Lecture

INSTITUTE OF ACTUARIAL & QUANTITATIVE STUDIES

Class: M.Sc. Sem 1

Subject : Business Economics

Chapter: Unit 1 Chapter 1

Chapter Name: Economics and Economies

Today's Agenda

1. Understanding Economic Concepts
    1. Economics
    2. Economy
    3. Economic scarcity
    4. Economic choice
    5. Opportunity cost

2. Microeconomics and Macroeconomics

3. Economic Problems

4. Microeconomics
    1. Key concepts of microeconomics
    2. Scope and subject matter
    3. Features

5. Macroeconomics
    1. Scope and subject matter
    2. Features

1 Understanding Economic concepts

Economics is driven by scarcity.
What do you infer from the above statement?

1.1 Economics

The study of how individual & society make decision about ways to use scare resources to fulfill want & needs

Economics – choice

1.2 Economy

The economy is the sum total of the work we must perform to produce the goods and services we need to survive and live.

- The “economy” is simply that four-letter word that we curse on Monday mornings: W – O – R – K
- Without work nothing happens in the economy.

Economy – work

1.2 Economy

Economy in Neighborhood

- You can identify the main ingredients of the economy walking around your neighborhood.

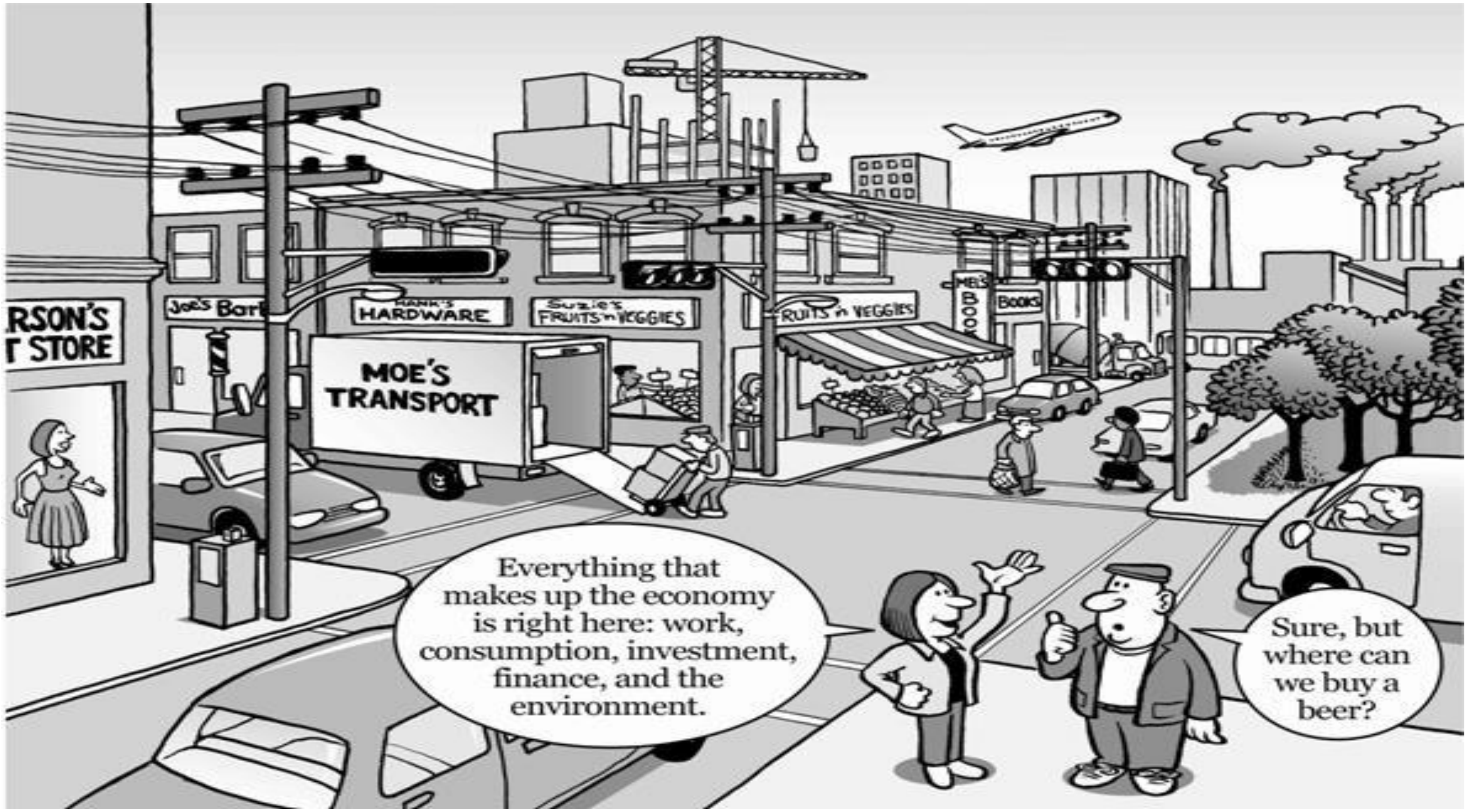
- Take a walk, and keep track of what you see:
  - What **work** are people doing (paid & unpaid)?
  - What do people **consume**, in order to stay alive?
  - What is being **invested** – is enough output ploughed back into improving or expanding the local economy?
  - How do people **finance** their bills? Where do they get **money**?
  - Is the local **environment** healthy, or being degraded?

- This is the "economics of everyday life."

- We can **ALL** learn enough about economics to be confident in questioning conventional wisdom, and defending our interests

1.2 Economy

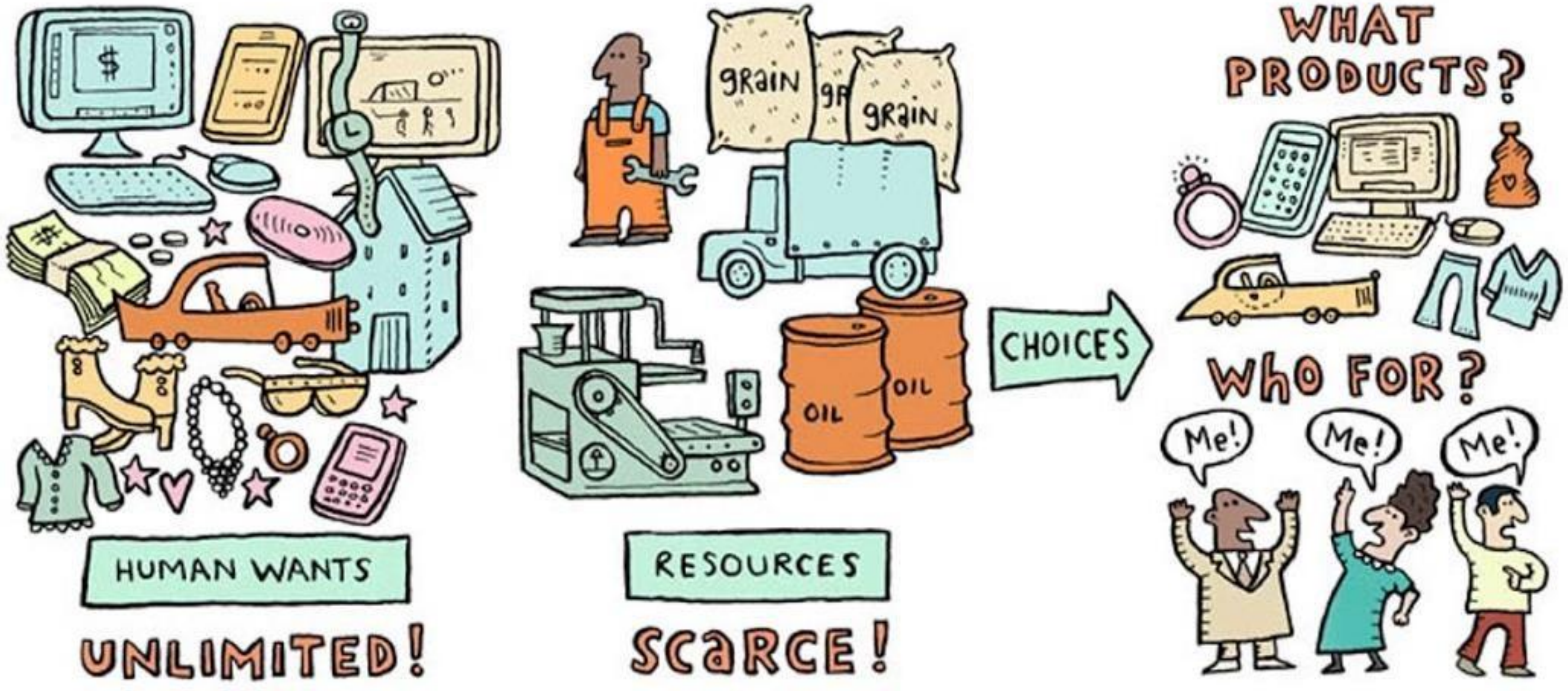
Economy in Neighborhood



1.3 Economic scarcity

Want > Resources

Human wants are unlimited but resources are scarce



1.3 Economic scarcity

Scarcity refers to a basic economic problem—the gap between limited resources and theoretically limitless wants.

