ECONOMICS DEPARTMENT

F.Y.B.A.

DR DESHMUKH G S

INTRODUCTION TO ECONOMICS

Choices, Choices, Choices, . . .

WHAT IS ECONOMICS?

- Economics – the study of how individuals and societies make decisions about ways to use scarce resources to fulfill wants and needs.

THE STUDY OF ECONOMICS

- Macroeconomics
  - The big picture: growth, employment, etc.
  - Choices made by large groups (like countries)

- Microeconomics
  - How do individuals make economic decisions

ECONOMICS: 5 ECONOMIC QUESTIONS

Society (we) must figure out

- WHAT to produce (make)
- HOW MUCH to produce (quantity)
- HOW to Produce it (manufacture)
- FOR WHOM to Produce (who gets what)
- WHO gets to make these decisions?

WHAT IS ECONOMICS?

Economics – the study of how individuals and societies make decisions about ways to use scarce resources to fulfill wants and needs

PRODUCTION

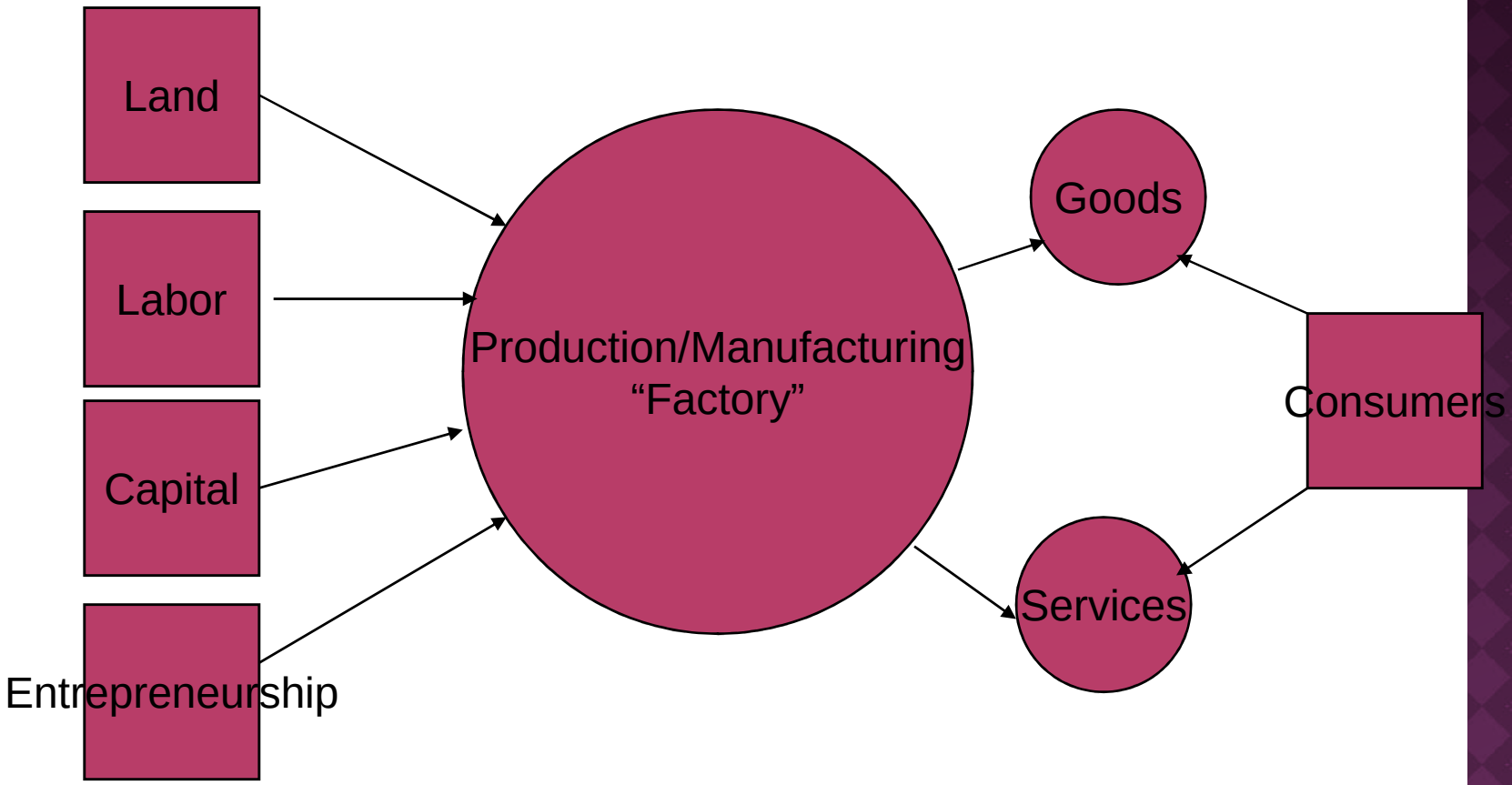
- So how do we get all this “stuff” that we have to decide about?

  Decisions, decisions …

4 FACTORS OF PRODUCTION

- LAND – Natural Resources
  - Water, natural gas, oil, trees (all the stuff we find on, in, and under the land)
- LABOR – Physical and Intellectual
  - Labor is manpower
- CAPITAL - Tools, Machinery, Factories
  - The things we use to make things
  - Human capital is brainpower, ideas, innovation
- ENTREPRENEURSHIP – Investment $$$
  - Investing time, natural resources, labor and capital are all risks associated with production

PRODUCTION PROCESS



THANK U

INTRODUCTION TO ECONOMICS

What is Economics

F.Y.B.A. Dr. DESHMUKH G S

Economics, Scarcity, and Choice

- A good definition of economics
  - Study of choice under conditions of scarcity
- Scarcity
  - Situation in which the amount of something available is insufficient to satisfy the desire for it

Scarcity and Individual Choice

- There are an unlimited variety of scarcities, however they are all based on two basic limitations
  - Scarce time
  - Scarce spending power
- Limitations force each of us to make choices
- Economists study choices we make as individuals, and consequences of those choices
- Economists also study more subtle and indirect effects of individual choice on our society

Scarcity and Social Choice

- The problem for society is a scarcity of resources
  - Scarcity of Labor
    - Time human beings spend producing goods and services
  - Scarcity of Capital
    - Something produced that is long-lasting, and used to make other things that we value
      - Human capital
      - Capital stock
  - Scarcity of land
    - Physical space on which production occurs, and the natural resources that come with it
  - Scarcity of entrepreneurship
    - Ability and willingness to combine the other resources into a productive enterprise
- As a society our resources—land, labor, and capital—are insufficient to produce all the goods and services we might desire
  - In other words, society faces a scarcity of resources

Scarcity and Economics

- The scarcity of resources—and the choices it forces us to make—is the source of all of the problems studied in economics
  - Households allocate limited income among goods and services
  - Business firms choices of what to produce and how much are limited by costs of production
  - Government agencies work with limited budgets and must carefully choose which goals to pursue
- Economists study these decisions to
  - Explain how our economic system works
  - Forecast the future of our economy
  - Suggest ways to make that future even better

Microeconomics

- Micro
  - Micro comes from Greek word *mikros,* meaning “small”
- Microeconomics
  - Study of behavior of individual households, firms, and governments
    - Choices they make
    - Interaction in specific markets
- Focuses on individual parts of an economy, rather than the whole

Macroeconomics

- Macro
  - Macro comes from Greek word, *makros*, meaning “large”
- Macroeconomics
  - Study of the economy as a whole
- Focuses on big picture and ignores fine details

Positive Economics

- Study of how economy works
- Statements about how the economy works are positive statements, whether they are true or not
- Accuracy of positive statements can be tested by looking at the facts—and just the facts

Normative Economics

- Study of what should be
  - Used to make value judgments, identify problems, and prescribe solutions
  - Statements that suggest what we should do about economic facts, are normative statements
    - Based on values
  - Normative statements cannot be proved or disproved by the facts alone

Why Economists Disagree

- In some cases, the disagreement may be positive in nature because
  - Our knowledge of the economy is imperfect
  - Certain facts are in dispute
- In most cases, the disagreement is normative in nature because
  - While the facts may not be in dispute
    - Differing values of economists lead them to dissimilar conclusions about what should be done

Why Study Economics

- To understand the world better
  - You'll begin to understand the cause of many of the things that affect your life
- To gain self-confidence
  - You'll lose that feeling that mysterious, inexplicable forces are shaping your life for you

