## Lab 11 - Aggregate Demand & Aggregate Supply

#### The Set-up

- 1. Recall from before the Demand and Supply curves we studied earlier this semester
- 2. Our graph will consist of price level (usually CPI) on the vertical axis and real GDP on the horizontal axis
- 3. Aggregate Demand (AD)
  - a. AD represents the total demand in the economy. It is the summation of many market demand curves for various goods and services produced in a nation
  - b. AD slopes downward because increases in the price level can result in decreases in real wealth, increases in real interest rates, and changes in prices of exports and imports that decrease people's willingness and ability to purchase a nation's aggregate output of final products
- 4. Aggregate Supply (AS)
  - a. AS is a representation of national productivity
  - b. AS slopes upward because the unit costs of additional production tend to increase as more is produced over a given year
  - c. AS has a distinct shape, it starts off very flat and then rises steeply

#### **Changes and Shifts in AD**

- 1. Recall from before the difference between change in quantity demanded and change in demand
- 2. Only changes in the price level or AS shifts can cause changes along the AD
- 3. Factors that shift AD:
  - a. The Real Interest Rate
    - As the interest rate rises, it becomes more expensive for businesses to purchase capital and for consumers to make large purchases such as buying a home
      - 1.
      - 2.
  - b. The Quantity of Money in Circulation
    - i. The more cash and liquid assets a household has the more it will purchase
      - 1.
      - 2.

- c. Wealth
  - i. An individual's wealth consists of things like bonds, stocks, and other financial investments. If these things increase in value then consumption increases
    - 1.
    - 2.
- d. Expectations about Changes in the Future
  - 1.
  - 2.
- e. Changes in the International Value of the Dollar
  - i. Think in terms of a foreigner buying US goods
  - ii. If the value of the US dollar increases then US goods become more expensive to foreigners (it takes more foreign currency to purchase a US dollar)
    - 1.
    - 2.
- f. Government Activity (GDP = C+I+G+NE)
  - i. Purchases will lead to an increase in G
    - 1.
    - 2.
  - ii. Taxes will either increase or decrease available income to consumers (C)
    - 1.
    - 2.
  - iii. Transfers put money into the hands of consumers (C)
    - 1.
    - 2.

### **Changes and Shifts in AS**

- 1. Recall from before the difference between change in quantity supplied and change in supply
- 2. Only changes in the price level or shifts in AD can cause changes along the AS
- 3. Potential Real GDP (PRGDP) is a specific point on AS
  - a. PRGDP is similar to the PPC we studied at the beginning of the semester. Anything that would cause the PPC to shift will cause PRGDP to shift
  - b. Anytime PRGDP shifts AS will shift.
  - c. If AS shifts, it does not mean PRGDP will shift
    - i. Only factors that affect the potential production of a nation will effect PRGDP
      - 1. Size of labor force, productivity of the labor force, technology
    - ii. A factor that will not affect PRGDP would be an increase in the price of a key input. AS will fall but the amount of the input available is still the same thus the production that is feasible has not changed

# **Problems**

The following questions deal with factors that shift the AS or AD. For each situation tell whether there is 1) an increase in AD, 2) a decrease in AD, 3) an increase in AS, or 4) a decrease in AS. Explain.

1.	A decrease in the real interest rates
2.	An increase in the foreign exchange rate of the US dollar
3.	An increase in input prices
4.	Good expectations about the future state of the economy
5.	A decrease in income taxes
6.	A recession in Canada, which is a major US trading partner
7.	An increase in productivity of inputs