Wants

Resources

1.3 Economic scarcity

Resources being Limited

Labour Shortage

Healthcare Shortage

1.3 Economic scarcity

Land & Water Shortage

Fixed Supply of Roads

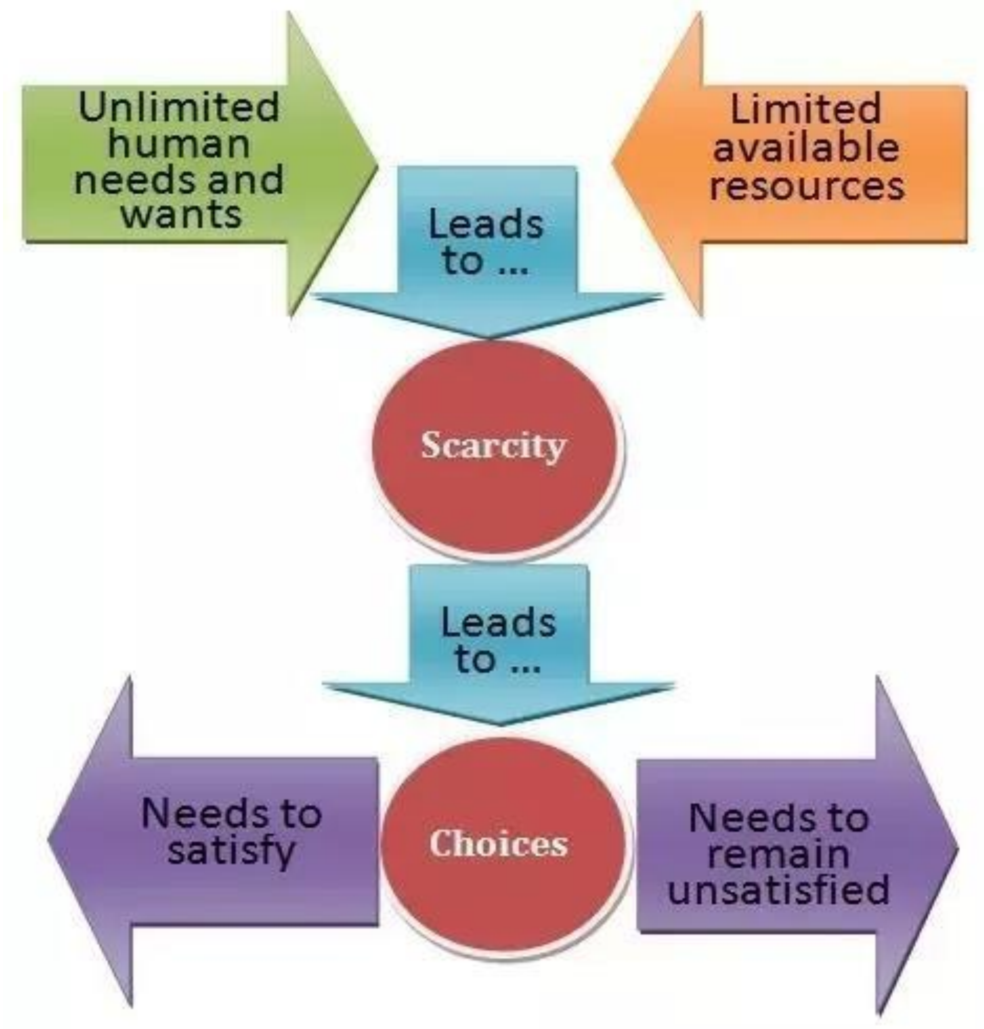
Seasonal Shortage

1.3 Economic scarcity

Scarcity is the same as shortage.
Do you agree with the above statement or not? Why?

1.4 Economic choice

Choices & scarcity is explained in diagram

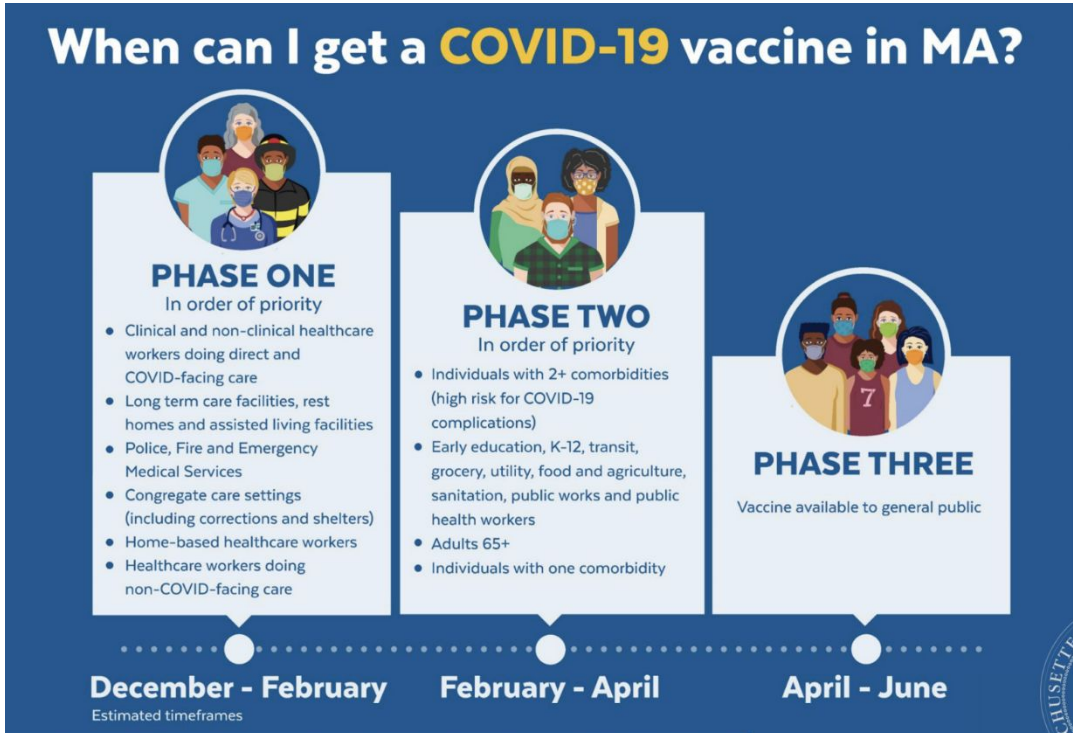


1.4 Economic choice

Example

Scarcity

Choice



1.4 Economic choice

What will you choose?

Income – 30000

Expenditures	Amount
Rent	12000
Food	13000
Clothes	1200
Travelling	3000
Healthcare and Fitness	5000
Phone and Internet	1200
Books	600

1.5 Opportunity Cost

Opportunity cost is the forgone benefit that would have been derived by an option not chosen.

- The opportunity cost of any activity is the sacrifice made to do it.
- It is the best thing that could have been done as an alternative.

1.5 Opportunity Cost

Mr. Brown makes $400 an hour as an attorney and is considering paying someone $1000 to paint his house. If he decides to do it himself, it will take four hours. Find his opportunity cost for painting it himself

Caroline has $15,000 worth of stock she can sell now for $20,000. She wanted to wait two months because the stock was expected to increase. She decides to sell now. Find his opportunity cost if the share price in 2 months time is

a) $22000

b) $14000

1.5 Opportunity Cost

Example – Guns vs Butter

- The more a country spends on defense, the less it will have to spend on consumer goods and services.
- This has become known as the 'guns versus butter' trade-off.

'Guns vs Butter – Debate' – Video

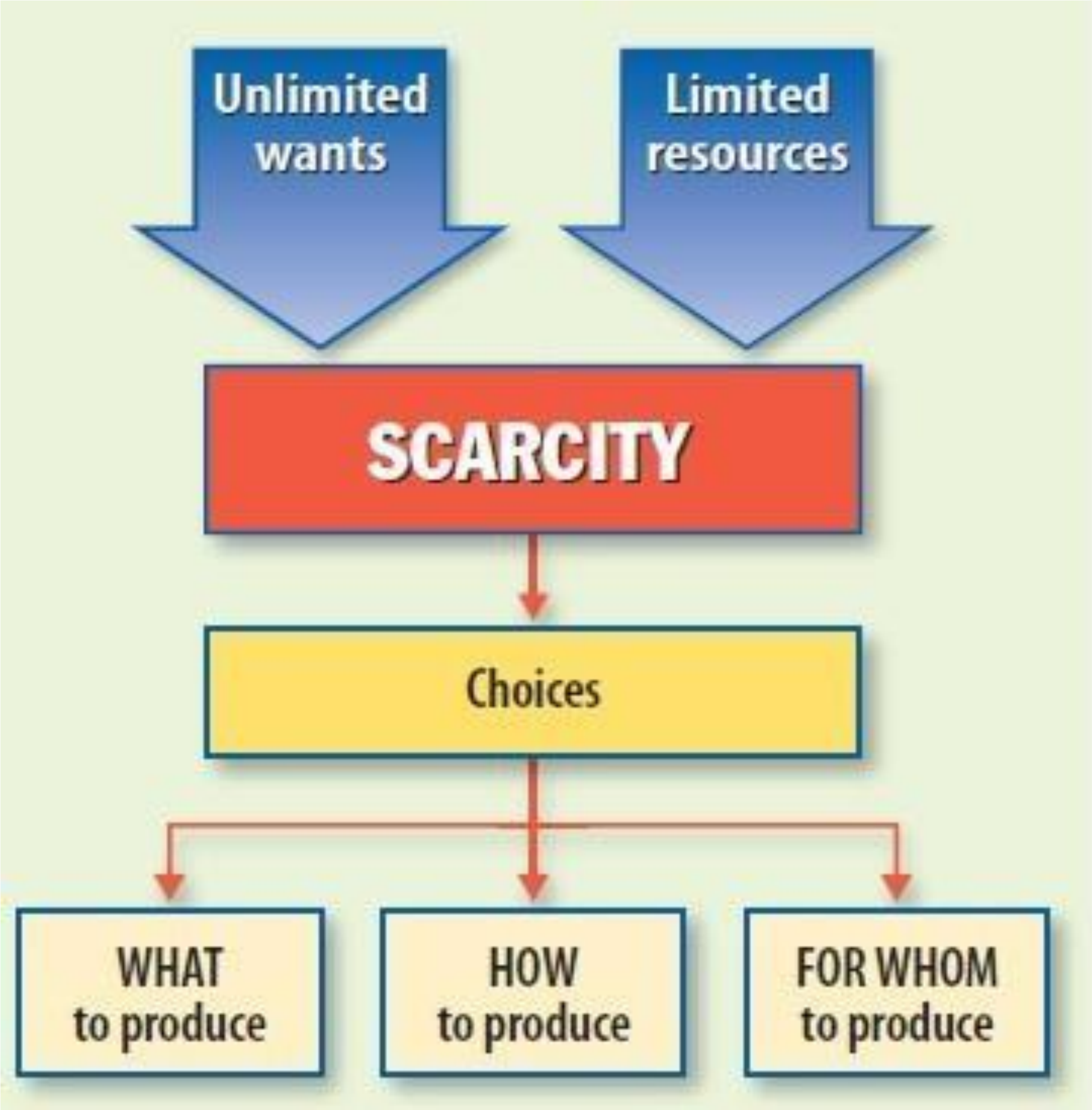
2 Economic problems

Economic systems must confront and solve fundamental economic problems.
What economic problems can you think of?

