

## AP MACRO-ECONOMICS REVIEW

### ECONOMIZING PROBLEM

Marginalism: Benefits and costs

Why is Marginalism important for Economics?

Define and differentiate Microeconomics and Macroeconomics

Unlimited wants v. Scarce resources

Opportunity cost

Four factors of Production (CELL) and their corresponding resource payments

1. (C)Capital -- Interest
  - o Human
  - o Physical capital
2. (E)Entrepreneurial ability -- Profits
3. (L)Land -- Rent
4. (L)Labor -- Wages

What is the difference between Productive efficiency and Allocative Efficiency?

Law of Increasing Opportunity cost and how it determines the shape of Production Possibilities Curve.

Production possibilities frontier/curve (PPF)

PPF for increasing, constant and zero opportunity costs

PPF and productive inefficiency (unemployment)

PPF & growth in the economy. What causes growth in the economy and how does this affect PPF?

1. Change in Quantity of CELLS
2. Change in Quality of Capital
3. Advances in technology
4. International trade

Basic economic questions:

1. What to produce?
2. How to produce?
3. For whom to produce?

Comparative economic systems

1. Traditional Economy
2. Market Economy
3. Command Economy
4. Mixed Economy

*Profit motive, competition*, “Invisible Hand”

Know the importance of phrase “Profit is motivator, competition is regulator”. Why is this important for market economy?

Define and present examples of *market failure*.

Define the term *externality* and present examples of positive and negative externalities.

## INDIVIDUAL MARKETS: SUPPLY AND DEMAND

Law of Demand & Demand Curve

- Diminishing marginal utility
- Income effect
- Substitution effect

Change in quantity demanded v. change in demand

**Demand determinants (shifts in demand curve)**

1. **Tastes**
2. **Number of buyers**
3. **Income**
  - a. *Normal (superior good)*
  - b. *Inferior good*
4. **Expectations**
5. **Prices of related goods**
  - a. *Substitute good*
  - b. *Complementary good*

Law of supply & supply curve

Change in quantity supplied v. change in supply

**Determinants of Supply (shifts in supply)**

1. **Resource prices**
2. **Technology**
3. **Taxes and subsidies**
4. **Prices of other goods**
5. **Number of sellers**
6. **Price expectations**

Market equilibrium. Equilibrium price and quantity.

Surplus, shortage – Price floor, Price ceiling.

What is the rationing function of prices?

How does changes in supply and demand affect equilibrium price and quantity?

*Ceteris Paribus* – “other things equal”. Why is *ceteris paribus* important in economics?

## DOMESTIC OUTPUT, NATIONAL INCOME AND PRICE LEVEL

Gross domestic product (GDP)

Avoiding multiple counting. Importance of *intermediate goods* and *final goods*.

What does GDP exclude?

1. Second hand sales
2. Purely financial transactions
  - a. Public transfer payments
  - b. Private transfer payments
  - c. Stock market transactions

Expenditure approach of calculating GDP.  $GDP = C + I_g + G + X_n$

C – Personal Consumption

$I_g$  – Gross Private Domestic Investment

- All final purchases of machinery, equipment, and tools by business

- All construction
  - Changes in inventories (positive and negative changes in inventories)
- G – Government purchases  
 $X_n - \text{Net exports} = \text{Exports (X)} - \text{imports (M)}$

Income approach of calculating GDP.

- Compensation of the employees
- Rents
- Interest
- Proprietors' income
- Corporate profits
  - Corporate income taxes
  - *Dividends*
  - Undistributed corporate profits

Net Domestic Product (NDP)

$$\text{NDP} = \text{GDP} - \text{Consumption of fixed capital (depreciation)}$$

National Income (NI) – all income earned through the use of American owned resources, located at home or abroad.

$$\text{NI} = \text{NDP} + \text{Net foreign factor income} - \text{Indirect business taxes}$$

What is net foreign factor income?

Personal Income (PI) – all income received whether earned or unearned

$$\text{PI} = \text{NI} - \text{Social security contributions} - \text{Corporate income taxes} - \text{Undistributed corporate profits} + \text{Transfer payments}$$

Disposable Income (DI)

$$\text{DI} = \text{PI} - \text{Taxes}$$

$$\text{DI} = \text{Consumption (C)} + \text{Savings (S)}$$

Nominal GDP v. Real GDP (How do you calculate Real GDP using Nominal GDP?)

Nominal GDP – includes prices (change in prices affect Nominal GDP)

Real GDP – excludes prices (change in prices do not affect Real GDP)

Per Capita GDP

How is price index computed?

Define *base year* and *market basket*.

The Consume Price Index (CPI), Producer Price Index (PPI)

Shortcomings of GDP

### **BUSINESS CYCLE, UNEMPLOYMENT AND INFLATION**

Two definitions of economic growth

1. Growth in Real GDP
2. Growth in Per Capita Real GDP

Which is a more effective source of economic growth?

