Macroeconomics Notes

- CHAPTER 2
  - Economics is a science
    - Collect data
    - Analyze these data
    - Scientific method
      - Dispassionate development and testing of theories about how the world works
      - Observation and theory
    - Assumptions
      - Can simplify the complex world and make it easier to understand
      - HOUSEHOLDS selll FACTORS OF PRODUCTION, FIRMS buy FACTORS OF PRODUCTION, FIRMS sell GOODS AND SERVICES, HOUSEHOLDS buy GOODS AND SERVICES
  - Production possibilities frontier: Efficiency of producing products and factoring in the opportunity cost
  - Microeconomics: study of how households and firms make decisions; interact with markets
  - Macroeconomics: study of economy-wide phenomena
  - Positive statements: “Minimum-wage laws cause unemployment”
  - Normative statements: “The government should raise the minimum-wage”

Macroeconomics Notes

- CHAPTER 4
  - Market: group of buyers and sellers; demand and supply
  - Monopoly: sets the price
  - Law of demand: price increases, quantity demanded decreases
  - Market demand: add up the individual's demands
  - Shifts in demand
    - Income
      - Normal: income increases, demand increases
      - Inferior: income increases, demand decreases
    - Prices of related goods:
      - Complements: price increases, demand decreases
        - EX: software and computers, bagels and cream cheese
        - Fall in the the price of one good raises the demand for another good
      - Substitutes: Price increases, demand increases
        - EX: computers and typewriters
        - Fall in price of one good reduces the demand for another good
    - Tastes
    - Expectations
    - # of buyers
  - ***Change in price is movement along the demand curve***
  - Shifts in supply
    - Input prices
    - Technology
    - Expectations about future
    - # of sellers

Macroeconomics Notes

- CHAPTER 5
  - Elasticity: measure of the responsiveness of quantity demanded or quality supplied
  - Close substitutes: more elastic
  - Necessities: inelastic demand
  - Luxuries: elastic demand
  - Narrowly defined markets: more elastic
  - Demand is more elastic over longer time horizons
  - Midpoint method: (Q2-Q1)/[(Q2+Q1)/2]/(P2-P1)/[(P2+P1)/2]
  - Elastic: greater than 1
    - Price and revenue move in same direction
    - Points with high price and low quantity
  - Inelastic: less than 1
    - Price and total revenue move in opposite direction
    - Points with low price and high quantity
  - Unit elasticity: equals 1
    - Total revenue remains constant when price changes
  - Perfectly inelastic: demand equals 0, vertical

Macroeconomics Notes

- CHAPTER 6
  - Price ceiling: a legal maximum on the price at which a good can be sold
    - Rent control laws
    - Shortage
      - Quantity supplied < quantity demanded
      - Upward pressure
    - Not binding: surplus
    - Binding: shortage
  - Price floor: a legal minimum on the price at which a good can be sold
    - Minimum wage laws
    - Surplus
      - Quantity supplied > quantity demanded
      - Downward pressure on price
    - Not binding: shortage
    - Binding: surplus
  - Taxes: government uses taxes to raise revenue for public projects
    - ***Buyers and sellers share the burden of taxes***
    - Affect on sellers:
      - Shift in supply
      - Supply curve shifts left
      - Higher equilibrium price
      - Lower equilibrium quantity
    - Affect on buyers:
      - Demand curve shifts left
      - Lower equilibrium price
      - Lower equilibrium quantity

Macroeconomics Notes

- CHAPTER 10
  - Gross Domestic Product (GDP): measures the total income of everyone in the economy
  - $56,000 in the US
    - Measures the total expenditures on the economy's output of goods and services
    - Income must equal expenditure
    - Market value of all final goods and services
    - GDP: CONSUMPTION + INVESTMENT + GOVERNMENT PURCHASES + NET EXPORTS
      - Consumption: spending by households on goods and services
      - Investment: purchase of capital goods that will be used to produce other goods and services in the future
      - Government purchases: government consumption expenditure and gross investment, spending on goods and services
      - Net exports: EXPORTS - IMPORTS
    - Nominal GDP: valued at current prices
    - Real GDP: takes inflation into account (economic growth and economic well-being
    - Inflation: Economy's overall price level is rising
    - Inflation rate: percentage change in same measure of the price level from one period to the next

