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Office Hour: Tuesday 2:30 – 3:30 at 7841 Social Science

Econ102 Discussion Handout Week2

Important Definitions/Concepts from Chapter 1

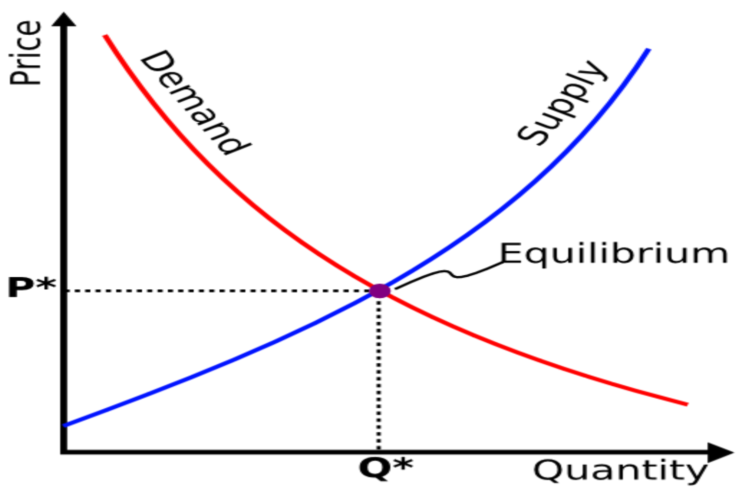
Opportunity Cost is the value of an option forgone when making a decision (ie the opportunity cost of watching "American Idol" is the value of watching "The Voice" at that same time slot)

A **marginal decision** is one made at the "margin" of an activity to do a bit more or less of an activity (when the **benefit exceeds the cost**, an individual will decide to do a bit more of an activity)

Equilibrium defines an economic situation in which no individual would be better off doing something else

A market or economy is **efficient** when it is impossible to make any individual better off without making someone else worse off. It can also be seen as the point where every good is produced until the costs are equal to the benefits.

Supply and Demand Overview



The **demand curve** is a curve illustrating the amount of a good demanded by consumers at a given price. The curve is downward sloping due to the **law of demand**.

The **supply curve** is a curve illustrating the amount of good suppliers are willing to provide at a given price. This curve is upward sloping due to the **law of supply**

A market is in **equilibrium** when demand equals supply

In Econ 102, we will deal with supply and demand in a variety of contexts (eg market for loanable funds, aggregate supply/demand, money supply/demand). Unlike in Econ 101, where we are often concerned with solving mathematically for the equilibrium in a market, in this course we are often concerned about the *qualitative* impacts of a change in the economy on the market in question. In these cases, you are told about a change in the economy, and then asked how it affects the market in question and the economy as a whole. As such, it is important to discuss how to think about such changes in the context of supply/demand.

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When the price in a market (the variable on the y-axis) changes, this leads to a change in the **quantity supplied/demanded or a movement along the supply/demand curve** in that market (the curves do not shift in this case)

A **shift in the demand (supply) curve** occurs when the quantity demanded/supplied changes at every price in the market (the curves shift left/right in this case). Also referred to as an **increase (decrease) in demand (supply)**

Macroeconomic: Theory and Policy

Classical economists believe that the economy is **self-regulating**: supply and demand (the invisible hand) will always adjust quickly in order to improve the economy's performance

According to **Keynesian economics**, government intervention can help expedite an economic recovery through **monetary** and **fiscal policy**

Monetary policy uses changes in the quantity of money to alter interest rates, which in turn affect the level of overall spending

Fiscal policy uses changes in taxes and government spending to affect overall spending

The Business Cycle

A broad-based economic downturn, when output and employment fall over several periods, is called a **recession**. This is followed by an **expansion**, when economic indicators follow their normal upward trend. The **Business Cycle** is the alternation between recessions and expansions.