2 Economic problems

Fundamental economic question arises due to scarcity

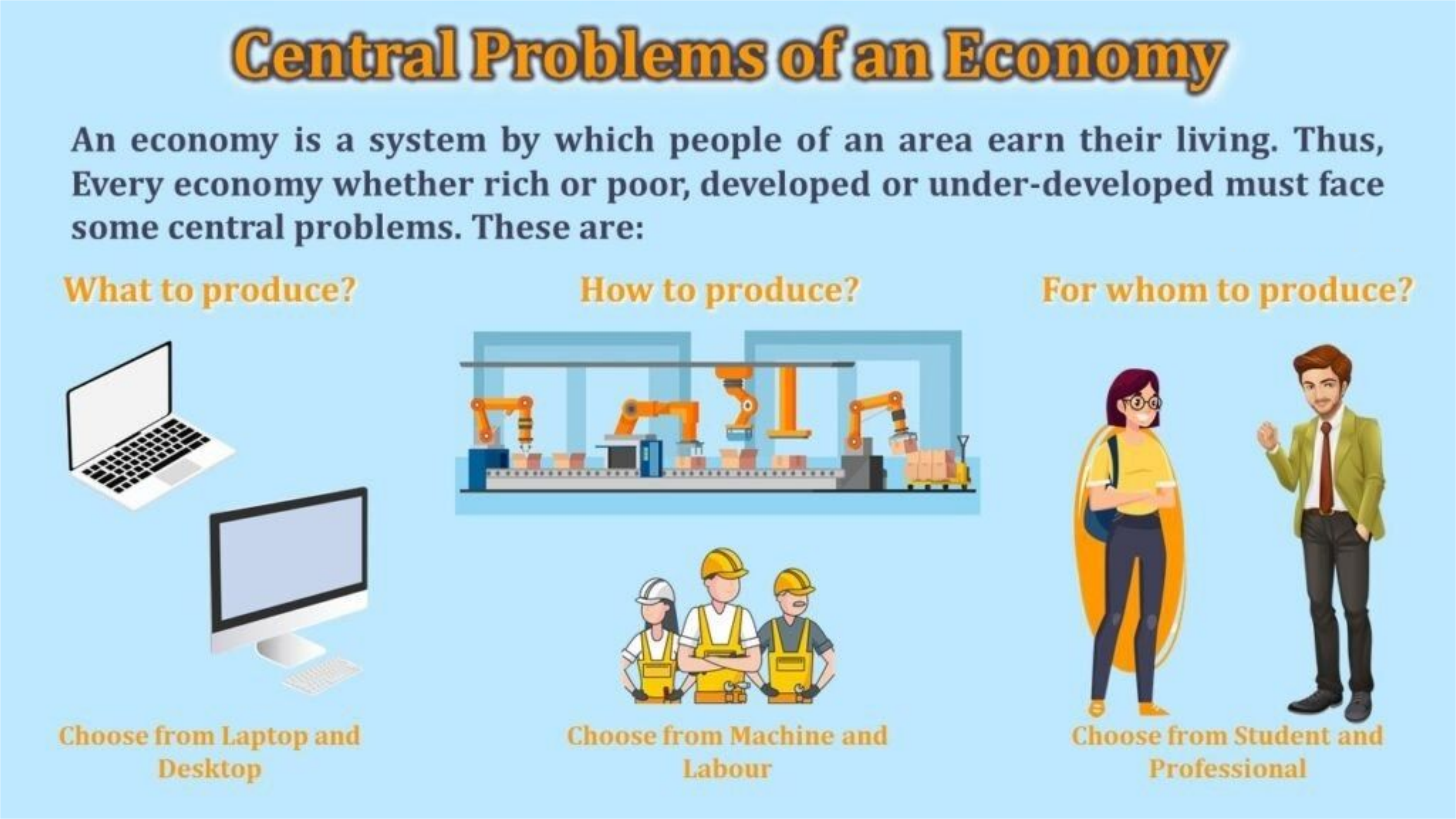
1. WHAT to produce
2. HOW to produce
3. FOR WHOM to produce



2 Economic problems

Consumer	• Consumer has to make choices with limited income
Worker	• Worker has to decide how much to work to fulfil the needs
Producer	• Producer has to decide how much to produce to remain profitable

