BUSINESS CYCLES, UNEMPLOYMENT AND INFLATION

I. BUSINESS CYCLES

a. Long-run growth trend is one of expansion

    i. BUSINESS CYCLES – alternating rises and declines in the level of economic activity (REAL GDP) over time (several years usually). Individual cycles vary substantially in duration and intensity.

    ii. Review figure 13.1 on page 313; recessions (contractions) and expansions (peaks and troughs are the highest and lowest points)

    iii. RECESSION – period of decline in total output, income and employment. Lasts 6 months (2 quarters) or more.

        1. Along with declines in Real GDP, significant increases in unemployment occur.

    iv. EXPANSION – period following a recession in which Real GDP, income, and employment rise.

b. CAUSES OF THE BUSINESS CYCLE

    i. Long-run trend is growth; that is why the business cycles in figure 13.1 are rising in the long-run

    ii. Fluctuations are driven by SHOCKS – situations where individuals and firms expect one thing to happen, but something else happens.

    iii. DEMAND SHOCKS are unexpected changes in demand for goods and services; SUPPLY SHOCKS are unexpected changes in the supply of goods and services.

iv. Shocks can be both POSITIVE and NEGATIVE.

v. Shocks to the economy with significant negative impact often lead to government intervention.

vi. Product and resource markets do not respond quickly to correct imbalances because the prices of many goods and services are inflexible in the short run – STICKY PRICES

    1. Due to sticky prices, the economy is forced to respond in the short run to demand shocks through changes in output and employment, rather than prices.

vii. One group stresses that supply shocks caused by major innovations such as the railroad, automobile, Internet, etc., caused large positive impacts on investment spending and consumption spending.

viii. Another school of thought believes shocks to productivity as a major cause of business cycles.

ix. Another cause is business cycles are a result of unexpected financial bubbles and bursts.

x. All agree that the IMMEDIATE cause of the large majority of cyclical changes in the levels of real output and employment is unexpected changes in the level of TOTAL spending.

    1. Slower sales will cause firms to cut back on production and real GDP

will fall, as well as employment. The economy will contract and lead to a recession.

2. If the level of spending unexpectedly rises, output, employment and incomes will rise. Real GDP will rise and an expansion in the business cycle will occur.

c. CYCLICAL IMPACT: DURABLES AND NONDURABLES
   i. Firms and industries producing capital goods (housing, commercial buildings) and consumer durables (autos, personal computers, refrigerators) will be affected most by the business cycle.
   ii. In contrast, service businesses and nondurable consumer goods will be affected less. People still need food, medical services, etc. during a downturn.
   iii. Review the analysis of Stock Prices and Macroeconomic Instability: the WEALTH EFFECT and the INVESTMENT EFFECT
      1. Stock market bubbles can be detrimental to the economy.

II. UNEMPLOYMENT

a. MEASUREMENT OF UNEMPLOYMENT
   i. The Bureau of Labor Statistics (BLS) conducts a survey of 60K households
   ii. The LABOR FORCE is people who are willing and able to work. In 2007, about 50% of the population. Persons 16 or older.

iii. UNEMPLOYMENT RATE is the % of the labor force that is unemployed.
    1. Unemployment rate = unemployed / labor force x 100
    2. Figure 13.2, the unemployment rate is 4.6%

b. TYPES OF UNEMPLOYMENT
    i. FRICTIONAL UNEMPLOYMENT – unemployment that is associated with people searching for jobs or waiting for jobs in the near future; Example – college graduates
        1. Many people who are frictionally unemployed are moving into the labor force from low-paying, low productivity jobs to higher-paying high-productivity positions.
    ii. STRUCTURAL UNEMPLOYMENT- unemployment that is associated with a mismatch between available jobs and the skills or locations of those unemployed.
        1. Does not respond immediately or completely to the new structure of job opportunities.
        2. Need additional human capital.
        3. Low-paying jobs going overseas.
    iii. CYCLICAL UNEMPLOYMENT – unemployment that is associated with the recessionary phase of the business cycle. During a contraction

c. DEFINITION OF FULL EMPLOYMENT
    i. Something less than 100% employment
    ii. When economists say "FULL EMPLOYMENT" the economy is ONLY experiencing structural and frictional

unemployment. There is NO cyclical unemployment.

iii. Most economists agree that full employment occurs when the unemployment rate is below 5%

iv. The level of real GDP that would occur precisely at full employment is called POTENTIAL OUTPUT (for potential GDP).

d. ECONOMIC COST OF UNEMPLOYMENT

   i. The basic economic cost of unemployment is forgone output.

   ii. Cyclical unemployment means that the economy is operating inside the production possibilities frontier from the production possibilities graph in chapter 1

      1. Economists call this sacrifice of output a GDP GAP – the difference between potential output and actual output.
      2. GDP GAP = ACTUAL GDP – POTENTIAL GDP
         a. Can be either a positive or negative number
      3. Society's cost of unemployment- its forgone output- translates to forgone income for individuals.
      4. Workers in lower-skilled jobs have higher unemployment rates than higher-skilled workers.
         a. Have longer structural unemployment periods than higher-skilled workers
      5. Teenagers have much higher unemployment rates than adults.