Calculating Growth Rates: The Math behind Inflation and Economic Growth

In general, we use the notation x_t to represent a variable that changes over time (ie GDP, Price Level, Unemployment)

To calculate the percentage growth rate of a given variable x, the formula you can use is:

$$\frac{New\ Value - Old\ Value}{Old\ Value} \times 100\% = \frac{x_t - x_{t-1}}{x_{t-1}} \times 100\% = \frac{\Delta x_t}{x_{t-1}} \times 100\%$$

The **Inflation Rate** is the rate at which prices (represented by P_t) change. The formula is:

$$\frac{P_t - P_{t-1}}{P_{t-1}} \times 100\% = \frac{\Delta P_t}{P_{t-1}} \times 100\%$$

***Note:** When the Inflation Rate is positive it is called **inflation**; when it is negative it is **deflation**

The **Economic Growth Rate** is the rate at which GDP (represented by GDP_t or Y_t) changes. The formula is given by:

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$$\frac{Y - Y_{t-1}}{Y_{t-1}} \text{ x } 100\% = \frac{\Delta Y_t}{Y_{t-1}} \text{ x } 100\%$$

Examples

1. Carl is considering buying a concert ticket for $35. The additional cost of driving to and parking at the concert are $20. Finally, in order to attend the concert, Carl will miss 5 hours at his part-time job paying $6/hr. Carl's opportunity cost of attending the concert is:

   a) $35
   b) $55
   c) $30
   d) $85

2. If you have an economics exam and a biology exam tomorrow, and you realize you only have time to fully study for one of them, then what are you facing?

   a) An impossible situation
   b) A failing grade on both exams
   c) A tradeoff
   d) None of these

3) A situation is efficient when

   a) It is producing the maximum gains from trade that are possible from the resources available
   b) The price of the good under consideration is as low as possible
   c) One person is made better off even if some other person is made worse off
   d) One group of people are made better off even if it harms some other group of people

4) Which of the following does economics promote as the best way to make a decision?

   a) Continue an enjoyable activity until you get tired of it
   b) Continue an enjoyable activity until the marginal benefit equals the marginal cost
   c) Continue an enjoyable activity until you cannot afford any more of it
   d) Do an enjoyable activity at least once

Use the chart below to answer the next questions

Year	GDP	CPI
2006	500	100
2007	600	120
2008	800	150

5) What is the Economic Growth Rate from 2007-2008?

   a) 20%
   b) 60%
   c) 33%
   d) 25%

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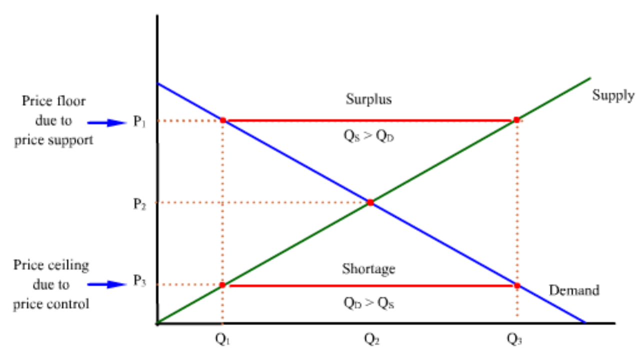
6) Which of the following describes the change in the price level from 2006-2007?
 a) Expansion
 b) Inflation
 c) Deflation
 d) Recession

7) Which of the following best describes the change in GDP from 2006-2007?
 a) Expansion
 b) Inflation
 c) Deflation
 d) Recession

8) What is the Inflation Rate from 2007-2008?
 a) 30%
 b) 20%
 c) 50%
 d) 25%

9) If the Economic Growth Rate decreases, does this mean we have a recession?
 a) Yes; any decrease in growth is evidence of a recession
 b) No; a recession is defined by negative growth, not by a decrease in growth rate



10) In the above graph, which price represents an effective minimum wage?
 a) P_1
 b) P_2
 c) P_3
 d) None of the above represents an effective minimum wage

11) Suppose the price of cheese curds rise from \$1 to \$2. What would we expect to occur in the market for cheese curds?
 a) Quantity demanded rises
 b) Quantity demanded falls
 c) Increase in demand
 d) Decrease in demand

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12) Suppose the cost of grapes increase. What would we expect to occur in the market for wine?
   a) Quantity supplied rises
   b) Quantity supplied falls
   c) Increase in supply
   d) Decrease in supply

13) Suppose that consumer interest in the Playstation 3 increases. At the same time, the price of the plastic used to make the Playstation 3 falls. How would this affect the price of the Playstation 3?
   a) Price would increase
   b) Price would decrease
   c) No change in price
   d) Unknown

14) In the previous example, how would that scenario affect the equilibrium quantity in the market for the Playstation 3?
   a) Quantity would increase
   b) Quantity would decrease
   c) Quantity would remain the same
   d) Unknown