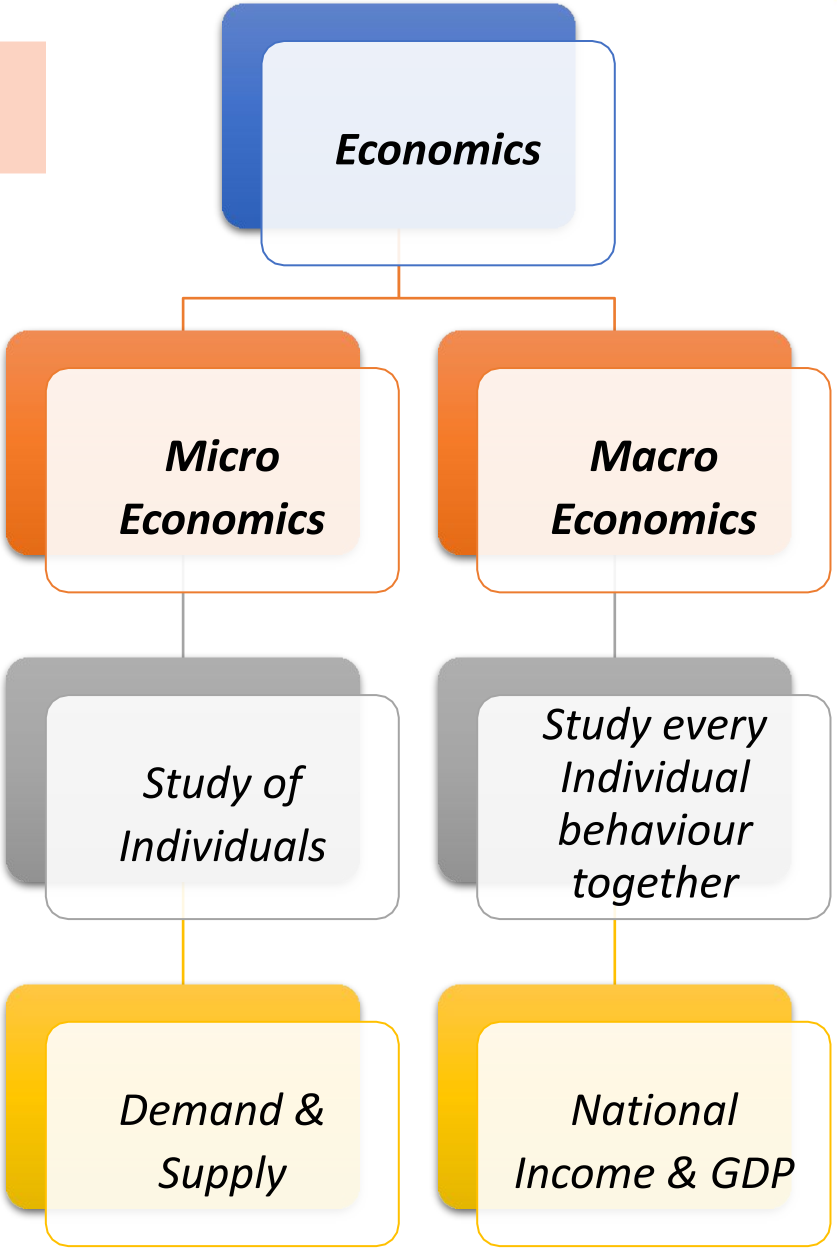
2 Economic problems



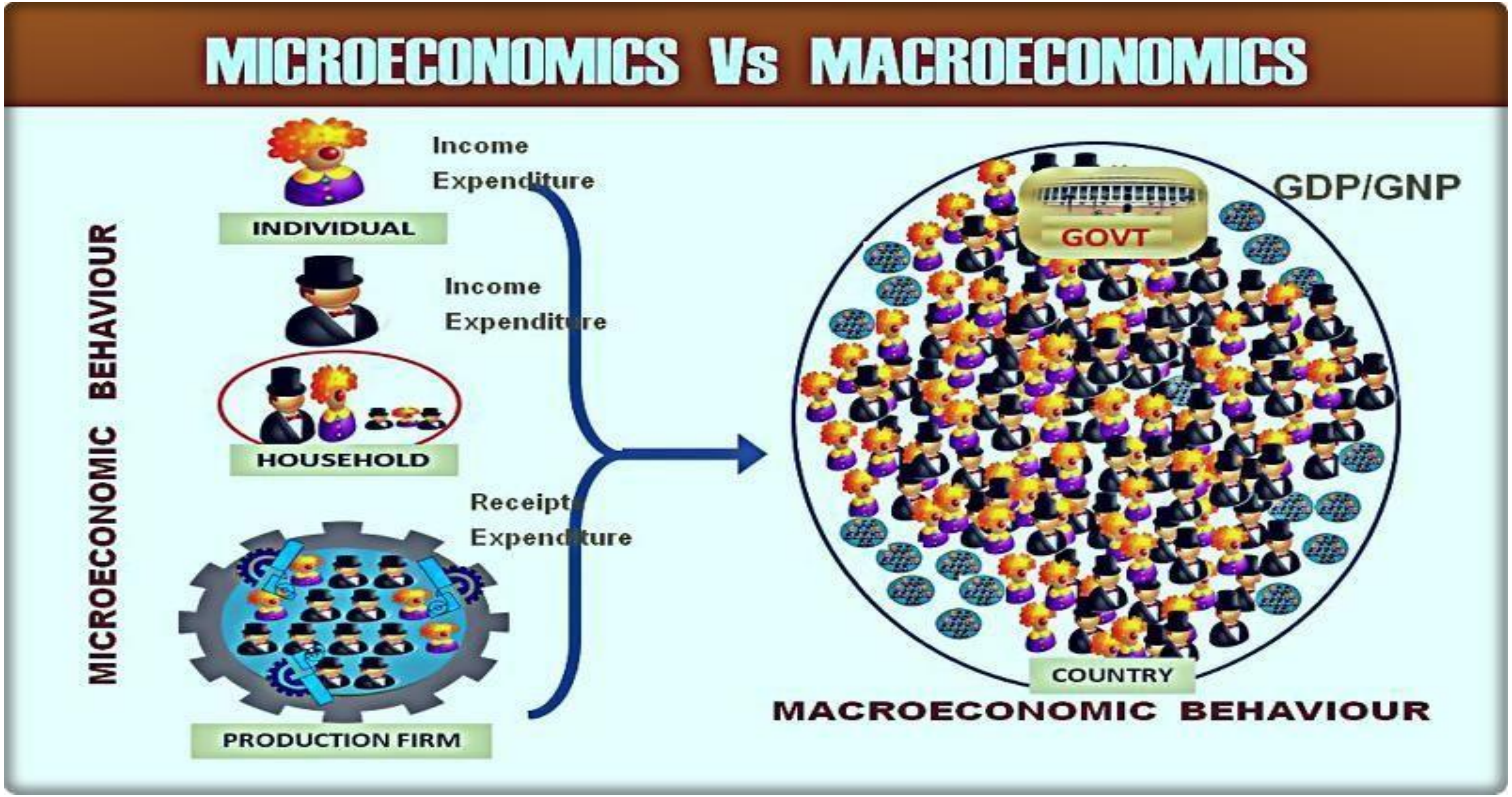
3

Micro-economics and Macro-economics

The given diagram shows the basic difference between Micro & Macro Economics



3 Micro-economics and Macro-economics



3 Micro-economics and Macro-economics

Why the divide?

- Before the Great Depression, economics did not have micro and macro divisions as we have now
- The severe and prolonged global collapse in economic activity that occurred during the Great Depression of 1929-30 changed that.

- John Maynard Keynes founded and paved the way for macroeconomics after publishing **The General Theory of Employment, Interest and Money**.

- Keynes' work brought forth the bigger picture of the economy and the study of the structure and behavior of the entire economy called macroeconomics emerged, alongside the classical paradigm of microeconomics.

'Origins of Microeconomics and Macroeconomics' – Article

4 Micro-economics

- Microeconomics is the social science that studies the implications of human action, specifically about how those decisions affect the utilization and distribution of scarce resources.

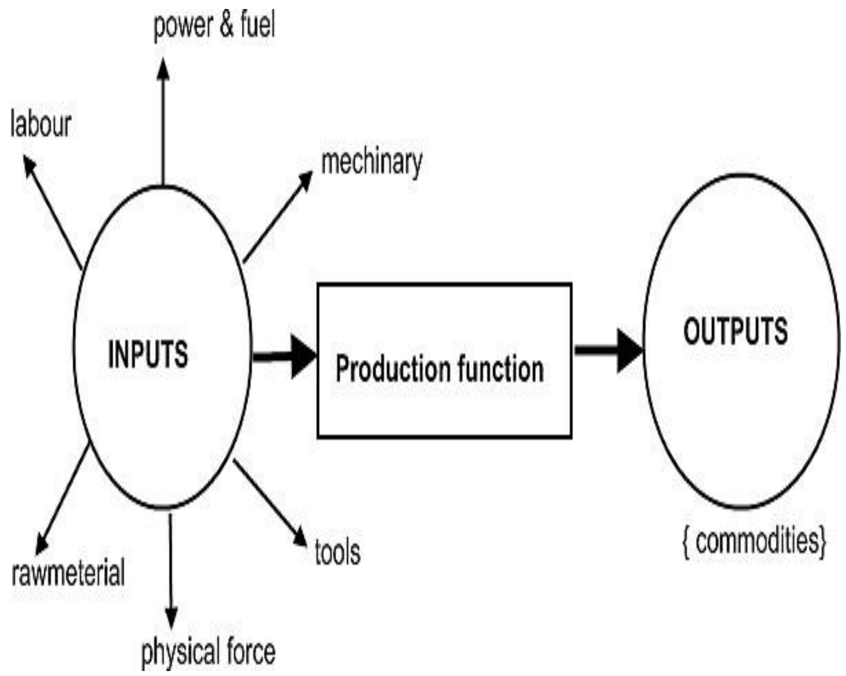
- Microeconomics shows how and why different goods have different values, how individuals make more efficient or more productive decisions, and how individuals best coordinate and cooperate with one another.

- Generally speaking, microeconomics is considered a more complete, advanced, and settled science than macroeconomics.

4.1 Key concepts of microeconomics

4.1.A Production Theory

- Study of production or the process of converting inputs into outputs.
- Producers seek to choose the combination of inputs and methods of combining them that will minimize cost in order to maximize their profits.
- Production leads to supply of goods



4.1 Key concepts of microeconomics

4.1.B Utility Theory

- Utility means usefulness

- consumers will choose to purchase and consume a combination of goods that will maximize their happiness or "utility", subject to the constraint of how much income they have available to spend.

- Utility is the force that creates demand

4.1 Key concepts of microeconomics

4.1.C Price Theory

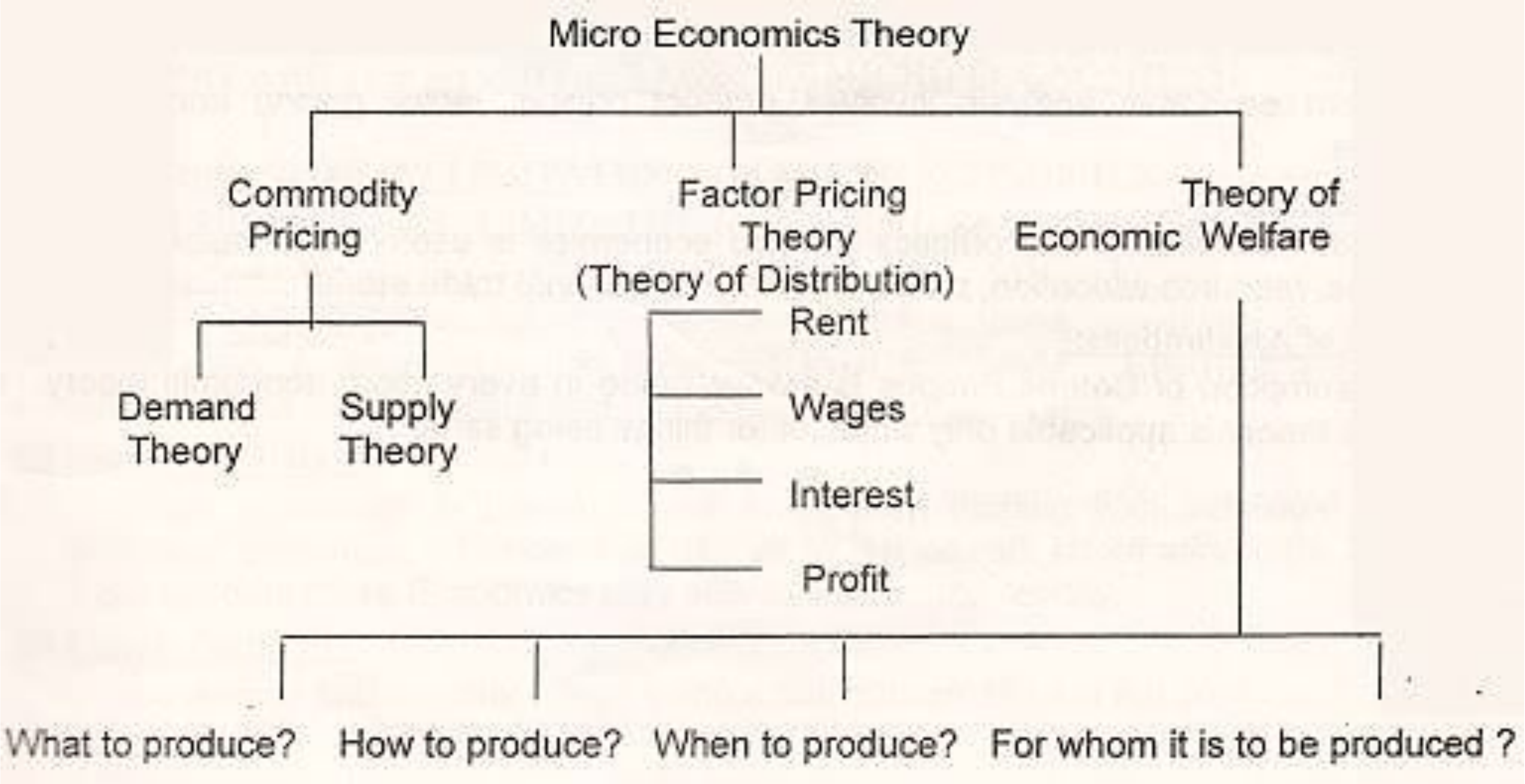
- Production theory and utility theory interact to produce the theory of supply and demand
- In economics Price is decided by demand & Supply

4.1 Key concepts of microeconomics

4.1.D Industrial Organisation & Market Theory

- Microeconomists study the many ways that markets can be structured, from perfect competition to monopolies, and the ways that production and prices will develop in these different types of markets.& Supply