Why Study Economics

- To achieve social change
  - You'll gain tools to understand origins of social problems and design more effective solutions
- To help prepare for other careers
  - You'll discover that a wide range of careers deal with economic issues on many levels
- To become an economist
  - You'll begin to develop a body of knowledge that could lead you to become an economist in the future

The Methods of Economics

- Economics relies heavily on modeling
  - Economic theories must have a well-constructed model
- While most models are physical constructs
  - Economists use words, diagrams, and mathematical statements
- What is a model?
  - Abstract representation of reality

The Art of Building Economic Models

- Guiding principle of economic model building
  - Should be as simple as possible to accomplish its purpose
- Level of detail that would be just right for one purpose will usually be too much or too little for another
- Even complex models are built around a simple framework

Assumptions and Conclusions

- Types of assumptions in an economic model
  - Simplifying assumptions
    - Way of making a model simpler without affecting any of its important conclusions
  - Critical assumptions
    - Affect conclusions of a model in important ways
    - If critical assumptions are wrong model will be wrong
- All economic models have one or more critical assumptions

Two Fundamental Assumptions

- The economy is complex
- Economists make sense of all this activity in two steps
  - First, the decision makers in the economy are divided into three broad groups:
    - Households
    - Business
    - Government agencies
  - In Microeconomic models
    - Individual households
    - firms
    - Government agencies
  - In Macroeconomic models
    - Household sector
    - Business sector
    - Government sector
    - Foreign sector
- The next step in understanding the economy is to make two critical assumptions about decision makers

First Fundamental Assumption

- Every economic decision maker tries to make the best out of any situation
  - Typically, making the best out of a situation means maximizing some quantity
  - While economists often have spirited disagreements about what is being maximized, there is virtually unanimous agreement that any economic model should begin with the assumption that someone is maximizing something
  - The first fundamental assumption seems to imply that we are all engaged in a relentless, conscious pursuit of narrow goals
    - An implication contradicted by much of human behavior
    - In truth, we only rarely make decisions with conscious, hard calculations
    - Why, then, do economists assume that people make decisions consciously, when, in reality, they often don't?

First Fundamental Assumption

- This is an important question
  - Economists answer it this way
    - The ultimate purpose of building an economic model is to understand and predict behavior
      - The behavior of households, firms, government, and the overall economy
    - As long as people behave as if they are maximizing something, then we can build a good model by assuming that they are
- One last thought about the assumption that people maximize something
  - It does not imply that people are selfish or that economists think they are
- Economics also recognizes that people often care about their friends, their neighbors, and the broader society in which whey live

Second Fundamental Assumption

- Every economic decision maker faces constraints
  - Society's overall scarcity of resources constrains each of us individually in much the same way as the overall scarcity of space in a crowded elevator limits each rider's freedom of movement
  - Together, the two fundamental assumptions help define the approach economists take in answering questions about the world
    - Economists always begin with the same three questions
      - 1. Who are the individual decision makers?
      - 2. What are they maximizing?
      - 3. What constraints do they face?
    - This approach is used so heavily by economists that it is one of the basic principles of economics you will learn in this book

Math, Jargon, and Other Concerns…

- What is economic jargon?
  - Special words that allow economists to more precisely express themselves
- What about math?
  - Basic economics only requires high school level algebra and geometry
  - Appendix at end of this chapter covers some of the basic concepts that you will need

The Basic Principles of Economics

- In this book, you will learn eight basic principles of economics
  - A “key” symbol will appear each time one of them is introduced for the first time
  - Then, each time the principle is used in the text you’ll be alerted with the same key symbol, in the margin
- The Eight Basic Principles of Economics
  - Basic Principle #1: Maximization Subject to Constraints
  - Basic Principle #2: Opportunity Cost
  - Basic Principle #3: Specialization and Exchange
  - Basic Principle #4: Markets and Equilibrium
  - Basic Principle #5: Policy Tradeoffs
  - Basic Principle #6: Marginal Decision Making
  - Basic Principle #7: Short-Run versus Long-Run Outcomes
  - Basic Principle #8: The Importance of Real Values
- You may want to flip back to this list from time to time, especially when you see the “key” symbol in the margin and need to refresh your memory about the principle that it refers to

How to Study Economics

- Following alone in class and learning are two different things
  - Economics must be studied actively, not passively
- What does active studying mean?
  - Closing the book periodically and reproducing what you have learned
  - Reading with a pencil in your hand and a blank sheet of paper in front of you
  - Listing the steps in each logical argument
  - Retracing the cause-and-effect steps in each model
  - Drawing the graphs that represent the model
  - Thinking about the basic principles of economics and how they relate to what you are learning

SUBJECT- MACRO ECONOMICS

NAME OF THE TEACHER- DESHMUKH G. S

Class- S.Y.B.A.

Basic Definitions

Open vs Closed Economy

presence of foreign sector

Private Vs. Mixed

presence of government sector

Economic Growth

per capita GDP based on PPP

Measuring Economic Activity

- Stock

  point in time

  wealth, debt, unemployment, account balance

- Flow

  over a period of time

  income, GDP

•Gross Domestic Product

the total market value of all final goods and services produced by factors of production located within a nation's borders over a period of time (usually one year)

•Gross National Product

the total market value of all final goods and services produced by factors of production owned by a nation over a period of time (usually one year)

other important statistics

- **Unemployment**

  the total number of adults (16 and up) who are willing and able to work and who are actively looking for work, but have not found a job

- **Labor Force**

  adults who are either employed or unemployed

- **Unemployment rate = Unemployed / Labor Force**
- **Structural, Cyclical, Frictional, Seasonal**

Inflation vs deflation

- Inflation – the situation in which the average of all prices in the economy is rising
- GDP deflation, CPI, PPI, Core CPI, Core PPI

$$\text{Price Index} = \frac{\text{cost of market basket today}}{\text{cost of market basket in base year}} \times 100$$

costs of inflation and the business cycle

- menu costs
- redistribution of wealth
- forward looking arrangements and the real interest rate
- currency depreciation and the standard of living
- RECESSION

  two consecutive quarters of negative growth

Components of the GDP

- Personal Consumption
  - Goods
    - Durable
    - Non-durable
  - Services
- Gross Private Domestic Investment
  - Fixed Investment
    - Non-residential
      - Structure
      - Equipment and software
    - Residential
  - Business Inventories

Components of the GDP

- Government Spending
  - Federal and State and Local level
- Exports of goods and services
- Imports of goods and services

