

## Day 14

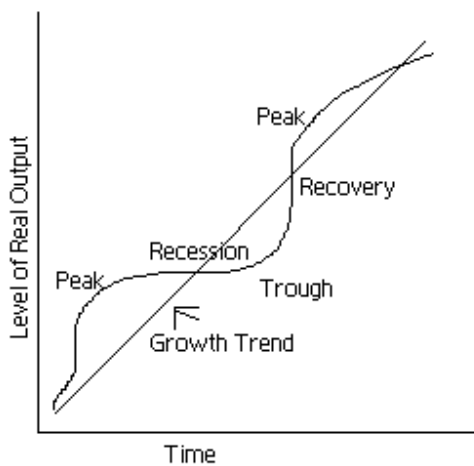
- Pattern of economic activity in a typical capitalist society



- Typical recession two quarters of negative GDP growth
- Trough – Stop in decline; stabilizes
- Why does this occur and what, if anything, should we or could we do about it
  - Nature of macro economics
- 1<sup>st</sup> step in understanding
  - Understand how it is described and measured

## Day 15

- Macro Economics is about the business cycle



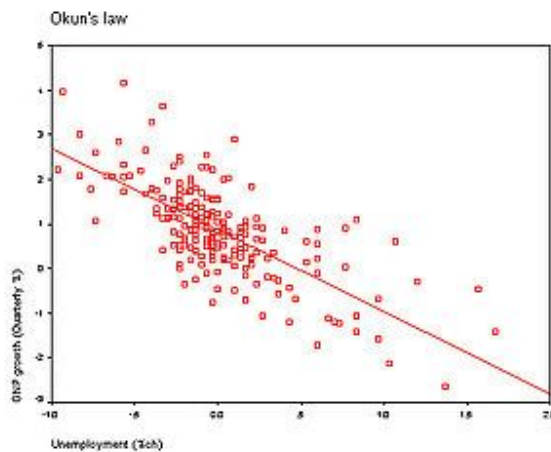
- Unemployment
  - Measured with unemployment rate
  - 9.7% of labor force in August was unemployed
- Employed

- During the survey week, they worked at least one hour for pay or at least 15 hours in a family business unpaid, or if have a job and are off for personal reasons
- Measured in a poll
- Calls 60,000 households
- Unemployed
  - Those who did not work at all during the survey week, but must have been actively searching for work in the last 4 weeks
- Not all unemployment is the same

## Day 16

- Employment vs Unemployment
  - What about underemployment?
    - More capable than current job entails
- 3 types of unemployment
  - Frictional, Structural, and Cyclical
  - Frictional
    - Unemployment that is voluntary
  - Structural
    - Mismatch
    - Some structural problem between labor force and demand for labor force
    - Ex: Skills no longer necessary or location does not have demand for skill
    - Not trained or in the right place for a job
    - Inevitable
  - Cyclical Unemployment
    - Unemployment because of cycle
    - Not enough economic activity for full employment
- Natural rate of unemployment
  - Demand for labor = Supply
  - Reasons for unemployment – Structural + Frictional
- 5% Approximately is natural rate
  - Only unemployed are those who seek or are being trained
- Cyclical unemployment is the type policy makers focus on
- Unemployment can be below the natural rate
  - Fear is that the prices will thus increase

- What makes natural rate of unemployment change
  - Advances in technology
    - Ex: Now can apply for jobs online
  - Demographics
    - Fewer teenagers, less frictional unemployment
  - Doubling of prisoner population
- Full employment is the biggest objective of economic policy makers
  - Unemployment represents a good or service that could've been produced but never will be; lost forever
  - Okun's Law
    - For every 1% of unemployment above the natural rate, there is a 2% decrease in production



- Increase in unemployment increases the death rate, suicide, homicide, mental problems
- Beyond full employment objective – Stability
  - Inflation: Overall price level goes up
  - Deflation: Overall price level goes down
  - Consumer Price Index (CPI)
    - Determines overall average price level to gauge inflation/deflation

### Day 17

- The business cycle
  - Varying levels of economic activity
- At any given time, there will be some level of structural and frictional unemployment
  - Inevitable
- Goal
  - Number of job seekers should equal the number of jobs

- What an idle worker could have done is lost forever
- Inflation
  - Some economists argue 0% inflation would be ideal
  - Others say 2-3% is perfectly fine
- How is inflation gaged
  - Determined with a sample
  - CPI (Consumer Price Index)
    - Most widely used
    - Cost of living
    - 215.834 was the CPI of Aug 09
    - 215.351 was the CPI of July 09
      - Represents how much a market basket of goods would generally cost per month
      - Every year, the goods are re-priced
      - Inflation rate (Difference of month last year and month this year)/(Month last year) x 100
      - CPI is yearly measured in January
      - Core CPI
        - Takes out subjectivity of energy and food

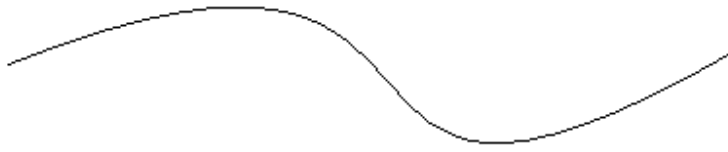
$$\text{inflation rate} = \frac{P_0 - P_{-1}}{P_{-1}} \times 100\%$$