Macroeconomics Notes

- QUIZ #2
  - Elasticity: measure of responsiveness of quantity demanded or quality supplied
    - CHANGE IN QUANTITY / CHANGE IN PRICE
    - More elastic:
      - Close substitutes
      - Luxury goods
      - Narrowly defined market (ice-cream)
      - Over longer time horizons
  - Midpoint method: [(Q2 - Q1) / (Q2 + Q1) / 2] / [(P2 - P1) / (P2 + P1) / 2]
  - Elastic: greater than 1
  - Inelastic: less than 1
  - Unit elastic: Equals 1
  - Perfectly inelastic: vertical
  - Perfectly elastic: horizontal
  - Cross- price elasticity: percentage change in quantity demanded of the first good divided by the percentage change in price of the second good
  - Substitutes: goods typically used in place of one another
  - Complements: goods that are typically used together
  - Taxes: to influence market outcomes and to raise revenue for public purposes
    - Shift supply curve to the left
    - Reduces the size of the market
    - Demand curve shifts left
    - PRICE BUYERS PAY - PRCE SELLERS RECEIVE
    - Buyers and seller share the burden of the tax
    - Buyers pay more
    - Sellers receive less
  - Price ceiling: legal maximum on the price at which a good can be sold (Rent-control laws)
  - Price floor: a legal minimum on the price at which a good can be sold
  - GDP: measures total income of everyone in the economy. Measures the total expenditures on the economy's output of goods and services
    - INCOME = EXPENDITURE
    - GDP: CONSUMPTION + INVESTMENT + GOVERNMENT PURCHASES + NET EXPORTS
    - Nominal GDP: valued at the current price
    - Real GDP: valued at the constant prices (not affected by changes in prices)
      - Inflation: overall price level is rising

Macroeconomics Notes

- CHAPTER 11
  - Consumer price index: measure of the overall level of prices, overall cost of goods and services
  - Calculating CPI:
    - Fix the basket
    - Find the prices
    - Compute the basket's cost
    - Choose a base year and compute the CPI
    - Compute the inflation rate
      - [(CPI IN YEAR 2 - CPI IN YEAR 1) / CPI IN YEAR 1] * 100
  - Inflation rate: percentage change in the price index
  - Core CPI: measure of the overall cost of consumer goods and services excluding food and energy
  - Producer price index: measure of the cost of a basket of goods and services bought by firms
  - Problems in measuring the cost of living:
    - Substitution bias
    - Introduction of new goods
    - Changes in quality
  - GDP deflator: ratio of nominal GDP to real GDP; reflects prices of all goods and services produced domestically
    - (NOMINAL GDP / REAL GDP) * 100
  - CPI: reflects prices of goods and services bought by consumers
  - Dollar figures from different times:
    - AMOUNT IN YEAR T = PRICE LEVEL TODAY / PRICE LEVEL IN YEAR T
  - Indexation: automatic correction by law or contract
  - Nominal interest rate: interest rate as usually reported; without a correction for the effects of inflation
  - Real interest rate: interest rate corrected for the effects of inflation
    - = NOMINAL INTEREST RATE - INFLATION RATE
  - The CPI gives greater weights to goods that consumers purchase more of
  - Group of goods and services used to compute the GDP deflator changes automatically over time
  - Price of coffee increases, both the CPI and GDP deflator increase
  - An increase in the price of French wine would increase the CPI but not the GDP deflator

Macroeconomics Notes

- CHAPTER 15
  - Employed:
    - Paid employees, in their own business, unpaid workers in a family member's business
    - Full-time and part-time workers
  - Unemployed
    - Available for work
    - Tried to find employment during the previous four weeks
    - Labor force: total number of workers, employed and unemployed
      - Percentage of the total adult population that is in the labor force
        - (LABOR FORCE / ADULT POPULATION) * 100
    - Unemployment rate: percentage of labor force that is unemployed
      - (NUMBER OF UNEMPLOYED / LABOR FORCE) * 100
    - Women of the prime working age (25 to 54): have lower rates of labor-force participation than men
    - Blacks of prime working age: similar rates of labor-force participation as prime-age whites
      - Much higher unemployment rate
    - Teenagers:
      - Lower rates of labor-force participation
      - Much higher rates of unemployment than older workers
    - Natural rate of unemployment: normal rate of unemployment around which the unemployment rate fluctuates
    - Women's role
      - New technology
      - Improved birth control
      - Changing political and social attitudes
    - Fall in men's labor-force:
      - Young men stay in school longer
      - Older men retire earlier and live longer
      - More women employed
    - Discouraged workers: individuals who would like to work, but have given up looking for a job
    - Collective bargaining: process by which unions and firms agree on the terms of labor from a firm by a union
    - Union raises wages above equilibrium