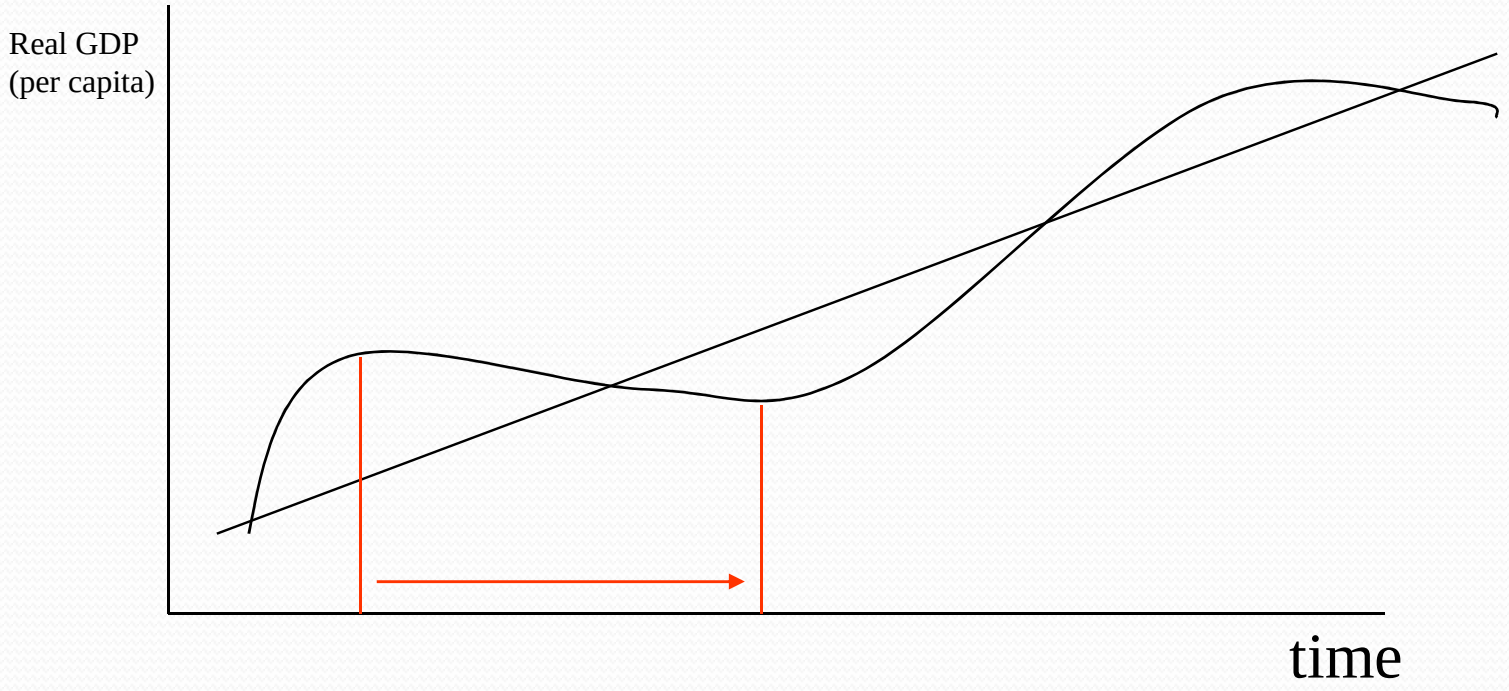
GDP = C + I + G + x - m

Can Euro be yet another problem?

- Price of oil
- International reserve currency
- Competition for investment funding

Simple view of the business cycle

- Business cycle



Predicting the future

The magical art of forecasting

Coincident indicators

- Total hours worked
- Value of unemployment claims
- Total tax revenues
- Corporate income tax receipts

Leading indicators

- Average work hours in **manufacturing**
- Average weekly claims for unemployment insurance
- Business inventories
- New orders for non-defense capital goods
- Sales tax receipts
- Stock index (index futures)
- Construction Employment
- Residential permits

More leading indicators

- Growth in wage rate
- Money supply (velocity)
- Interest rate spread (10 year bond – federal funds rate) or (10 year bond – 1 year bond)