- Increase in resources
- Increase in productivity

Rule of 70

Business Cycle  
Peak  
Recession  
Trough  
Recovery

Labor force. Who is counted and not counted in labor force.

Unemployment. Who is counted and not counted as unemployed

Discouraged workers

Unemployment rate

$$\text{Unemployment Rate} = \text{unemployed} / \text{Labor force}$$

Types of unemployment

1. Frictional
2. Structural
3. Cyclical
4. Seasonal

Full Employment and Natural Rate of Unemployment (NRU)

Inflation

Measurement of Inflation using CPI

$$\text{Rate of Inflation in 2004} = (\text{CPI of 2004} - \text{CPI of 2003}) / \text{CPI of 2003}$$

Types of inflation

- Demand-pull inflation
- Cost push inflation (*Supply shock* – major source of cost-push inflation)
- Hyperinflation

Redistribution effects of inflation. Who is helped or hurt by inflation?

- Creditors with fixed or variable interest rate loans
  
- Debtors with fixed or variable interest rate loans

## **AGGREGATE DEMAND AND AGGREGATE SUPPLY**

Aggregate demand curve and explanation for its downward slope.

1. Real-balance effect
2. Interest rate effect
3. foreign purchase effect

**Non-price determinants of Aggregate Demand (Aggregate demand Shifts)**

- 1. Change in consumer spending**
  - a. Consumer wealth**
  - b. Consumer expectations**
  - c. Household indebtedness**
  - d. Taxes**
- 2. Change in investment spending**
  - a. Real interest rate**
  - b. Expected returns**
    - i. Expected future business conditions**
    - ii. Technology**
    - iii. Degree of excess capacity**

- iv. **Business taxes**
- 3. **Change in government spending**
- 4. **Change in net export spending**
  - a. **National income abroad**
  - b. **Exchange rates**

Aggregate Supply (AS)

- 1. Horizontal range
- 2. Intermediate range
- 3. Vertical range

**Non-price determinants of Aggregate Supply (Aggregate Supply shifts)**

- 1. **Change in input prices**
  - a. **Domestic resource availability**
    - i. **Land**
    - ii. **Labor**
    - iii. **Capital**
    - iv. **Entrepreneurial ability**
  - b. **Prices of imported resources**
  - c. **Market Power**
- 2. **Change in productivity**
- 3. **Change in legal and institutional environment**
  - a. **Business taxes and subsidies**
  - b. **Government regulation**

Increases in AD: Demand-pull inflation (show graphically)

Decreases in AD: Recession and Cyclical unemployment (show graphically)

Downwardly “sticky” or inflexible resource and product prices

- Wage contracts
- Morale, effort and productivity
  - Efficiency wages
- Minimum wage
- Menu costs
- Fear of price wars

Decrease in AS: Cost-push inflation (show graphically)

Increase in AS & AD: Full employment with price-level stability (show graphically)

### **AGGREGATE EXPENDITURE MODEL**

Consumption schedule (C) and Savings schedule (S) . How are the two graphically related? What is break even income? Where does it show up on C & S schedules?

Marginal propensity to consume (MPC) and Marginal propensity to save (MPS), Average propensity to consume (APC) and Average propensity to save (APS). What is the relationship between MPC & MPS, APC & APS?

### **Investment Demand Curve** (draw the curve)

Expected Rate of Return

Real Interest Rate = Nominal interest rate – rate of Inflation

### **Shifts in Investment Demand Curve**

1. **Acquisition, Maintenance, and Operation costs**
2. **Business taxes**
3. **Technological change**
4. **Stock of Capital Goods on hand**
5. **Expectations**

Says Law – Supply creates its own demand

Multiplier effect

$$\text{Multiplier} = 1 / \text{MPS} = 1 / (1 - \text{MPC})$$

Show graphically and solve the word problems for Balanced Budget Multiplier

## **FISCAL POLICY**

Expansionary fiscal policy

1. Increased Government Spending
2. Tax Cuts

Contractionary Fiscal Policy

1. Decreased Government Spending
2. Tax Increase

Financing Deficits. How does each one of these actions affect the economy and effectiveness of the fiscal policy.

- Borrowing from public or
- Money creation

Disposing surpluses. How does each one of these actions affect the economy and effectiveness of the fiscal policy.

- Debt reduction
- Impounding

Automatic stabilizers

- Taxes (progressive tax)
- Transfer payments

Progressive / proportional / regressive tax systems

Criticisms of fiscal policy

- Timing problems
  - Recognition lag
  - Administration lag
  - Operational lag
- Political business cycle
- Crowding out effect

Show crowding out effect graphically.