4.2 Scope and Subject matter



4.2 Scope and Subject matter

4.2.A Product Pricing Theory

- This help to decide the price of product

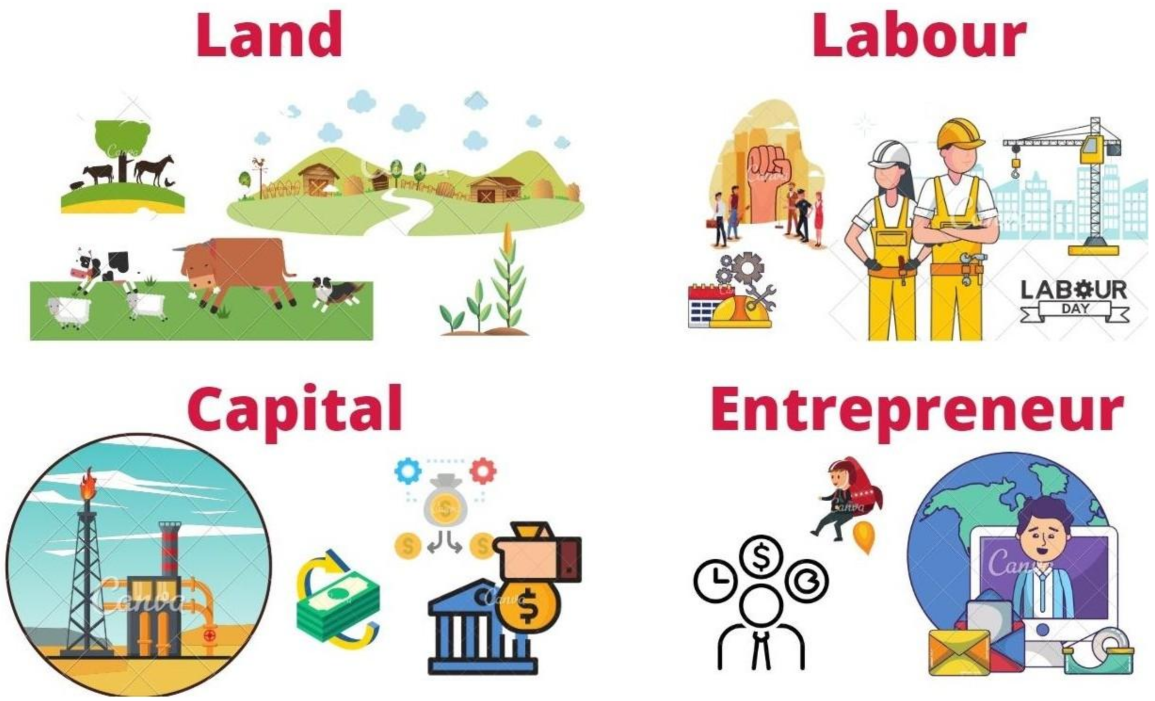
- Price will be determine by
  - ✔ Demand
  - ✔ Supply
  - ✔ Cost

4.2 Scope and Subject matter

4.2.B Factor Pricing Theory

- Theory of distribution explains how

1. Wages (price for the use of **LABOUR**)
2. Rent (payment for the use of **LAND**)
3. Interest (price for the use of **CAPITAL**)
4. Profits (the reward for the **ENTREPRENEUR**) are determ



4.2 Scope and Subject matter

4.2.C Theory of Welfare

- Theory of welfare basically deals with efficiency in the allocation of resources.

1. Efficiency In Production :- Efficiency in production means producing maximum possible amount of goods & services from the given amount of resources.

2. Efficiency In Consumption :- Efficiency in consumption means distribution of produced goods & services among the people for consumption, in such a way as to maximize total satisfaction of society.

3. Efficiency In the Direction of Production :- Efficiency in the direction of production means production of those goods which are most desired by the people.

4.3 Features

4.3.A Study of Individuals

4.3.B Price theory

- All the factors of production (such as land, labour, capital and entrepreneur)
contribute towards the production process.
- As a consideration, they receive rewards in the form of rent, wages, interest and
profits respectively.
- Micro economics deals with the determination of such rewards i.e. factor prices. Also, it deals with the determination of prices of goods and services. Hence, it is correctly known as "price theory"

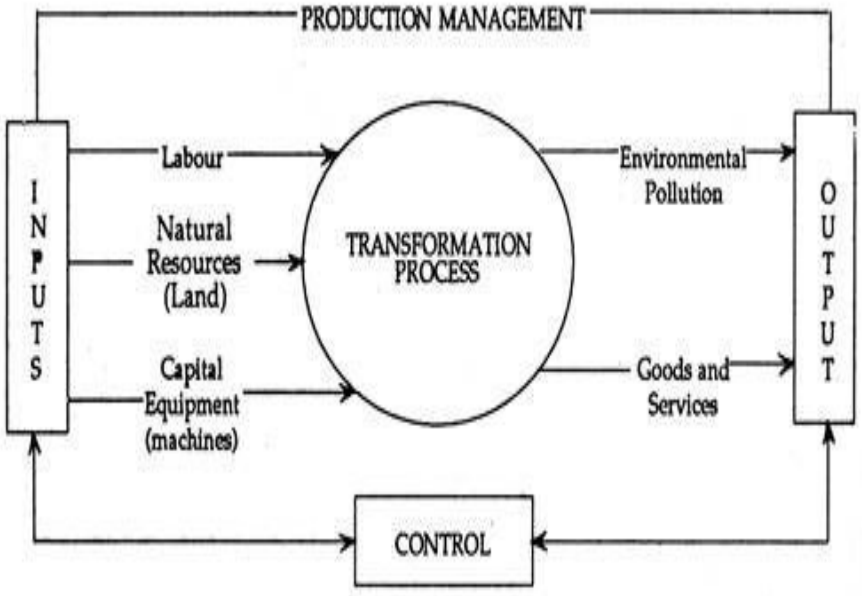


Figure 13.1 The Production Process

4.3 Features

4.3.C Slicing Method

- It splits or divides the whole economy into small individual units and then studies each unit separately in detail.

4.3.D Partial Equilibrium

- Partial equilibrium analyses equilibrium position of an individual economic unit i.e. individual consumer, individual firm, individual industry etc.
- It isolates an individual unit from other forces and proceeds with the assumption "Other things remaining the same" (Ceteris Paribus).
- Many theories of micro-economics are based on such assumptions.
- Partial equilibrium also neglects the interdependence between economic variables

4.3 Features

Ceteris Paribus – Example (Partial Equilibrium)

- Consider an insurance model which determines the premium
- Based on the input data of factors like age, interest, mortality, type of contract, term of contract, etc., the model calculates the premium
- Now suppose we change interest by 1% but keep the other parameters same and hence the premium also changes
- Similarly by changing other input variables, the premium also changes
- This is called ceteris paribus

4.3 Features

4.3.E Microscopic Approach

- Micro economics analyses and examines each individual unit separately in detail.

4.3 Features

4.3.F Analysis of Resource Allocation and Economic Efficiency

- Micro economics deals with the resource allocation among the competing groups. It further explains how the relative prices of both, goods as well as factors of production would determine the allocation of resources.

- This in turn, can help to answer the following questions:
    a. Who will produce the goods?
    b. What goods will be produced?
    c. In what quantities the goods will be produced?
    d. How to price the produced goods?
    e. How will they be distributed? etc.

- Moreover, it examines whether the given allocation of resources is efficient or not i.e. whether it results in the economic welfare of society.

4.3 Features

4.3.G Use of Marginalism Principle

- Marginal refers to the change brought about in total by an additional unit (marginal unit). Micro economics makes use of marginalism principle as its tool of analysis as all important micro economic decisions are taken at the margin.
- The concept of marginalism is important in all the areas of micro economics. Producers and consumers also take economic decisions using this principle.
- For Example – If producer is producing 100 unit a day now if he wants to produce additional 1 unit so what will be cost of that extra unit Its is called marginal principle

4.3 Features

4.3.H Based on Certain Principle

Many economists have used micro economic analysis to develop different theories which are based on the assumption of Ceteris Paribus which means “Other things remaining the same”.

4 .3.I Limited scope

The scope of micro economics is limited since it doesn’t deal with the nationwide economic problems such as inflation, deflation, balance of payment situation, poverty, unemployment, population, economic growth etc.

4.3.J Analysis of Market Structure

Micro economics analyses different market structures such as perfect competition, monopoly, monopolistic competition, oligopoly etc. and explains how prices and quantities are determined in these markets.

Quick Recap

Key concepts

- Production theory
- Utility theory
- Price theory
- Industrial Organisation & Market Theory