6. Overall, the unemployment rates for African-Americans and Hispanics are higher than whites or Asians.

e. INTERNAL COMPARISONS
   i. Unemployment rates differ greatly among nations at any given time.
   ii. Review Global Snapshot 13.1 on page 321

III. INFLATION

a. MEANING OF INFLATION – INFLATION is a rise in the GENERAL LEVEL OF PRICES.
   i. Reduces the PURCHASING POWER of money

b. MEASUREMENT OF INFLATION
   i. The main measure is the CONSUMER PRICE INDEX (CPI), compiled by the Bureau of Labor Statistics (BLS)
      1. Reports a "market basket" of some 300 consumer goods and services that are purchased by a typical urban consumer.
      2. Updates basket every 2 years so it reflects current patterns.
      3. CPI = price of most recent market basket / price of same market basket for '82-'84
      4. Inflation = CPI current year / CPI current year – CPI previous year.
      5. Rule of 70 tells how long it will take to double the price level: review example on page 322

c. FACTS OF INFLATION
   i. In recent years, U.S. inflation has been neither unusually high or unusually low relative to inflation and several other

industrial countries. See Global Snapshot 13.2 on page 323.

d. TYPES OF INFLATION
    i. DEMAND-PULL INFLATION - Excess demand bids (pulls) up the prices of the limited output. Too much spending chasing too few goods.
        1. Demand is pulling prices upward.
    ii. COST-PUSH INFLATION – Supply side of the economy.
        1. Definition – rising prices in terms of factors that raise the average cost (inputs) of a particular level of output.
        2. Costs are pushing prices upward.
        3. Major source of cost-push inflation has been supply shocks
            a. OPEC embargo in the '70s

IV. REDISTRIBUTION EFFECTS OF INFLATION

a. NOMINAL INCOME – the number of DOLLARS RECEIVED as wages, rent, interest or profits. REAL INCOME is a measure of the AMOUNT OF GOODS AND SERVICES NOMINAL INCOME CAN BUY
    i. Purchasing power of nominal income or income adjusted for inflation
    ii. REAL INCOME = NOMINAL INCOME / PRICE INDEX
    iii. % change in real income = % change in nominal income - % change in price level

b. WHO IS HURT BY INFLATION?
    i. FIXED INCOME RECEIVERS – real incomes fall when inflation occurs.
        1. Classic case –elderly with annuity of fixed amount of nominal income

        2. Landlords who receive the same amount of rent over time.
    ii. SAVERS – as prices rise, real value or purchasing power of savings declines
    iii. CREDITORS – Inflation harms creditors (lenders).
c. WHO IS UNAFFECTED OR HELPED BY INFLATION?
    i. FLEXIBLE INCOME RECEIVERS- Social Security due to it being INDEXED to CPI; union workers who get cost of living adjustments (COLA).
        1. Key is growth rate outpaces inflation.
    ii. DEBTORS – reverse of creditors; as debtors pay the same amount over time, the real value is less
d. ANTICIPATED INFLATION
    i. Effects of inflation will lessen if people anticipate inflation and can adjust their nominal income to reflect expected price-level increases.
        1. The REAL INTEREST RATE is the % increase in PURCHASING POWER that the borrower pays the lender.
        2. The NOMINAL INTEREST RATE is the % increase in MONEY that the borrower pays the lender
        3. NOMINAL INTEREST RATE = REAL INTEREST RATE + INFLATION PREMIUM (EXPECTED RATE OF INFLATION)
        4. Review figure 13.4 on page 327.

V. DOES INFLATION AFFECT OUTPUT?

a. Inflation may affect an economy's level of real output (thus its level of real income).
b. COST-PUSH INFLATION AND REAL OUTPUT
    i. Cost-push inflation reduces real output. It redistributes a decreased level of real income.
c. DEMAND-PULL INFLATION AND REAL OUTPUT
    i. Mild inflation reduces total output.
    ii. Mild inflation is a byproduct of strong spending and is a small price to pay for full employment and continued economic growth.
    iii. Better to err on the side of stronger spending than weaker spending, unemployment, recession and possible DEFLATION - a general decline in the level of prices in the economy.
d. HYPERINFLATION- extraordinary rapid inflation that can have a devastating effect on real output and employment
    i. Money eventually becomes almost worthless.
    ii. Can come from massive increase in money supply by the government.