### Supply-side Fiscal Policy

Supply-siders' criticism of fiscal policy

Focus on supply curve, tax-cuts and its incentives

Tax cut incentives:

1. Saving and investment
2. Work incentives
3. Risk taking

## **MONEY, BANKING AND MONEY MULTIPLIER**

Functions of money

1. Medium of exchange
2. Unit of account
3. Store of value

Supply of Money

$M1 = \text{Currency} + \text{All checkable deposits}$

$M2 = M1 + \text{Savings} / \text{Money market deposits} + \text{Small} (< \$100,000) \text{ time deposits}$   
 $+ \text{Money market Mutual Funds}$

$M3 = M1 + M2 + \text{Large} (> \$100,000) \text{ time deposits}$

Demand for Money

Transactions Demand ( $D_t$ )

Asset Demand ( $D_a$ )

Total Money Demand ( $D_m$ ) = Transactions Demand ( $D_t$ ) + Asset Demand ( $D_a$ )

### **The Money Market graph**

Federal Reserve

Board of Governors

Federal Open Market Committee (FOMC)

The 12 Federal Reserve Banks. *Bankers' Banks*

Fed functions and Money supply

- Issuing currency
- Setting reserve requirements and holding reserves
- Lending money to banks and thrifts
- Providing for Check collection
- Acting as fiscal agent
- Supervising banks

- Controlling the money supply

Importance of Fed independence

Importance of *fractional reserve banking*

The Money Multiplier (checkable-deposit multiplier)

How do banks create money (checkable deposits) through lending?

Money multiplier =  $1 / \text{Required Reserve Ratio}$

## **MONETARY POLICY**

Fed's tools for Monetary Policy

1. Open Market Operations
  - a. Buying securities
  - b. Selling securities
2. The reserve ratio
  - a. Raise
  - b. Lower
3. The discount rate
  - a. Raise
  - b. Lower

Easy Money / Expansionary Monetary Policy

1. Buy securities
2. lower the reserve ratio
3. lower the discount rate

Tight Money / Contractionary Monetary Policy

1. Sell securities
2. Increase the reserve ratio
3. raise the discount rate

Federal Funds Rate and Prime Interest Rate

## **EXTENDING ANALYSIS OF AGGREGATE SUPPLY**

Short run v. long run aggregate supply curve

Derive short run and long run Aggregate Supply (AS) curves graphically.

Equilibrium in extended AD-AS model and importance of Long Run Aggregate Supply line (LRAS) representing the Full Level of Employment.

Demand-pull inflation in extended AD-AS model.

Cost-push inflation in extended AD-AS model

Three generalizations about Inflation-Unemployment relationship derived from Extended AD-AS model:

1. Over short run there is inverse relationship between inflation and unemployment
2. Aggregate supply shock can cause increase in inflation and unemployment simultaneously (*stagflation*)
3. Over long run there is no significant relationship between inflation and unemployment

Define *Stagflation* and *Disinflation*. Distinguish between *Disinflation* and *Deflation*

Phillips Curve

Short run Phillips curve

Aggregate supply shock and Phillips curve (stagflation)

Long Run Phillips curve (vertical Phillips Curve)

Supply-side economics and Laffer Curve. Draw and explain the importance of Laffer Curve? How does the Laffer Curve affirm the Supply-side economics?

What are the criticisms of Laffer Curve and of the Supply-side economics?

## **ECONOMIC GROWTH**

Economic growth = shifting of PPF and LRAS (not SRAS) to the right

## **MACRO ECONOMIC DISPUTES**

Classical Economic school of thought

Keynesian Economic School of thought

Neo-Classical Schools of Thought

Supply-side economics

Monetarists

Rational Expectations

## **INTERNATIONAL TRADE**

How does free trade create wealth?

Labor-intensive, Land-intensive and Capital-intensive goods and economic basis for trade

Comparative Advantage, *Cost Ratio*, Absolute Advantage

*Terms of trade*. What can influence terms of trade between countries?

Production Possibilities Frontiers (PPF) for two nations prior to trade and after trade based on the specializing in comparative advantage. Trading Possibilities Lines and gains from trade.

Trade barriers

- Revenue tariff
- Protective tariff
- Import quota
- Non-tariff barrier (NTB)
- Voluntary export restriction (VER)

Economic impact of Tariffs and Quotas

Economics of protectionism

- Military self-sufficiency argument
- Increased domestic employment argument
- Diversification for stability argument
- Infant industry argument
- Protection against dumping argument
- Cheap foreign labor argument

## **EXCHANGE RATES**

Balance of payments

Current Account

Capital Account

Exchange rates

Flexible or floating exchange rates (advantages/disadvantages)

Fixed exchange rates (advantages/disadvantages)

Currency Market

Determinants of Exchange Rates

- Changes in tastes
- Relative income changes
- Relative price changes

- Relative interest rates
- Speculation