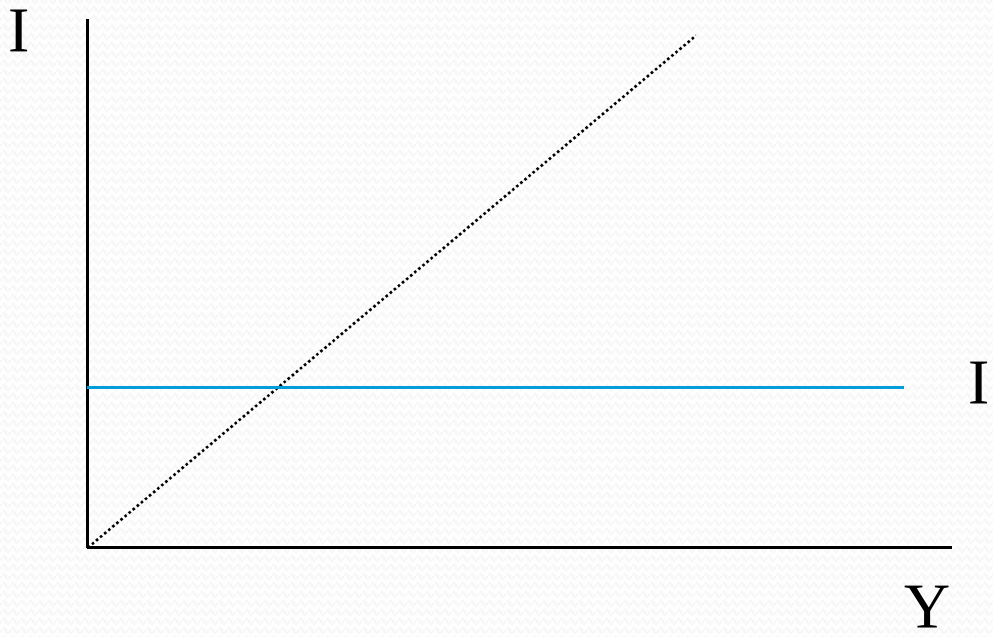
Economy in the short-run

Keynesian view

IS/LM

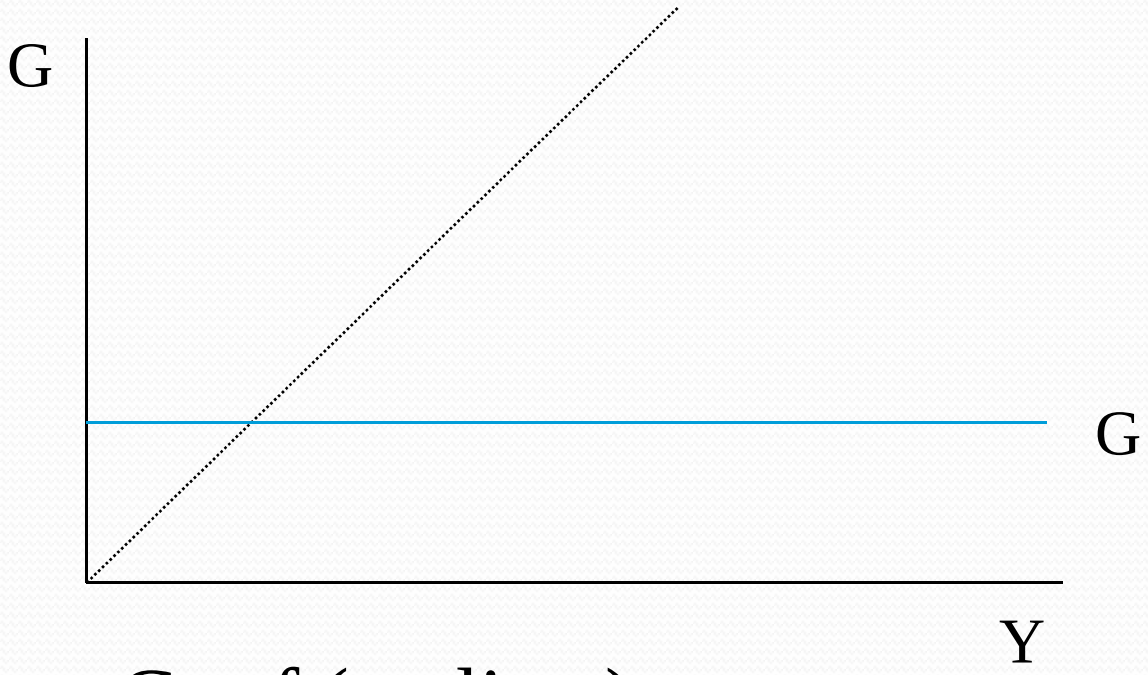
AD/AS

Investment Spending business sector



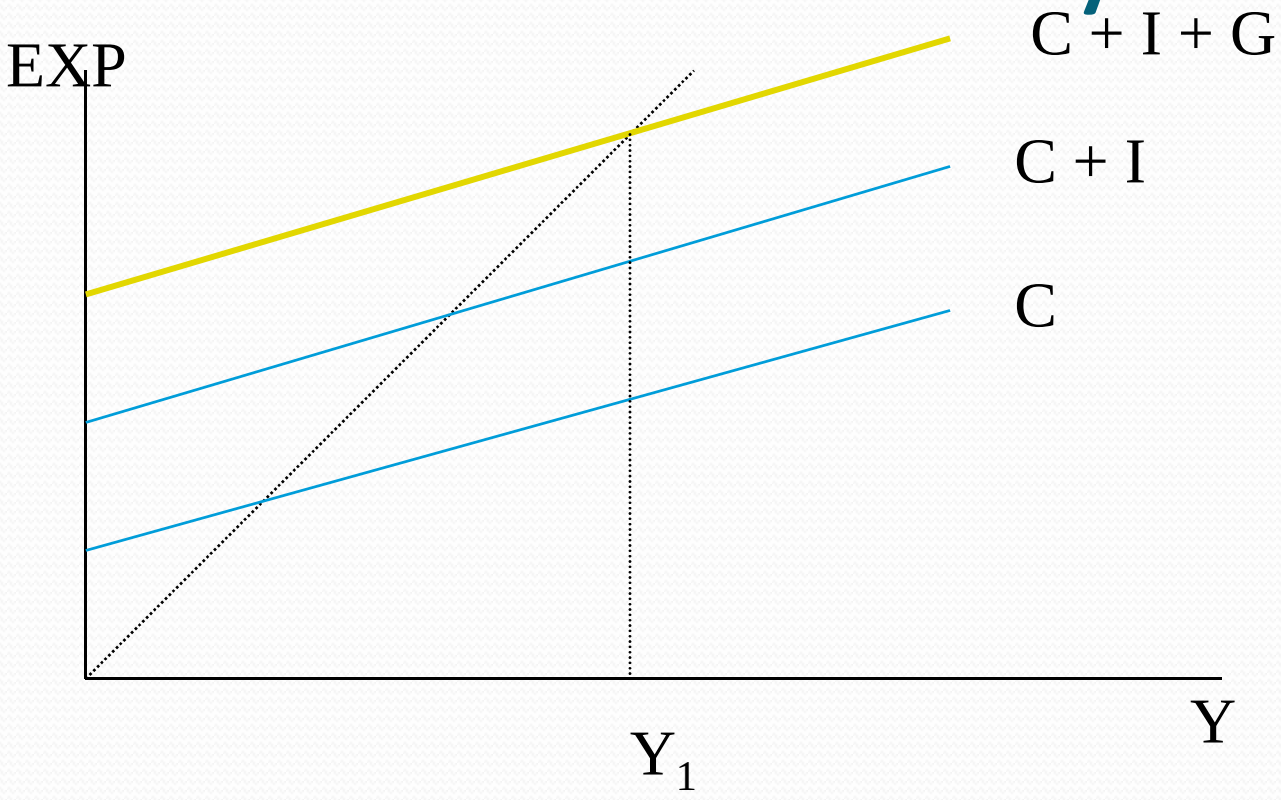
$I = f(\text{expected } Y, i)$

Government Spending government sector



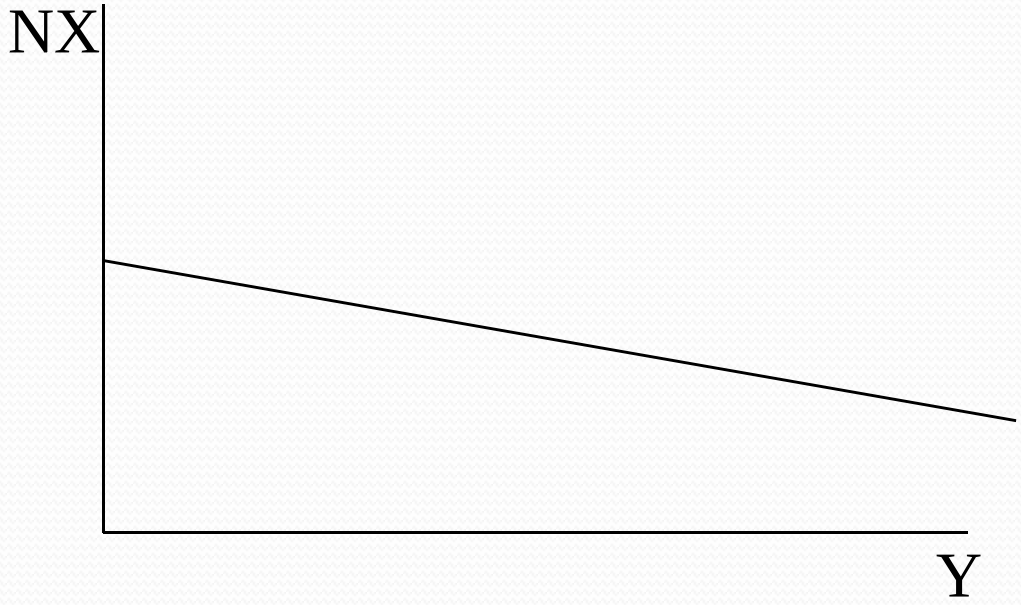
G = f (policy)

Closed Mixed Economy



Foreign sector

- Exports = f (foreign Y, exchange rate)
- Imports = f (domestic Y, exchange rate)



Equilibrium expenditures

Actual expenditures and total income are always equal to each other.

In EQUILIBRIUM: households, businesses, government, and the foreign sector want to spend (planned expenditures) exactly the amount of income that is being generated by the current level of production.

If the economy is out of equilibrium, then production (income) is out of alignment with planned expenditures, hence businesses are forced to change production.

LM
liquidity and money

- LM curve is defined as a set of different combinations of interest rate (i) and income level (Y) such that the money market is in equilibrium.

Understanding Money Demand

- Why hold money (*medium of exchange*)?

  transaction (liquidity) demand

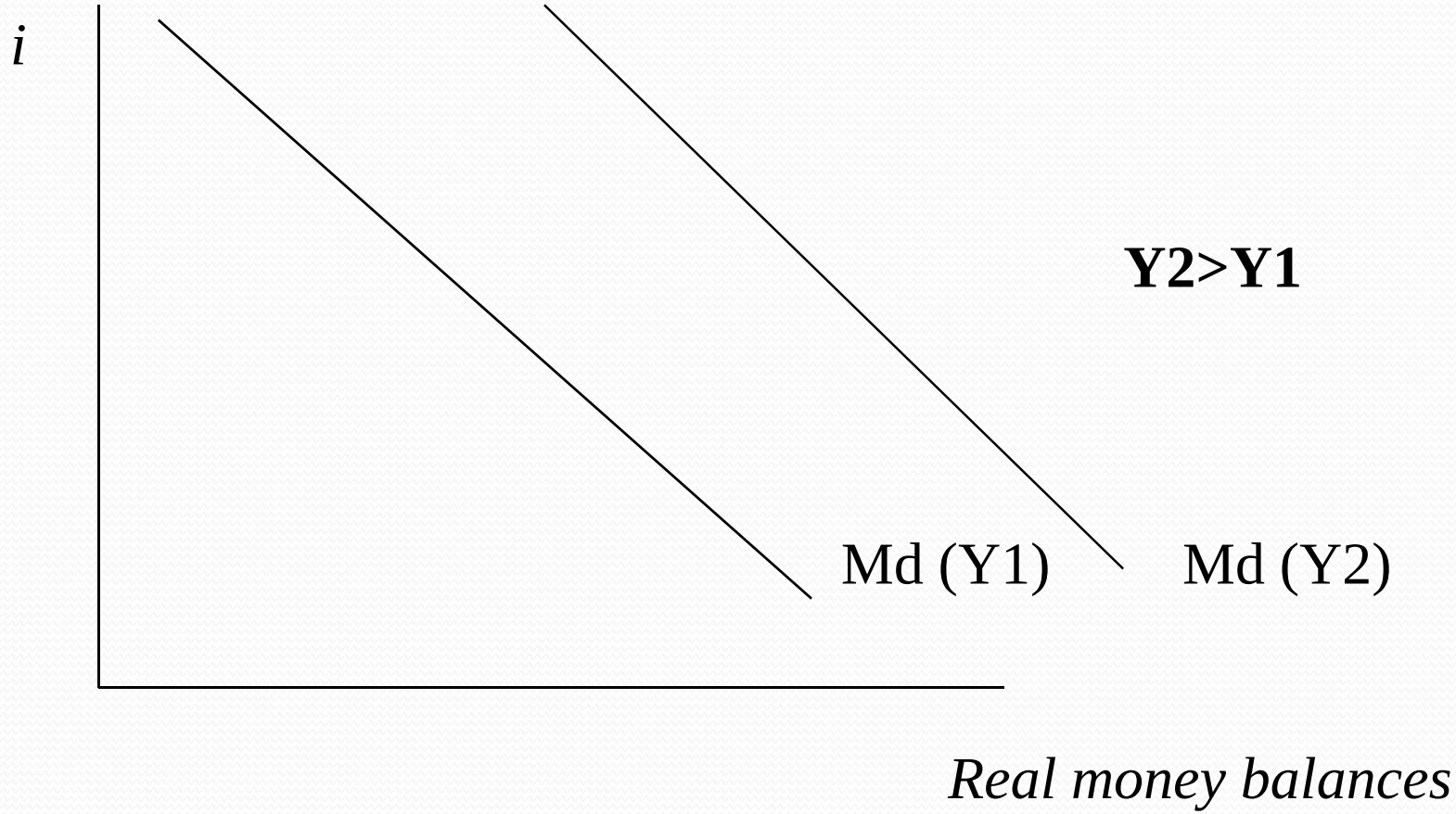
  store of value demand
- Opportunity cost of holding money: *interest rate*
- Real money demand (Md) vs nominal money demand (Mdn)

