Attempts to Legislate Prices

This Lecture is Intended to Teach You About the Following:

- Firms’ Demand Curves for Labor
- Reservation Wages and Labor Supply
- The Effects of A Minimum Wage
- Voluntary and Involuntary Unemployment
- Price Ceilings
Firms’ Demand for Labor

- Understanding of Marginal Versus Average Productivity for A Firm

- Principles of Profit-Maximizing Behavior for Firms
  - Firms Choose Inputs and Outputs to Maximize Profits
  - Profit-Maximizers Compare Wage to Value of Marginal Product
  - Hire an additional unit of labor so long as the extra revenue the laborer brings in exceeds the laborer’s wage.

- Drawing the Supply Curve
# Value of Total Product — Example

<table>
<thead>
<tr>
<th>Number of Workers</th>
<th>Value of Total Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>95</td>
</tr>
</tbody>
</table>
Value of Total Product for a Firm

<table>
<thead>
<tr>
<th>Number of Laborers</th>
<th>Value of Total Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>90</td>
</tr>
<tr>
<td>4</td>
<td>120</td>
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</tbody>
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### Value of Average Product — Example

<table>
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<th>Value of Total Output</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>–</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Value of Average Product

Value of Average Product

Number of Laborers
## Value of Marginal Product — Example

<table>
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<th>Value of Total Output</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Value of Marginal Product for a Firm

Number of Laborers

Value of Marginal Product
Labor Demand Curve for a Single Firm

Wage

Number of Laborers
Market Labor Demand Curve - Sess 3n

Wage Rate

Number of Laborers
A worker’s Reservation Wage is the lowest wage at which she will take a job.

To find labor supply at any wage, find number of workers whose reservation wages are lower than that wage.
Labor Market—No Minimum Wage, Sess. 1
Labor Market with Minimum Wage, Sess. 2

- Wage Rate
- Number of Laborers
Effects of a Minimum Wage

- If Minimum Wage exceeds Competitive Equilibrium Wage, the market wage be the minimum wage and employment will be the amount of labor demanded by firms at this wage. In this case, the Minimum Wage will:
  - Reduce Total Employment
  - Increase the Number of Laborers Seeking Employment
  - Increase Involuntary Unemployment
  - Reduce Profits of Employers
  - Might or Might Not Increase Total Wages

- If Legislated Minimum Wage is below the Equilibrium Wage, the Minimum Wage will have no effect on wages or employment.
Nonbinding Minimum Wage, Sess. 3

- **Wage Rate**
- **Number of Laborers**
Voluntary and Involuntary Unemployment

- **Voluntary unemployment** is defined as the number of persons who are unemployed and would not choose to take a job at the average wage paid to laborers.

- **Involuntary unemployment** is defined as the number of persons who are unemployed, but would like to take a job at the average wage paid to laborers.

- Even without a minimum wage there can be some frictional unemployment due to the fact that people must make contracts without complete knowledge of market conditions.
Price Floors and Ceilings

- Minimum Wage is an Example of a Price Floor, a legislated MINIMUM price.

- Price Ceilings areLegislated MAXIMUM prices. Rent Controls are an Example of a Price Ceiling.

- If the Price Ceiling is below the Competitive Equilibrium Price, the market price will be the ceiling price and the quantity will be the number of units suppliers are willing to supply at this price. In this case, a price ceiling will:
  - Reduce Total Number of Sales
  - Increase Number of Units Buyers Want to Purchase
- Result in “Shortages” of Supply. People want to buy more than is available at the legislated price.

- Queues and other allocational devices will have to be used to ration scarce goods when price cannot be increased.
Labor Market with Maximum Wage, Sess. 2

Number of Laborers

Wage Rate

0 5 10 15 20 25 30 35 40 45 50

0 5 10 15 20 25 30 35 40 45 50
A Rent Ceiling

Monthly Rent vs. Number of Apartments

Points A, B, C

Price Floors and Ceilings