good or service from which the demand for labor is derived.
- Predict how various policies or regulations will impact labor markets.

Key Economic Concepts

Derived Demand	Total labor income / Individual income	Excess demand / Excess supply
Productivity		
Labor supply	Investment	Unemployment
Technology		

Voluntary National Content Standards in Economics

<https://www.fte.org/teachers/teacher-resources/voluntary-national-content-standards-in-economics/>

STANDARD 4: INCENTIVES MATTER

People respond predictably to positive and negative incentives.

STANDARD 13: INCOME AND PRODUCTIVITY

Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.



STANDARD 15: INVESTMENT

Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.

STANDARD 19: UNEMPLOYMENT

Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.

Presentation Guidelines and Suggestions

1. Earlier lessons have discussed the differences in income among countries and the institutional arrangements that contribute to these differences. Use the review to move the focus from the aggregate income of countries to the income of individual workers.
 - The focus of this lesson is on the choices made by buyers and sellers of labor services, and the factors and constraints that affect these choices.
2. Establish the connection between the demand for a good or service and the demand for the labor used in producing that good or service. Explain that price changes for the output produced cause shifts in the derived demand for labor.

Example of Factors affecting Wages – Worker in Kite Industry *(See slides)*

- What happens if abnormally calm winds prevail during the summer months in major kite markets? *(Sales of kites decrease because weather is a factor in the market demand for kites.)*
 - If both the price of kites and quantity of kites sold decreases, total revenue from kite sales will decrease. How will this affect workers? *((Kite factories will want to hire fewer workers and will offer less for their services when they do hire them.)*
 - How will this affect individual workers in kite manufacturing? *(There are several possibilities: Some people may be laid off; workers' hours may be cut; some workers may be willing to work for lower wages. It is important to point out that how an individual worker is affected by the reduced sales of kites depends also on the alternatives available to the worker. If those alternatives are quite good, the worker may be no worse off; but if the alternatives are poor, the loss may be considerable.*



Note also that total income in the kite industry will decrease, regardless of the choices of individual workers and employers.)

- What happens if there is a windy summer? (*A windy summer is favorable for kite sales, which increases revenue of kite makers and also increases total labor income in the kite industry. Whether individual workers' incomes change depends on how easily additional workers can be hired.*)
 - *Note that the comparisons of windy summers to calmer summers in one location are analogous to comparisons of kite workers and kite sales in windy and calm regions.*
 - Develop examples of other factors that affect the supply of kites and therefore the wages of kite workers:
 - Cost of raw materials (fabric, glue, wood, plastics) affects the supply curve;
 - Substitutes for kite flying (hiking, skim boarding, outdoor games, etc.).
3. Explain the difference between total labor income and the wage a worker earns as the “derived” demand for labor changes.
- Provide illustrations of how wages and benefits change when demand increases in the market. Allow demand to increase because the price of output increases.
 - Provide an illustration of how wages and benefits change when labor supply increases. Allow labor supply to increase because telecommunications networks have lowered the cost of using foreign labor in English-speaking countries (e.g., call centers).
4. Present derived demand and productivity as economic reasoning tools in devising a strategy to earn a lot of money:
- Derived demand: Choose the right market. The market for what you produce is an important determinant of wages. (*See slides – BLS industry and job growth and decline predictions, 2006-2016*)
 - Identify factors that affect individual productivity:
 - education & training,
 - experience
 - infrastructure



- technology

(Note: Video comparison of horses and various tractors and improvements in labor productivity:

http://www.livinghistoryfarm.org/farminginthe50s/machines_plowing.html. Also appropriate for lesson on Innovation.)

(See BLS charts on annual percent change of productivity by industry:

<ftp://ftp.bls.gov/pub/special.requests/opt/dipts/ipr.airt.txt>)

- Use examples of Superstars (*See slides*) to develop understanding of how technology leverages labor time and raises income. Estimated 2018 income for each star is shown below. What do these “superstars” have in common?
(See slides.)
 - Floyd Mayweather - \$275 million
 - Scarlett Johansson - \$40.5 million
 - Chris Hemsworth - \$64.5 million
 - Ellen Degeneres - \$87.5 million
 - Ryan ToysReview - \$22 million
 - LeBron James \$87.5 million
 - Jeff Kinney \$18.5 million
 - Beyonce \$60 million
 - Jay-Z \$76.5 million
 - Johansson and Hemsworth are movie stars in Marvel Avengers movies; LeBron and Mayweather are athletes. Kinney wrote the popular “Diary of a Wimpy Kid” books; Ellen is a TV Personality, Beyonce and Jay-Z are musicians and Ryan reviews toys on YouTube. What do these people have in common?

(Each gains “leverage” from the technology available in their industry. Ellen, Johansson and Hemsworth star in shows that can be seen by millions of people. They don’t have to produce the show every time for each person; Kinney writes the book and creates the characters for merchandising only once, and then it is printed for millions to read; Mayweather fights one fight and millions see him, too. Athletes like LeBron have branded their image so marketers can re-sell him; Ryan reviews toys and millions of people watch his reviews on YouTube so he makes money from advertisements that appear on his videos.)



- Lesson to be learned: Work at a job that you enjoy, but if you can use technology to lever your time, then you'll be more productive and have a higher income.
- Discuss the market for unskilled labor in developed countries with an emphasis on so called "sweatshops".
 - Explain the work alternatives available to women in developing countries.
 - Explain how regulations in developed countries that aim to restrict wages and working conditions of firms operating overseas have unintended consequences; namely, increasing poverty in developing countries.

Labor unions and government regulation: Develop examples of how other institutions constrain labor markets.

- Review supply and demand lessons from Tuesday's "Markets in Action" problems. Emphasize supply shifters and impacts on price.
- Costs and benefits of unions: What are they? What benefit do they provide workers? What cost do they impose on workers?
 - How has economic change in the U.S. affected labor unions? What is labor union membership in significant decline, except possibly in the public sector? (*See powerpoint slide of union membership.*)
- Government restrictions: Develop examples. Emphasize supply and demand analysis tools:
 - Minimum wage: Unskilled and first-time workers most affected.
 - When minimum wage doesn't matter: (*See chart from CNN article http://money.cnn.com/2007/01/26/news/economy/economy_minimumwage/index.htm Minimum Wage, Marginal Impact. Powerpoint slide*)
 - Immigration – restrictions or not ?
 - Limits the supply of less skilled workers. Higher skilled workers often find employers who will bear some of the regulatory costs of obtaining work permits because it is small relative to the workers value-added.
 - Note that the European Union opened up labor markets for participating countries.



- Develop example of how safety regulations impact labor markets. (*See powerpoint slide – OSHA cowboy.*)
- Child labor laws – How do the alternatives a child faces differ in western countries and in developing nations?
- Family Leave Act
- Americans With Disabilities Act

5. Discuss examples and explanations for unemployment:

- This condition may apply to a lot of resources and it may not imply anything is “wrong” with the market. (For example, I have a bookcase that is not yet filled with books, so a good part of the bookcase is unemployed.)
- Job search is a two-sided process. Employers are looking for well-qualified persons who are likely to want to stay awhile with the company. Employees are seeking opportunities that offer income growth and they often seek stability. The cost of recruiting is high, so if you are unlikely to stay awhile an employer may not want to hire you.