- Inflation Rate affects everyone
  - How much our money is worth
  - How many goods and services you can buy with money is what the money is worth
    - If a dollar can buy 5 cookies, the dollar is worth 5 cookies
  - One flaw of CPI is over-calculation
    - Don't take into consideration coupons and discounts and substitutes
- 2 Reasons prices go up
  - Demand Pull Inflation
    - Too many dollars chasing too few goods
    - Tends to happen in times of prosperity
  - Cost Push Inflation
    - One product goes up in price, so all firms go up
      - Gas prices go up, transportation costs more, and thus the price of the transported product goes up

- Inflation redistributes wealth from some to others
- Minimum wage is the nominal wage, real wage is the amount you can buy with your money
- 3 groups that are hurt by inflation
  - People on fixed income (hurt most)
  - Lenders
  - Savers

### Day 18

- Problems in economy
  - Unemployment
  - Inflation (Price instability)
- Problem with inflation is money is worth less, and money is only good for what it can buy
- 3 Groups hurt by inflation
  - Fixed incomes
  - Savers
    - If value is saved in the form of cash
    - Closer something is to cash, the more inflation hurts
  - Lenders
    - Money paid back is worth less than money lent
    - One reason for interest
- Groups benefiting
  - People with assets
  - People whose incomes increases at a higher rate than the rate of inflation
  - Business owners
  - Borrowers
- Inflation, especially unanticipated, generally redistributes wealth in a bad way
- Causes people to be nervous, thus destabilizing economy
- Creeping inflation
  - Normal rate of inflation
- When inflation goes up by ridiculous amount, generally because government printed a ton of money randomly
  - Money becomes worthless
  - Hyper inflation
    - 1922-1923 in Germany 1 mark went to 1.3 trillion marks in one year
- Business cycle



- How do we know level of economic activity
  - Accounting
    - Keep track of company's economic activity
    - Produce records
- Certified Public Accountant
  - Certify what companies say about their records is true
  - Independent of company
- National income accounting
  - Give some policy makers idea of how economy is doing
  - Gross Domestic Product (GDP)
    - Total value of all final production that occurs on US soil in 1 year
    - Change in ownership does not count toward GDP

### Day 19

- US 14.2 trillion dollar gross domestic product
  - GDP
    - Total production on US soil in one year, only measures final production
    - Assumed everything produced was purchased
    - Expenditure Approach
      - Measure how much was purchased to see how much was produced
    - Expenditure = Income
      - How much earned = How much spent, which leads to income approach
- 14.2 trillion dollars income earned, 14.2 trillion spent, 14.2 trillion produced
- Spending broken to 4 categories
  - Consumers – Consumption (C) 2/3 of the 14.2 trillion
    - Counted only on final consumer
    - Very Important
  - Business – Gross Domestic Investment (Ig)
    - No expenditures count as part of GDP until final consumer purchases

- Business spending on capital counts
    - Pizza shop
      - Spatula counts; cash register counts; cheese does not count because it is counted when the consumer buys the pizza with the cheese
    - All new construction is also counted
    - Sale of previous construction does not count
  - Change in Inventory (Unsold production)
    - All inventory counts as business investment
    - At beginning of 2008, checked inventory of all firms, then again at the end
    - If beginning 100, end 110
      - Add 10 to GDP
    - If beginning 100, end 90
      - Subtract 10 from GDP
- Government (G)
  - Defense stuff, office supplies
  - Only spending counted toward GDP has to do with some sort of production
- Foreigners  $X - I = X_n$ 
  - Value of what we sell abroad – value of what we buy abroad = net export
  - Relatively small fraction of 14.2 trillion is bought by foreigners
  - Net export generally negative because US buys more from foreigners than it sells to foreigners
- $GDP = C + I_g + X_n + G$

## Day 20

- Business cycle; GDP – Level of business/economic activity
- Recession is defined as 2 consecutive quarters of negative GDP
- Firms are slow to rehire, so unemployment lags behind the rising level of economic activity
- Everything produced is purchased by someone
- If there is a dollar spent, there must be a dollar earned
  - Income broken into categories
    - Wages
    - Rent
    - Interest

- Proprietor Income (Ie shop owners, who own all the profits; barbers, beauticians)
  - Corporate Income
    - Corporation has multiple owners
    - Actually a legal entity
  - All of these do not equal 14.2 million dollars
    - Why
      - Indirect Business Taxes (IBT)
        - Sales tax (321 spent, 300 earned)
      - Depreciation
        - Hard to explain
        - Wear and Tear on capital
        - Everything wears out
        - Nothing actually paid
        - No income to show depreciation
      - NFF (Net Foreign Factor)
        - Subtract wages of Americans working abroad and add the incomes of foreigners working here
- Income = Wages + Rent + Interest + Proprietor and Corporate Profit + IBT + Depreciation + NFF
- Other Accounts
  - GDP
  - NDP = Net Domestic Product
    - GDP – Depreciation
    - Some view as more accurate
  - NI = National Income
    - NDP – (IBT + NFF)
    - Total Income generated by production in the economy
  - PI = Personal Income
    - Total gross income of every single American
    - Wages, interest, corporate profits (dividends)
    - (Doing Taxes)
    - Collective income prior to taxes
    - Not all corporate profits distributed to households