Scope and Subject matter

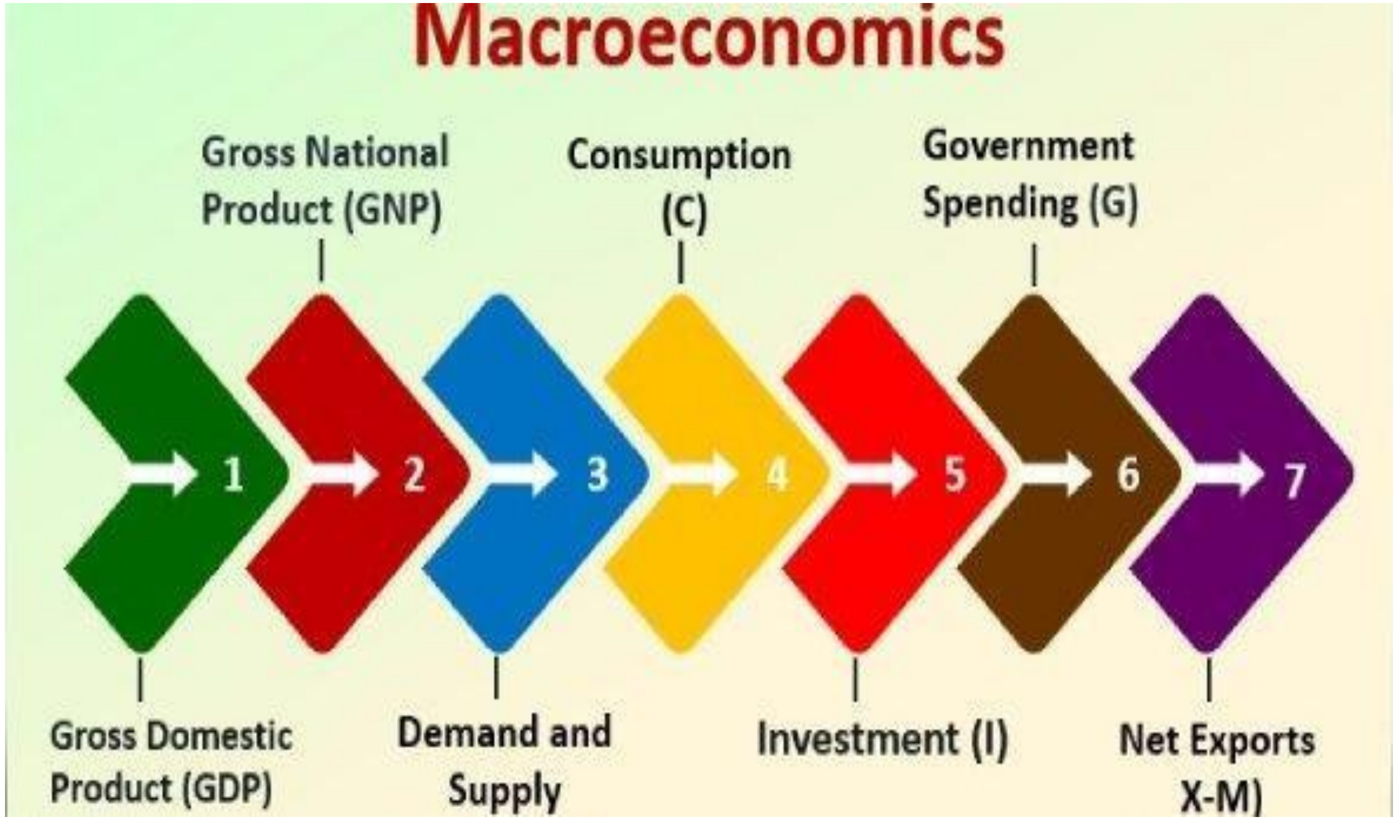
- Production pricing theory
- Factor pricing theory
- Theory of welfare
  1. Efficiency in production
  2. Efficiency in consumption
  3. Efficiency in direction of production

Features

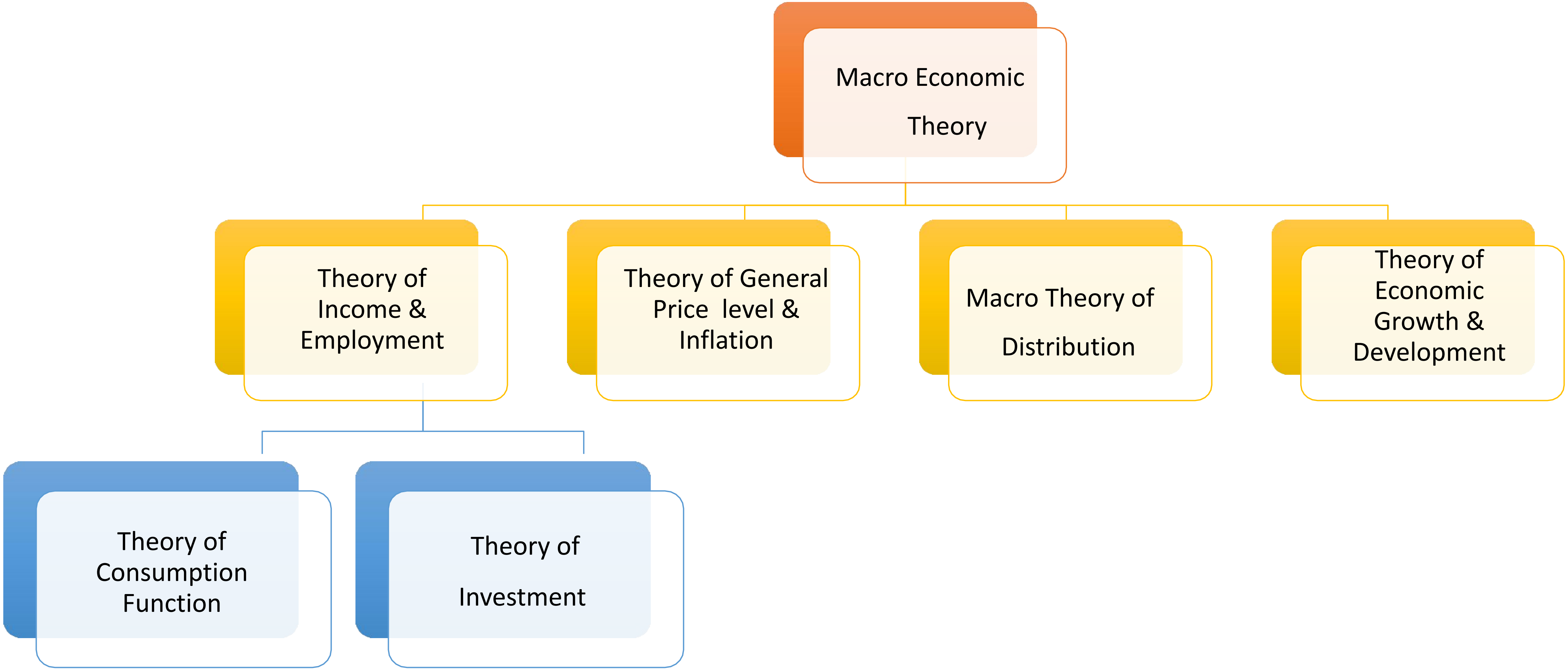
- Study of Individual
- Price theory
- Slicing method
- Partial Equilibrium
- Analysis of Resource Allocation and Economic Efficiency
- Microscopic approach
- Use of Marginalism Principle
- Based on certain principle
- Limited scope
- Analysis of market structure

5 Macro-economics

- Macroeconomics is the study of behavior of a national or regional economy as a whole.



5.1 Scope and Subject matter



5.1 Scope and Subject matter

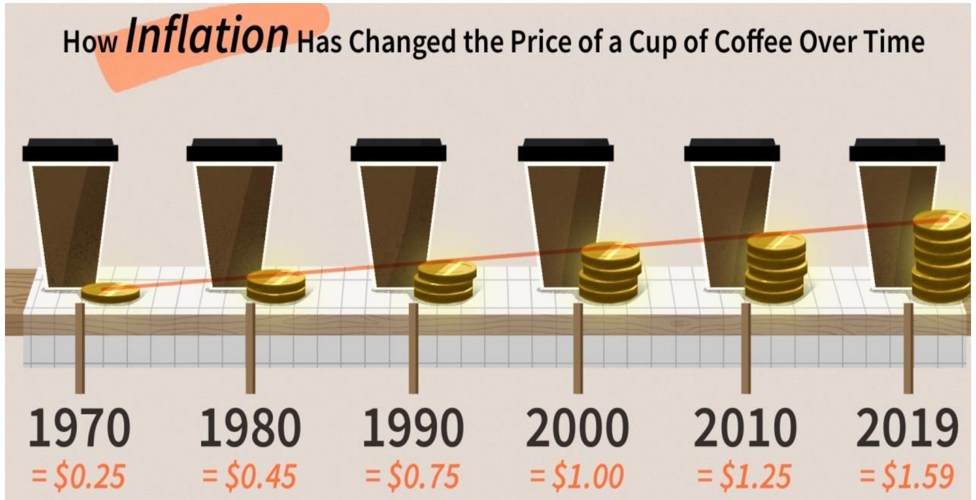
5.1.A Theory of Income and Employment

- Macro- Economics analysis explains what determines the level of national income & employment
- What causes fluctuations in the level of income, output & employment.

5.1 Scope and Subject matter

5.1.B Theory of General Price level & Inflation

- Macro- Economics analysis show how the general level of prices is determined & further explains what causes fluctuations in it.



5.1 Scope and Subject matter

5.1.C Theory of Growth and Development

- Macro- Economics analysis show how the general level of prices is determined & further explains what causes fluctuations in it.

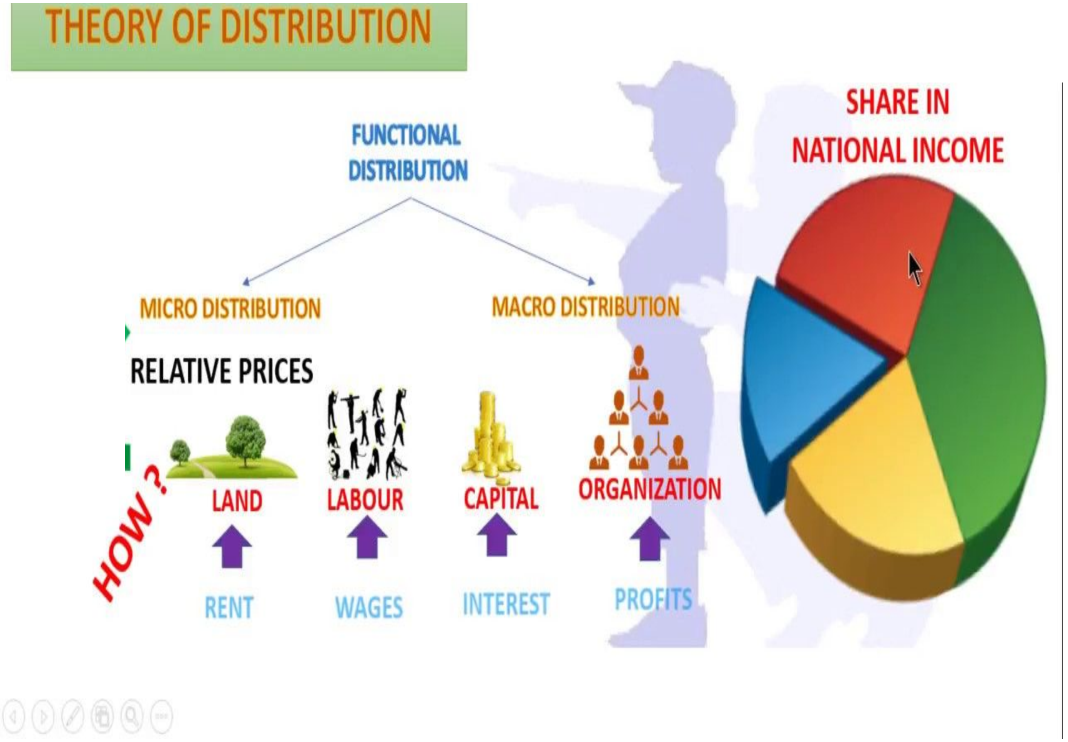
Nature

Economic Growth	Economic Development
• Natural	• Deliberate
• Reversible	• Irreversible

5.1 Scope and Subject matter

5.1.D Macro Theory of Distribution

- It explain what determines the relative shares from the total national income of the various classes, especially a workers & capitalist.