Md = Mdn/P

Md = f (i, Y), Mdn = f (i, Y, P)

No Money Illusion

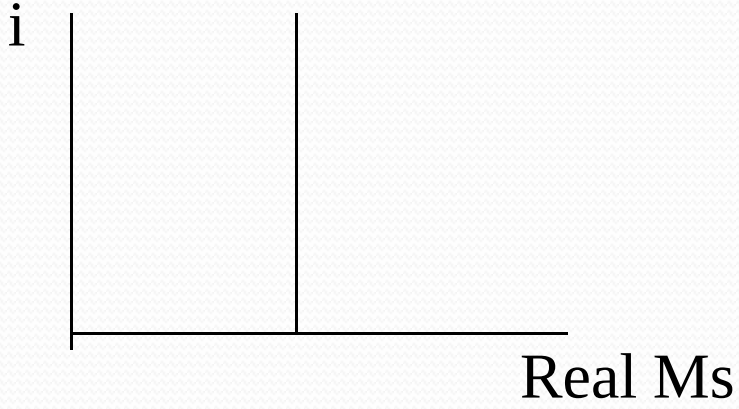
Money demand



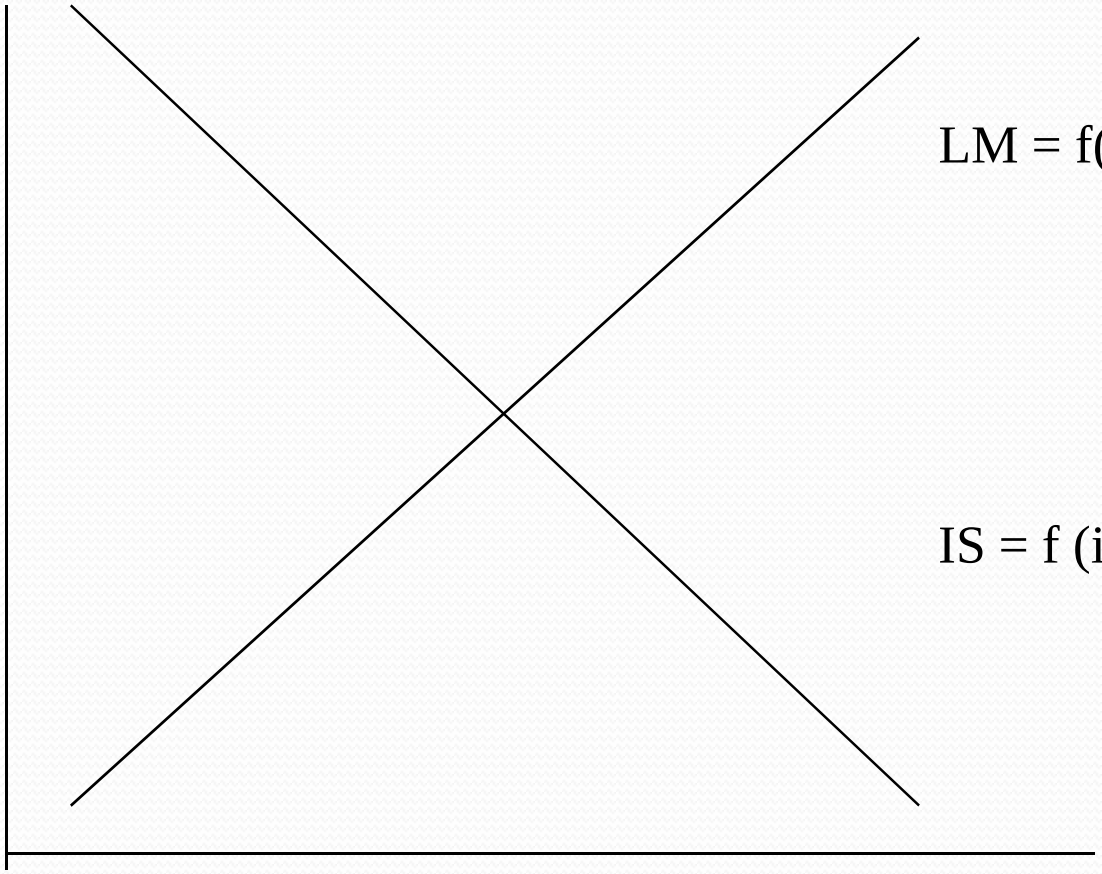
Nominal Money Supply monetary policy

- Reserve requirements ratio
- Discount Rate
- Open Market Operations

Real Ms = (nominal Ms)/P



IS-LM



LM = f(i; policy, P)

IS = f (i; taxes, consumer conf., wealth, fiscal policy, foreign Y, exchange rate….)

Fiscal multiplier and IS curve

- MPS and MPC, Saving as a leakage.
- APS and APC
- Multiplier and changes in autonomous expenditures

as MPS decreases (i.e. the multiplier increases) the IS CURVE BECOMES FLATTER

Slope of the LM curve

- Real money demand:

$$\left(\frac{M}{P}\right)^{D} = aY - bi$$

- As income increases, the interest rate has to increase in order to maintain equilibrium in the money market
- Velocity = Y/ (real money supply) changes along LM
- The more sensitive the demand for money is with respect to the interest rate, the flatter is the LM curve
- The more sensitive the demand for money is with respect to income, the steeper the LM curve becomes

SHIFTS in LM

- Changes in nominal supply of money
- Inflation

Weak monetary policy

- Steep IS (large MPS; weak dependency of C and I on the interest rate…)
- Flat LM curve (money demand is very sensitive to interest rate changes) LIQUIDITY TRAP and flat LM curve (modern Japan and USA in the 1930's).

Modern Japan and Liquidity trap

Japan, short-term interest rate fell below 1% in 1995 and remained under 1% since then. Possible solution: Fiscal and monetary expansion at the same time (same shift in LM and IS), GDP will increase and no crowding out, since the CB can purchase the bonds