Macroeconomics Notes

- CHAPTER 16
  - Barter: exchanging one good or service for another
    - Trade requires double coincidence of wants
  - Money:
    - Set of assets in an economy
    - To buy goods and services from other people
  - Liquidity: ease with which an asset can be converted into the economy's medium of exchange
  - Functions of Money:
    - 1. Medium of exchange: item that buyers give to sellers when they want to purchase goods and services
    - 2. Unit of account: yardstick people use to post prices and record debts
    - 3. Store of value: item that people can use to transfer purchasing power from the present to the future
  - Kinds of Money:
    - 1. Commodity money: money that takes the form of a commodity with intrinsic value: gold, cigarettes
    - 2. Intrinsic value: item would have value even if it were not used as money
    - 3. Gold standard: paper money that is convertible into gold on demand
    - 4. Fiat money:
      - Money without intrinsic value
      - Used as money because of government decree
  - Money in the US Economy
    - Money stock: quantity of money circulating in the economy
    - Currency: paper bills and coins in the hands of the public
    - Demand deposits: balances in bank accounts; depositors can access on demand by writing a check
    - Measures of money stock:
      - M1: demand deposits, traveler's checks, currency
      - M2: everything in M1, savings deposits, money market mutual funds
  - Federal Reserve system:
    - Central bank: oversee the banking system, regulate the quantity of money in the economy
    - Federal Reserve: ensure the health of the nation's banking system, control the money supply
  - Fed's primary tool: purchase and sale of US government bonds
    - FOMC increases the money supply: Fed open-market purchase

- FOMC decrease the money supply: Fed open-market sale
- Reserves: deposits that banks have received but have not loaned out
- Fractional-reserve banking: banks hold only a fraction of deposits on reserves
- Money Multiplier: amount of money the banking system generates with each dollar of reserves
  - Higher the reserve ratio, the smaller the money multiplier
- Influences the quantity of reserves
  - Open-market operations
  - Fed lending to banks
- Influences the reserve ratio
  - Reserve requirements
  - Paying interest on reserves
- Discount rate: interest rate on the loans that the Fed makes to banks
  - Higher: reduce the money supply
  - Smaller: increase the money supply
- Open Market Operations:
  - Feed buys bonds: decrease in the federal funds rate, increase in money supply
  - Fed sells bonds: increase in the federal funds rate, decrease in money supply

Macroeconomics Notes

- CHAPTER 20
  - Recession: period of declining real incomes and rising unemployment
  - Depression: severe recession
  - Economic fluctuations:
    - Economic fluctuations are irregular and unpredictable
    - Most macroeconomic quantities fluctuate together
    - As output falls, unemployment rises
  - Aggregate-demand curve: shows the quantity of goods and services that firms and households want to buy at each price level
    - Shift right: increase in consumer spending, increase in investment, increase in government purchases, increase in net exports
  - Aggregate-supply curve: shows the quantity of goods and services that firms choose to produce and sell
    - Long-run aggregate supply curve is vertical
    - Short-run: upward sloping
    - Shift left: natural rate of unemployment increases, expected price level increases
    - Shift right: quantity of labor increases, capital stock increases, new discovery of natural resource, new technology
  - 3 effects explain why AD curve slopes downward:
    - Wealth effect:
      - Consumers are wealthier
      - Increase in real value of money
      - Increase in consumer spending
    - Interest- rate effect:
      - Decrease in interest rate
      - Increase spending on investment goods
    - Exchange-rate effect
      - Decrease in interest rate
      - US dollar depreciates
      - Stimulates US net exports
  - AS curve slopes upward:
    - Sticky-wage theory
      - Nominal wages: slow to adjust to changing economic conditions, based on expected prices
      - Price level < expected: firms incentive to produce less output
      - Price level > expected: firms incentive to produce more output

  - Sticky-price theory:
    - Prices of some goods and services: slow to adjust to changing economic conditions
  - Misperceptions:
    - Changes in the overall price level
- Quantity of output supplied:
  - Natural level of output + a(Actual price level - Expected price level)
    - A = # that determines how much output responds to unexpected changes in the price level
- Equilibrium: Expected price level = Actual Price level

Macroeconomics Notes

- CHAPTER 21
  - Aggregate Demand
    - Slopes downward: when price level falls- quantity of goods and services demand increases
    - Key role in explaining short-run economic fluctuations
  - Money-supply
    - Controlled by the Fed
  - Interest rate: adjusts to balance the supply and demand for money
    - Interest rate > equilibrium: people are more willing to hold money
    - Interest rate < equilibrium: increase holdings in money
  - Money: most liquid asset
  - Fed increases money supply
    - Money-supply curve shifts right
    - Interest rate falls
    - Aggregate demand curve shifts right
  - Fed decreases money supply
    - Money-supply curve shifts left
    - Interest rate increases
    - Aggregate demand curve shifts left
  - Fiscal policy: government policymakers set the level of government spending and taxation
  - Multiplier effect: Expansionary fiscal policy increases income and increases consumer spending
    - Response of consumer spending and investment
  - Crowding-out effect: expansionary fiscal policy raises the interest rate and reduces investment spending