5.2 Features

5.2.A Study of aggregates

- Macro-economics deals with the study of nations economy as a whole.
- The scope of Macro Economics is wide.
- Macroeconomics is concerned with the study of aggregates.
- It is concerned with concept such as Aggregate Demand, Aggregate Supply, Total Output, General Price Level, National Income, etc.

5.2 Features

5.2.B Lumping Method

- Macro analysis deals with the behavior of aggregates.
- It uses method of lumping to deal with macro variables such as aggregate supply and demand, national output, etc.
- Macroeconomics uses lumping method for the purpose of economic study.
- Under lumping method we study the general price level, and not prices of individual products.

5.2 Features

5.2.C General Equilibrium Analysis

- Analysis deals with entire economy in the context of equilibrium.
- Macroeconomics is concerned with the behaviour of aggregates and their interdependence.
- It is a general equilibrium analysis in which everything depends on everything else.
- For instance, a change in income level may results in change in savings, which in turn may influence investment.

5.2 Features

5.2.D Income Analysis

- The income theory is a major aspect of macroeconomics theory.
- A major task of macroeconomics is the determination of national income.
- Macroeconomics studies the factors determining national income and the causes of the trends in national income

5.2 Features

5.2.E Policy oriented

- Analysis helps in formulating suitable economic policies to promote economic growth, generate employment, etc.

- The study of macroeconomics is highly useful for the formulation and implementation of economic policies of the government.

- The government is concerned with regulation of aggregates of the economic system such as the general price level, the general level of production, the level of employment, and so on.

5.2 Features

5.2.F Dynamic science

- Studies the changes in aggregate economic variables and analyses dynamic nature of economy.

5.2.G Based on interdependence

- Analysis takes accounts of interdependence between aggregate economic variables like how changes in one variable will make changes in another.

- It is a General Equilibrium approach in which everything depends on everything else and therefore there is an element of inter-dependency among the Macroeconomics variables.

5.2 Features

5.2.H Overall view of the economy

- The study of macroeconomics gives an overall view of the economy.

- It interlinks various aggregates so as to show the inter-relationships between them.it tend to provide a more realistic view of the overall economy.

Quick Recap

Scope and Subject matter

- Theory of Income & Employment
    1. Theory of Consumption Function
    2. Theory of Investment
- Theory of General Price level & Inflation
- Macro Theory of Distribution
- Theory of Economic Growth & Development

Features

- Study of aggregates
- Lumping method
- Income analysis
- General Equilibrium
- Policy-oriented
- Dynamic science
- Based on Interdependence
- Overall view of the economy

6 Microeconomics vs Macroeconomics

Micro economics	Vs	Macro economics
Micro economics deals with individual units and the effect of individual decisions regarding the allocation of scarce resources	Meaning	Macro economics deals with the aggregate or large scale units, i.e. the structure, behaviour and decision making in an economy as a whole
Greek term ‘mikro’ which means small	Derived from	Greek term ‘makro’ which means large
Applies to operational or internal issues	Application	Applies to environmental or external issues

6 Microeconomics vs Macroeconomics

Micro economics	Vs	Macro economics
Narrow	Scope	Wide
Price determination and allocation of resources	Central problem	Determination of level of income and employment
It ascertains price of a product and other factors of production	Importance	Maintains stability in the general price level and is helpful in solving various problems of economy
Single economic variables such as demand, price, consumer	Concerned with	Aggregates of economy, such as national income, aggregate savings and aggregate output

7 Economic school of thoughts

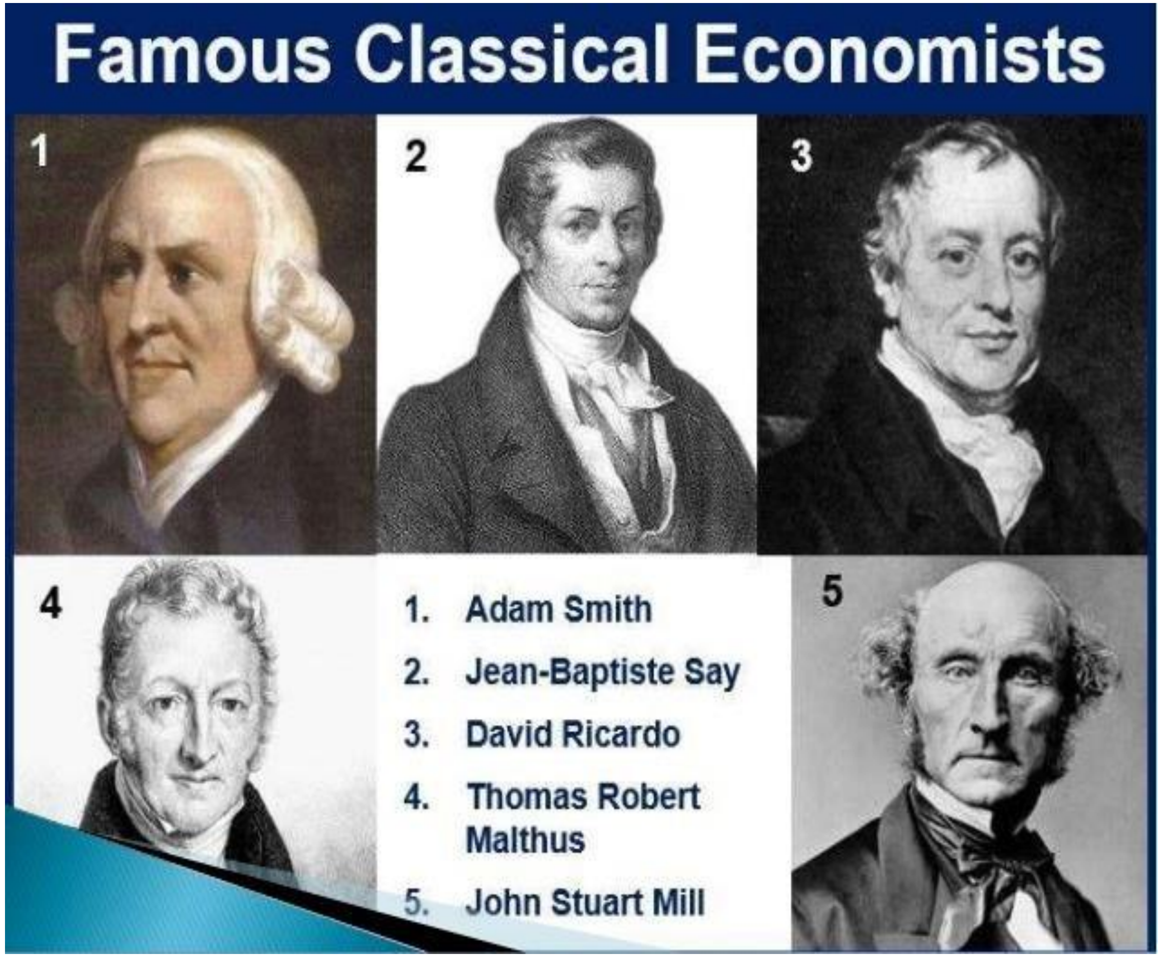
A school of economic thought is a group of economic thinkers who share or shared a common perspective on the way economies work.

There are different schools of thought, with differing views on how the markets and their participants operate.

1. Classical School
2. Neo-Classical
3. New Classical
4. Keynesian Economics
5. Monetarist
6. New Keynesian

'Economic Schools of Thought: Crash Course Economics' – Video

7.1 Classical school



7.1 Classical school

- The Classical school, which is regarded as the **first school of economic thought**, is associated with the 18th Century Scottish economist Adam Smith, and those British economists that followed, such as Robert Malthus and David Ricardo.

- The main idea of the Classical school was that **markets work best when they are left alone, and that there is nothing but the smallest role for government.** The approach is firmly one of **laissez-faire** and a strong belief in the **efficiency of free markets to generate economic development**.

- Markets should be left to work because the price mechanism acts as a powerful **'invisible hand'** to allocate resources to where they are best employed.