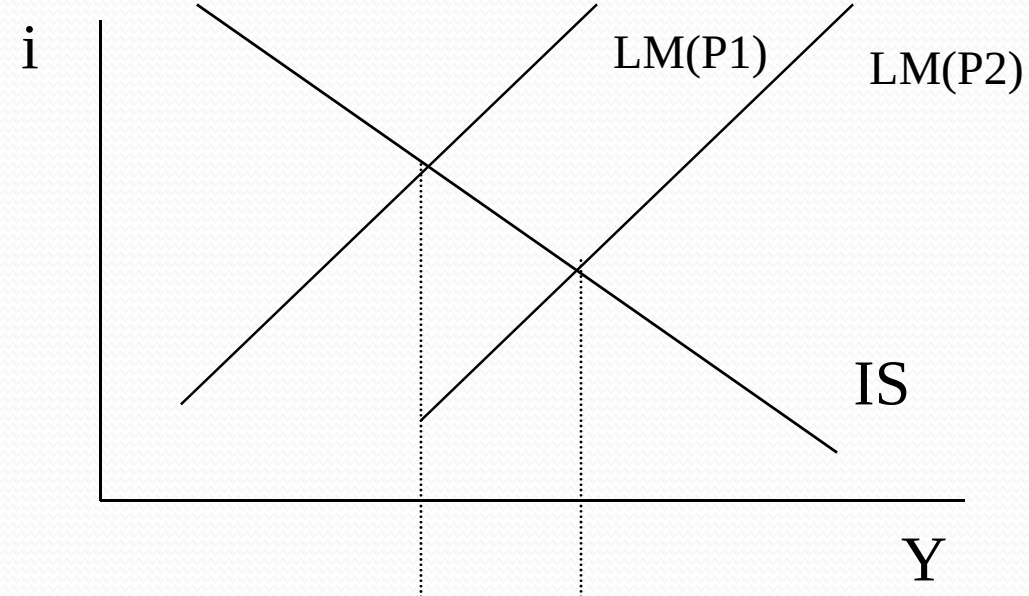
Weak fiscal policy

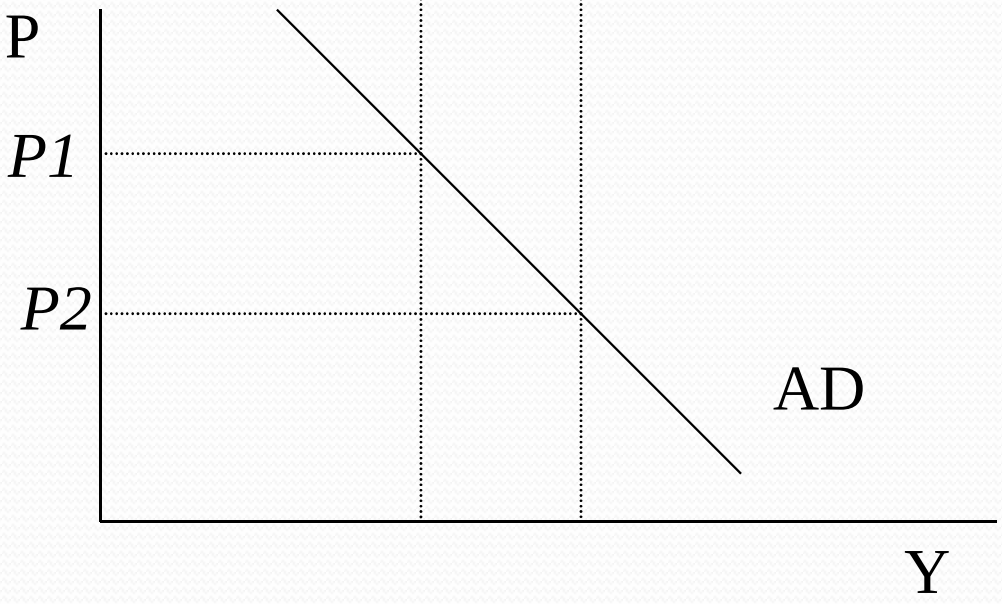
- Vertical LM curve (interest responsiveness of money demand is zero) Crowding out and IS
- Flat IS curve
- Note that fiscal policy is strong when IS curve is vertical (zero interest responsiveness of autonomous planned spending) i.e. there is no crowding out.

Conclusion

Policy mix is needed

From IS-LM to Aggregate Demand





Why is AD downward sloped

- Wealth effect (real balances effect)
- Interest rate effect
- Open economy effect
- Multiplier effect

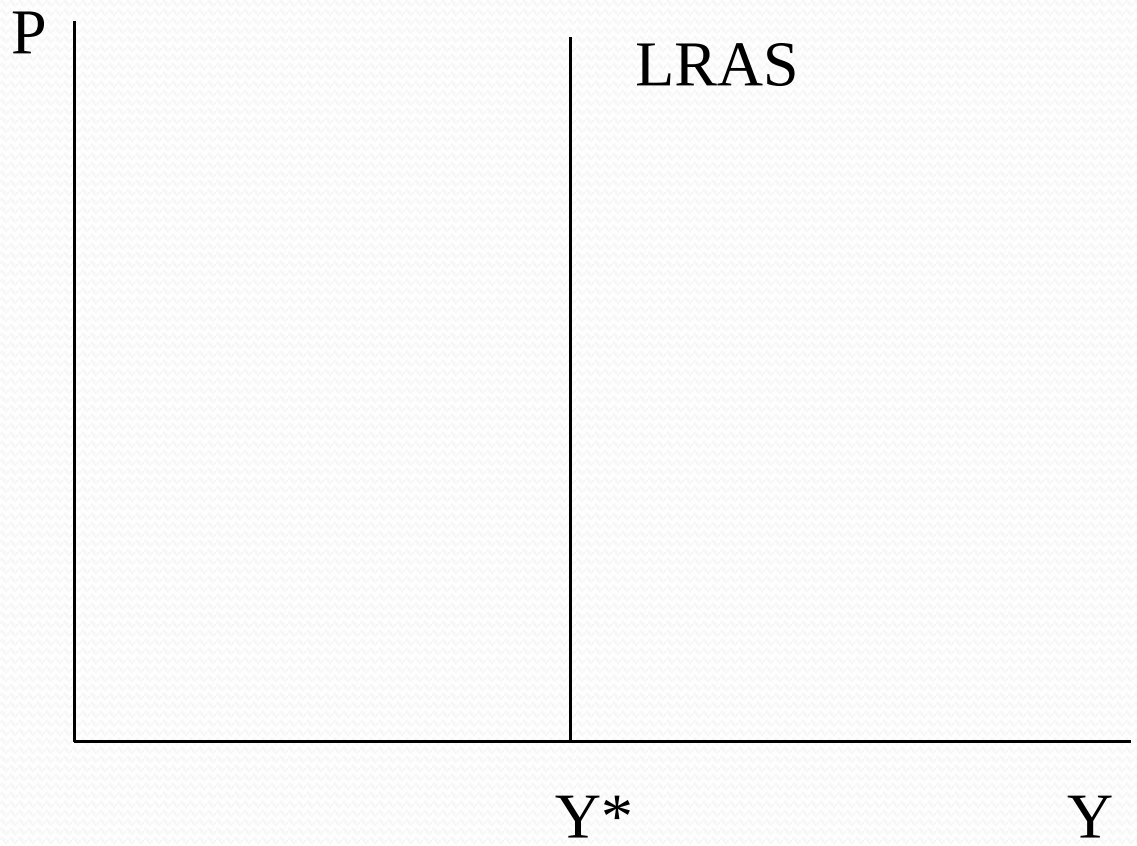
FACTORS THAT SHIFT AD

- interest rate
- consumer (business) confidence
- economic conditions in trading partners (foreign Y)
- tax
- money supply
- exchange rate
- government expenditures

Classical view

- Say's law
- Invisible hand (Adam Smith)
- Full flexibility in prices
- Competitive markets

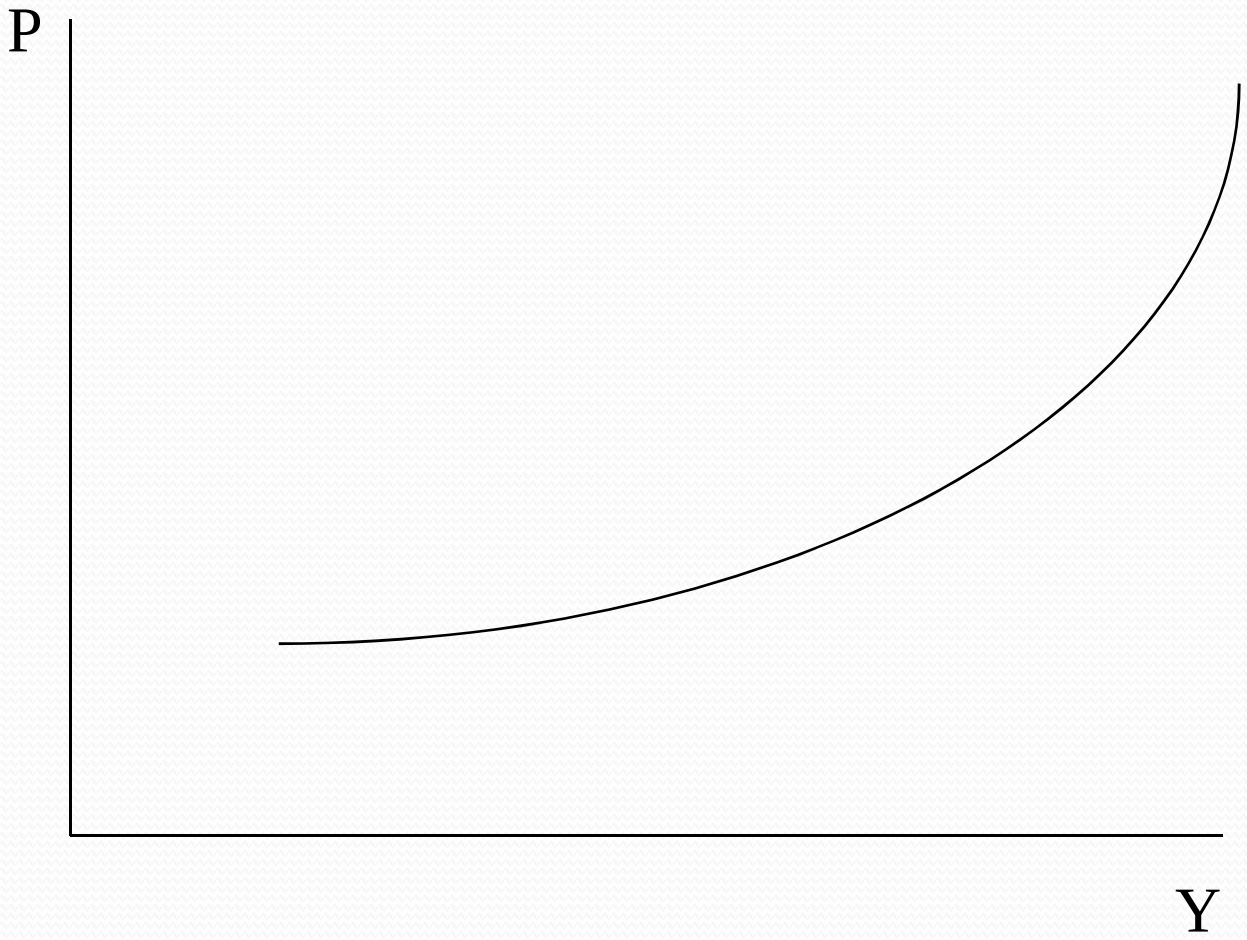
Aggregate Supply classical view



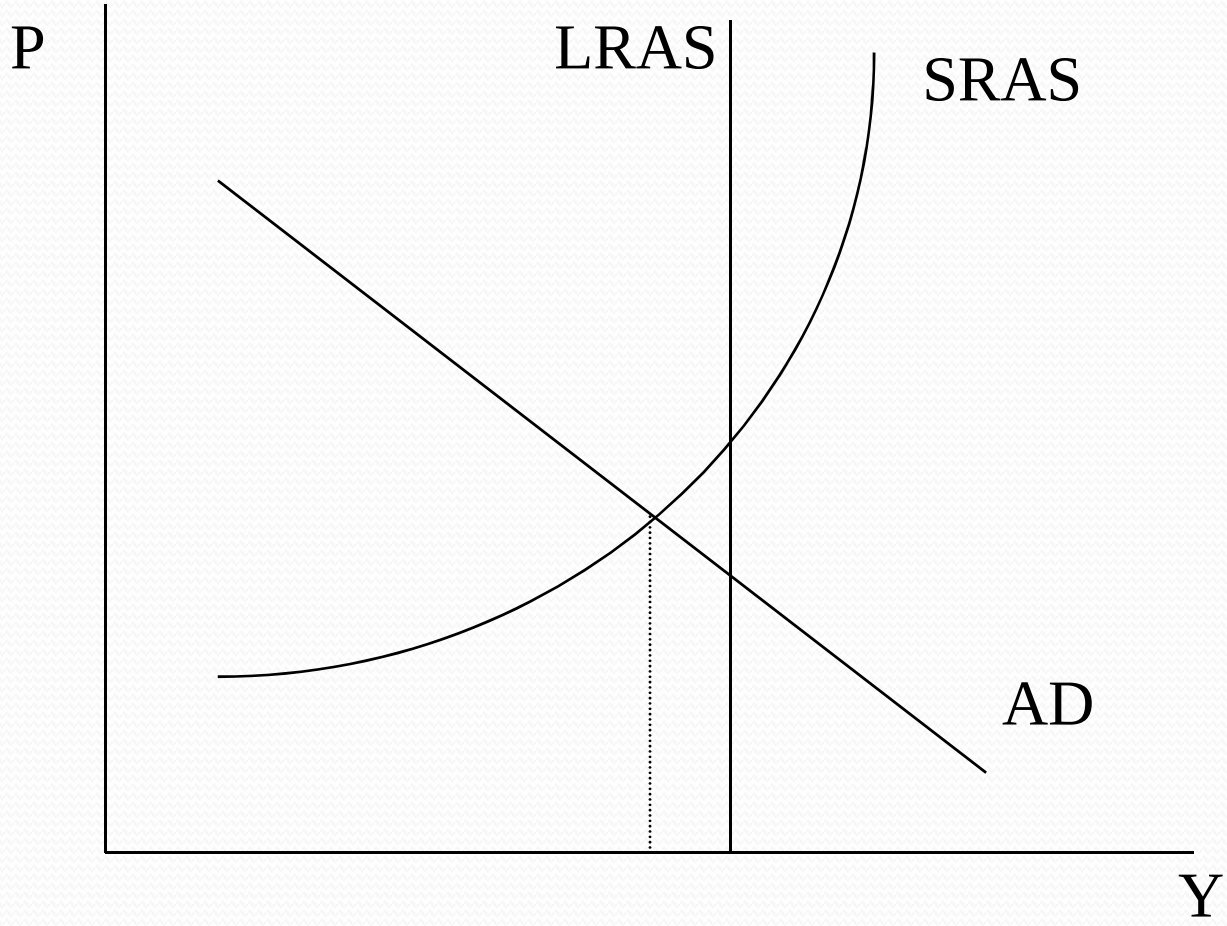
Keynesian View

- Sticky wages and prices and institutional constraints
- Thrift paradox and investment

Short-run aggregate supply Keynesian view



AD&AS



FISCAL POLICY

- Instruments: G, T, Tr. (changes personal disposable income)
- Drawbacks of FP:
  - crowding-out effects
    - direct
    - indirect
  - open-economy effect
  - Time lags (decision, recognition, effect)

Monetary Policy

- Instruments
  - discount rate
  - OMO
  - RRR
- Drawbacks: inflation?, exchange rate regime.
- Monetary Rule

Role of government debt

- Interest payments to foreigners
- Burden on future generations
- Crowding out of domestic investment and reduction in capital stock
- Cost vs benefit

Foreign sector us and them

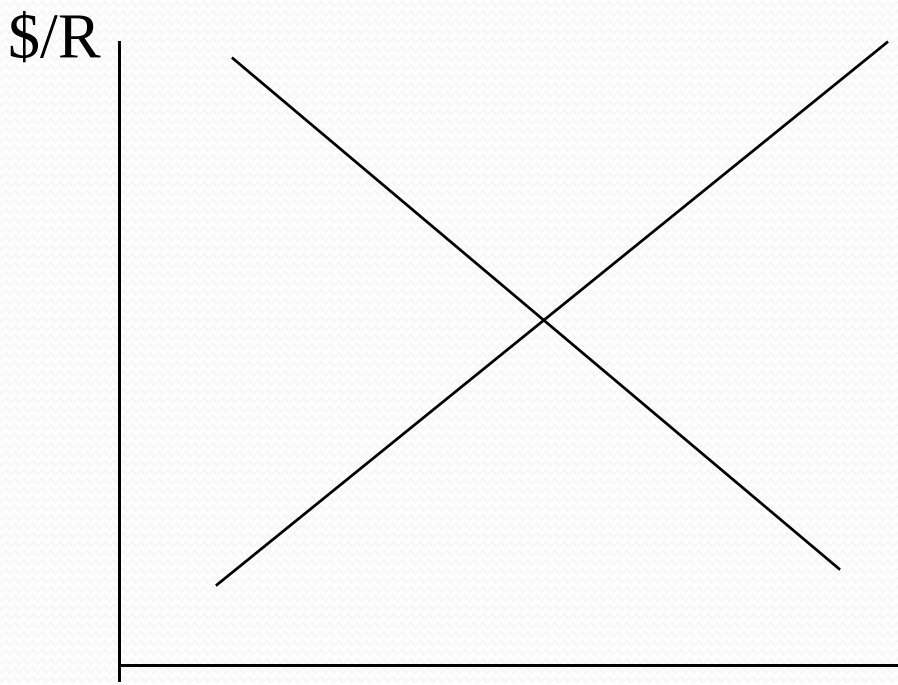
- Trade in goods and services
- Trade in financial assets
- Trade in currencies

Balance of Payments measuring international activity

- Current account (trade balance, income flows)
- Financial Account (investment flows)
- Reserves (central bank activity)
- Net Errors and Omissions

CA + FA + NEO = change in Reserves

Forex Market



Supply of Roubles

Russian investors
Russian Central Bank
Russian import firms
Russian tourists

Demand for Roubles

Foreign investors
Foreign Central Banks
Foreign import firms
Foreign tourists

History of Forex

- Gold Standard 1880's-1914
- Benefits:

Hume's correction mechanism

Ease of trade

No need for forward looking instruments

- Spain vs England
- No Monetary Policy!

CA + FA = change in gold

1918-1939

- Gold Standard revised

  US on Gold since June 1919, UK is since 1925 (pre-war)

  By 1931 the British Pound is inconvertible, by 1933 the USD.
- The Great Depression and monetary expansion, competition for export markets

1944-1970
Gold Exchange Standard

IMF and WB

USD=1/35 oz. All currencies are specified in gold.

Role of the IMF

August 1971 the USD is no longer convertible into gold

Smithsonian Agreement of December 1971.

March 1973 FLOAT BEGINNS

FLOAT

- Spot market vs future markets
- Forward looking instruments: options, futures, swaps, forward contracts.
- Need and importance of forecasting!

Forecasting

two forecasts for 6 month period. Current spot is 9.5 R = 1 USD. Assume that you owe a payment to a Russian firm in Roubles.

Forecast I	Forecast II
10 R = 1 USD	15 R = 1 USD
6 month forward rate is 11 R = 1 USD	
Forward	wait
The spot market in 6 months is 11.5 R = 1 USD	

Float vs fixed

FLOAT	FIXED
Large economy	Small economy
Closed economy	Open economy
Divergent inflation	Harmonious inflat
Diversified trade	Concentrated trade

Policy and exchange rate regime

FLOAT

strong open economy effect, thus weak fiscal policy.

Monetary expansion causes depreciation in the value of the currency, thus strong monetary policy

FIXED

no open economy effect, weak indirect crowding out effect, thus strong fiscal policy

no currency depreciation, inability to change domestic interest rate due to international capital mobility

Determinants of exchange rate under float

- Inflation (purchasing price parity)
- Interest rate (interest rate parity)
- Economic growth
- Microstructure approach
- Political news

THANK YOU

Department of Economics

SUBJECT- MACRO ECONOMICS

NAME OF THE TEACHER- DESHMUKH G. S

Class- S.Y.B.A.

Introduction :

In the modern times,inflation is a global phenomenon. There is hardly any country in the capitalist world today which is not afflicted by inflation. Inflation is generally associated with rapidly rising prices which cause a full in the purchasing power of money. But,the term ‘inflation’ is a higly controversial term. Different economists have offered different definitions of inflation. The persistent inflation and theproblems associated with it have claimed more attention of the economists than any other macro-economic problem.this has led to a great increase in the literature on flation.

MEANING OF INFLATION

Broadly speaking,inflation means a considerable and persistent rise in the general price level a long period of time.The term inflation has widely attracted the attention of the economics all over the world,but despite that,there is no generally accepeted defination.some frequently quoted definions of inflation are considered below.

1) ***Pigou ;-*** ***" Inflation exists whwn money income is expanding more than in proportion to the increase in earning activity"***

2) ***Prof.Coulbourn :-has also stressed on the same point as he says , " Inflation is to much money chasing too few goods"***

CAUSES OF INFLATION

When there is a defference between the aggregate supply and the aggregate demand there is a rise in prices. But,why there is a difference bettween the aggregate demand and aggregate supply ? This can be explained with the help of causes on inflation.

A) Increase in demand : The phenomenon of excess demand for goods and service can arise in anumber of situation,as belived by keynes and other monetarists such as:

1. *Incerase in public expenditure*
2. *Incerase in private expenditure*
3. *Increase in foreign demand*
4. *Reduction in taxations*
5. *Repayment of internal debts*
6. *Population growth*
7. *Existence of black money*
8. *Eeficit financing*
9. *Cheap money policy*
10. *Rise in consumer spending*

B) Decrease in supply : The factors which leads to reductions in the supply of goods and service are as under :

1.Natural calamities

2.Scarcity of the factors of production

3.Indistrial disputes

4.Imbalanced productions

5.Hoarding by merchants

6.Hoarding by consumers

❑ TYPES OF INFLATION

on the basis of speed with which the price level rises in the economy,the classification of inflation is as follow:

1.Creeping inflation 2. running inflation 3.full and partial inflation 4.make up inflation 5.ratchet inflation 6.stag flation 7.sectoral inflation 8. imported inflation.9.open inflation.

➢ CONTROAL OF INFLATION

A) MONETRAY MEASURE

B)FISCALMEASURES

THANK YOU

Micro economic Theory

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Introduction and Review

1. What is microeconomics & how are economic models constructed?
2. Buyers, Sellers, & Markets

What's the difference between Microeconomics & Macroeconomics?

Microeconomics examines small economic units, the components of the economy.

For example: individuals, households, firms, industries

Macroeconomics looks at aggregates.

For example: national output, overall price level, aggregate unemployment

How are economic theories formulated & economic models constructed?

1. Define the problem and phenomena to be investigated.
2. Formulate a hypothesis about the relationships among the relevant variables.
3. Determine testable predictions from the hypothesis.
4. Test the accuracy of the predictions using real world data.
5. Accept or revise the theory on the basis of the tests conducted.

When developing a model, some simplifying ***assumptions*** are usually made.

The assumptions should be easy to handle, sufficiently realistic, and not overly restrictive.

Without the simplifying assumptions, the analysis can be unmanageable.

If the assumptions are overly simplistic, the model may fail to explain real-life behavior.

The test of a theory is whether it explains what it is designed to explain. The predictions should be consistent with reality.

The world acts **as if** the assumptions held.

The assumptions need not hold precisely.

What is a ***market***?

The interaction of buyers & sellers of a good or service

Questions relevant to all economies, market-oriented or not

1. What goods & services should be produced and how much?
2. How should the goods & services be produced?
3. Who gets the goods & services?
4. How do changes in the production & distribution mixes take place?

In a market economy, these questions are handled by the market.

What & how much to produce:
determined by demand & supply conditions, individual choices, & pursuit of profit.

How to produce:
determined by technology & resource costs.

Distribution:
based on ability & willingness to pay the price.

What if consumer wants or technology change?
Those changes alter demand & supply, which changes prices, profits, & consequently output levels & distribution.

The Circular Flow

The market is not the only way that the basic questions of economics can be answered.

In some less developed nations, a **traditional economic system** is used.

Custom & tradition determine the answers.

Social arrangements & culture dictate the solutions.

Change occurs only very gradually.

Historically the former Soviet Union had a **command economy**.

Resources are government/publicly owned and centralized control is used to determine what is produced, how it is produced, and how it is distributed.

No country in the world has
a purely market or purely command economy.

They have mixed economies with both market and government sectors.

In this course, we will deal primarily with the market system.

The Market: Supply and Demand

What is the difference between
supply & ***quantity supplied***?

Supply is the entire curve that shows the relation between price & quantity provided.

Quantity supplied is one particular quantity on the supply curve.

THANK YOU

Micro Economics

DEPARTMENT OF ECONOMICS
Dr. Deshmukh G.S

- **The first semester**

Definition of Economics

It is the study of wealth (Adam smith)

Or

It is the study of welfare (Pegout)

Or it is

A study of exchange and production

The standard definition

"Economics is the social science which examines how people choose to use limited or scarce resources in attempting to satisfy their unlimited wants

Microeconomics

which examines the economic behaviour of individual actors such as businesses, households, and individuals, with a view to understand decision making in the face of scarcity and the allocation .consequences of these decisions

Macroeconomics

which examines an economy as a whole with a view to understanding the interaction between economic aggregates such as national income, employment and inflation. Note that general equilibrium theory combines concepts of a macro-economic view of the economy, but does so from a strictly .constructed microeconomic viewpoint

Other subdisciplines includes

international economics, labour economics, welfare economics, neuroeconomics, information economics, resource economics, environmental economics, managerial economics, financial economics, urban economics, development economics, and economic geography.

Why we study economics

- **Hope to make money.**
- **Worry to be considered illiterate if they cannot understand the laws of demand and supply.**
- **To understand the effect of the information revolution on shaping our society.**
- **To understand the effect of internet.**

Continue

- To be fully informed about the international trade.
- To study the tradeoff between inflation and unemployment.
- To help you invest your saving.
- To know how to make economic decision.

land

- Or more generally natural resources that represents the gift of nature to our productive process.
- It includes the land it self, the energy resources that fuel our cars & heat our homes, nonenergy resources like copper, iron and sand, the environmental resources, such as clean air and drinkable water.

labor

- Includes the human time spend in production at all skill levels.
- Includes also human time spend in management.


THANK YOU