7.1 Classical school

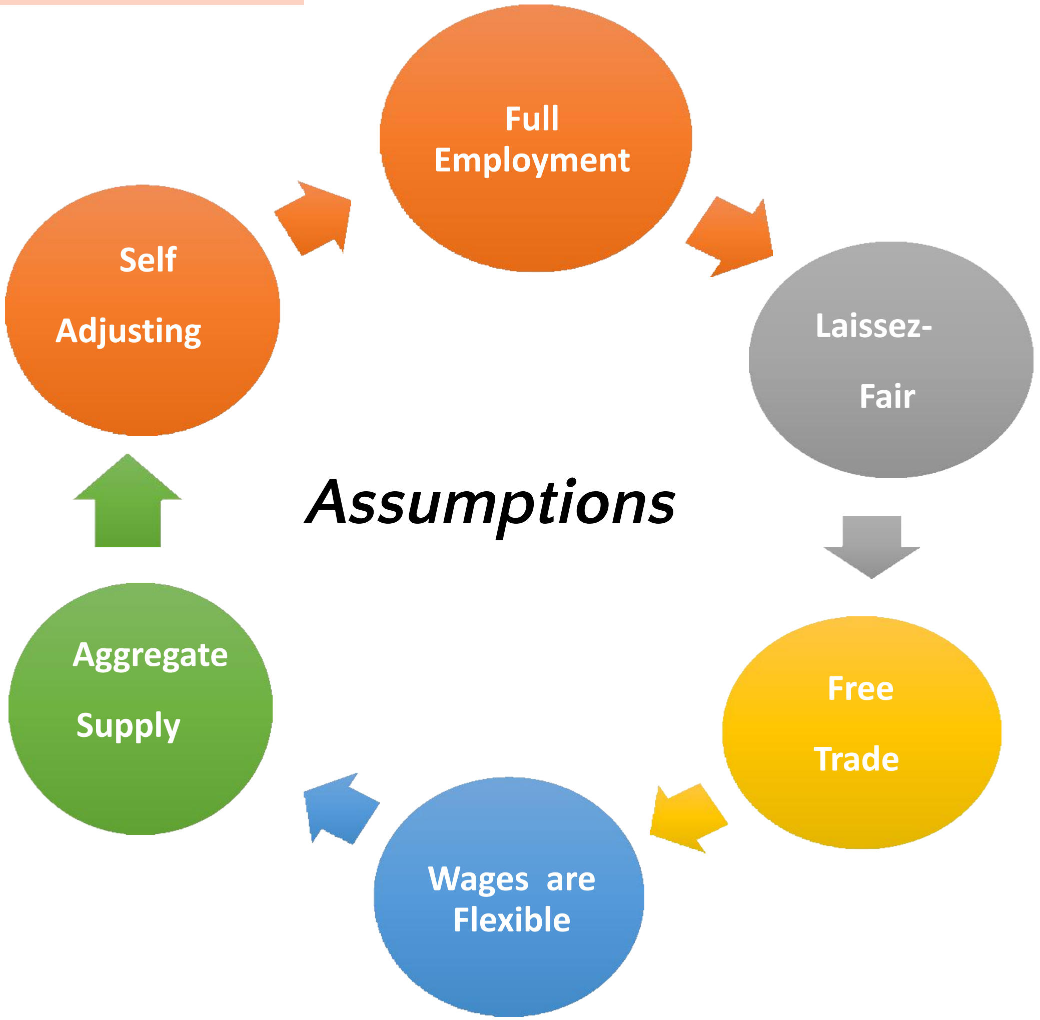
- In terms of explaining value, the **focus** of classical thinking was that it was determined mainly by **scarcity and costs of production**. Classical economists hold that prices, wages, and rates are flexible and **markets always clear**, building on Adam Smiths original theories.

- In terms of the macro-economy, the Classical economists assumed that the economy would **always return to the full-employment level of real output** through an automatic self-adjustment mechanism.

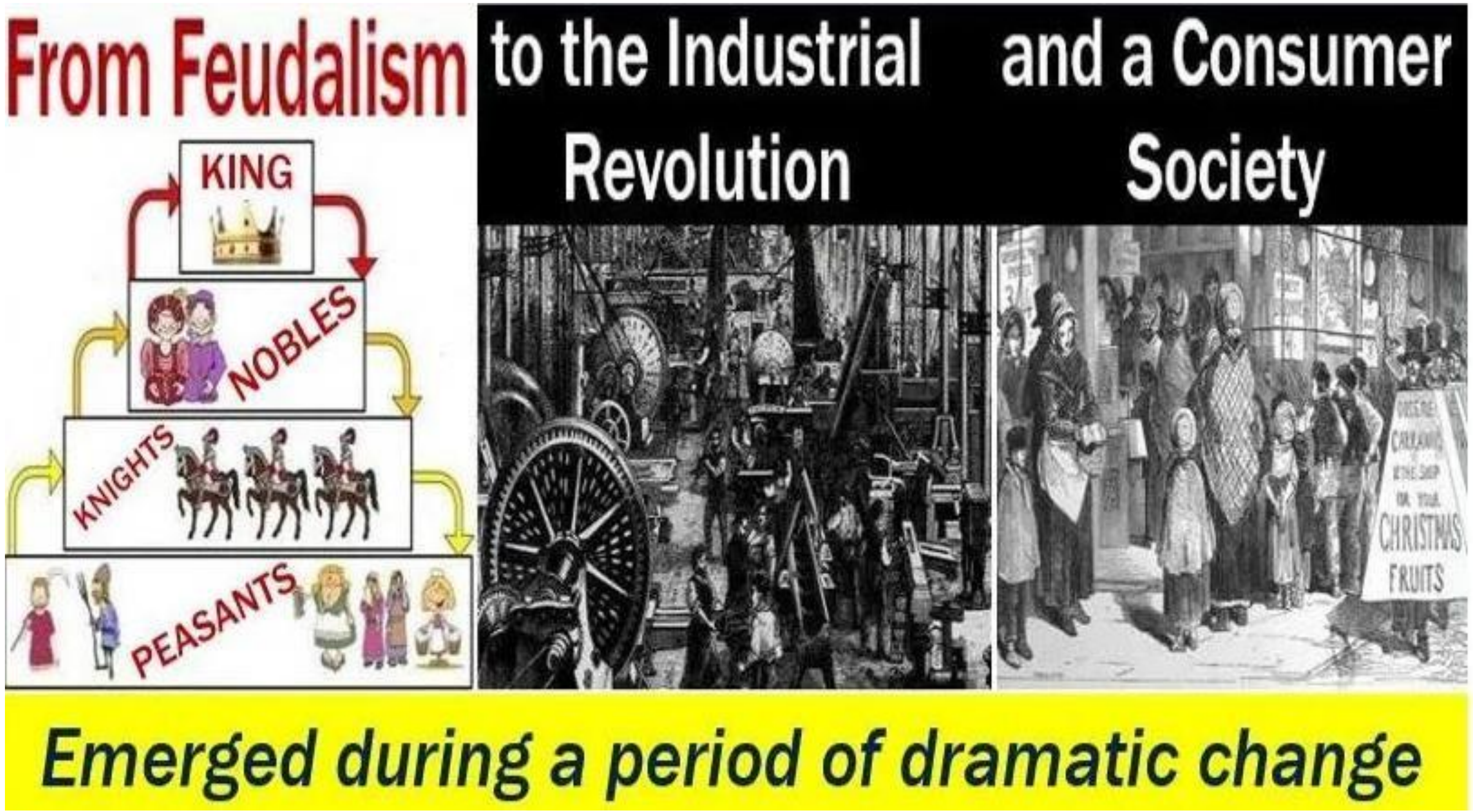
- It is widely recognised that the Classical period lasted until 1870.

- Classical economics believes that the **economy is self-correcting**, Which means that when a recession occurs, It needs no help from anyone

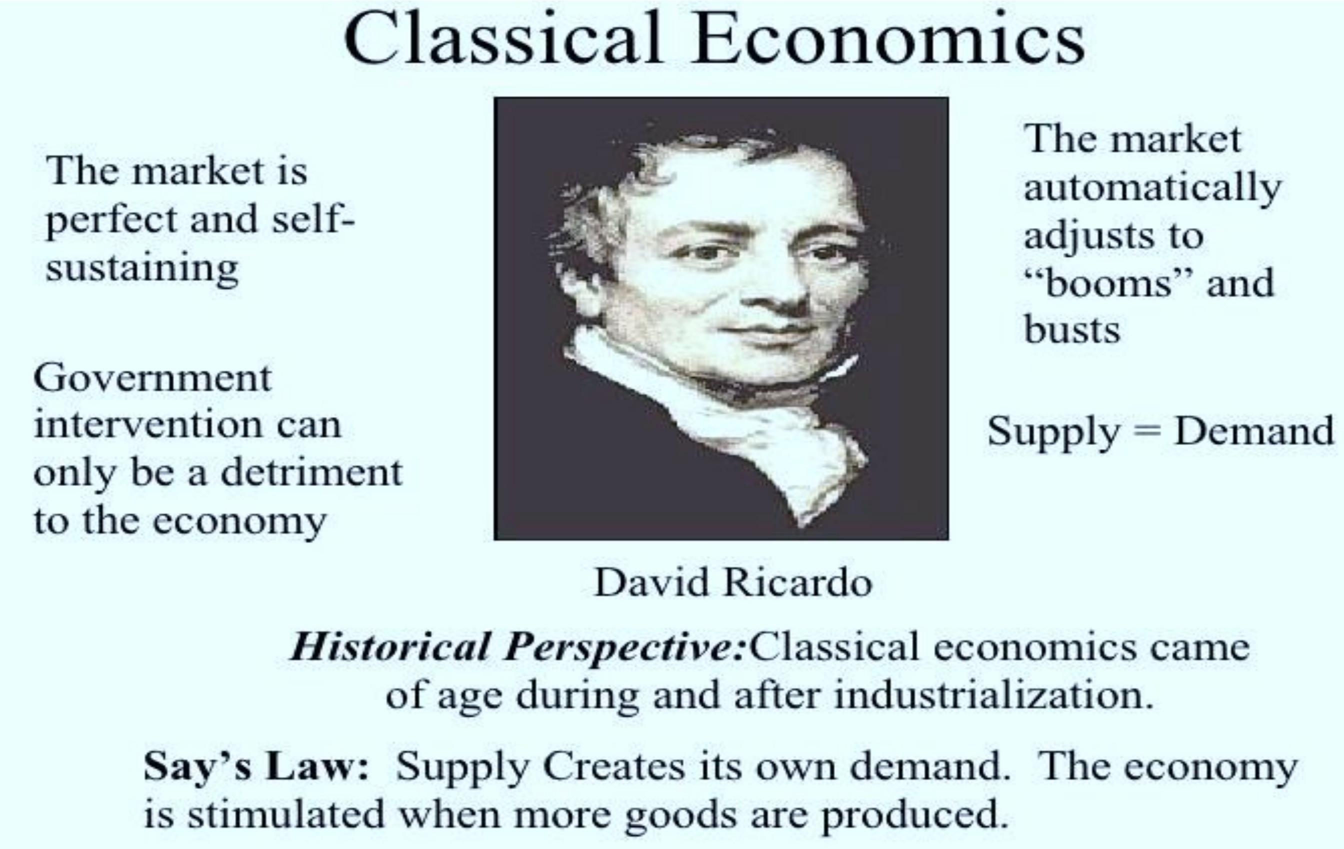
7.1 Classical school



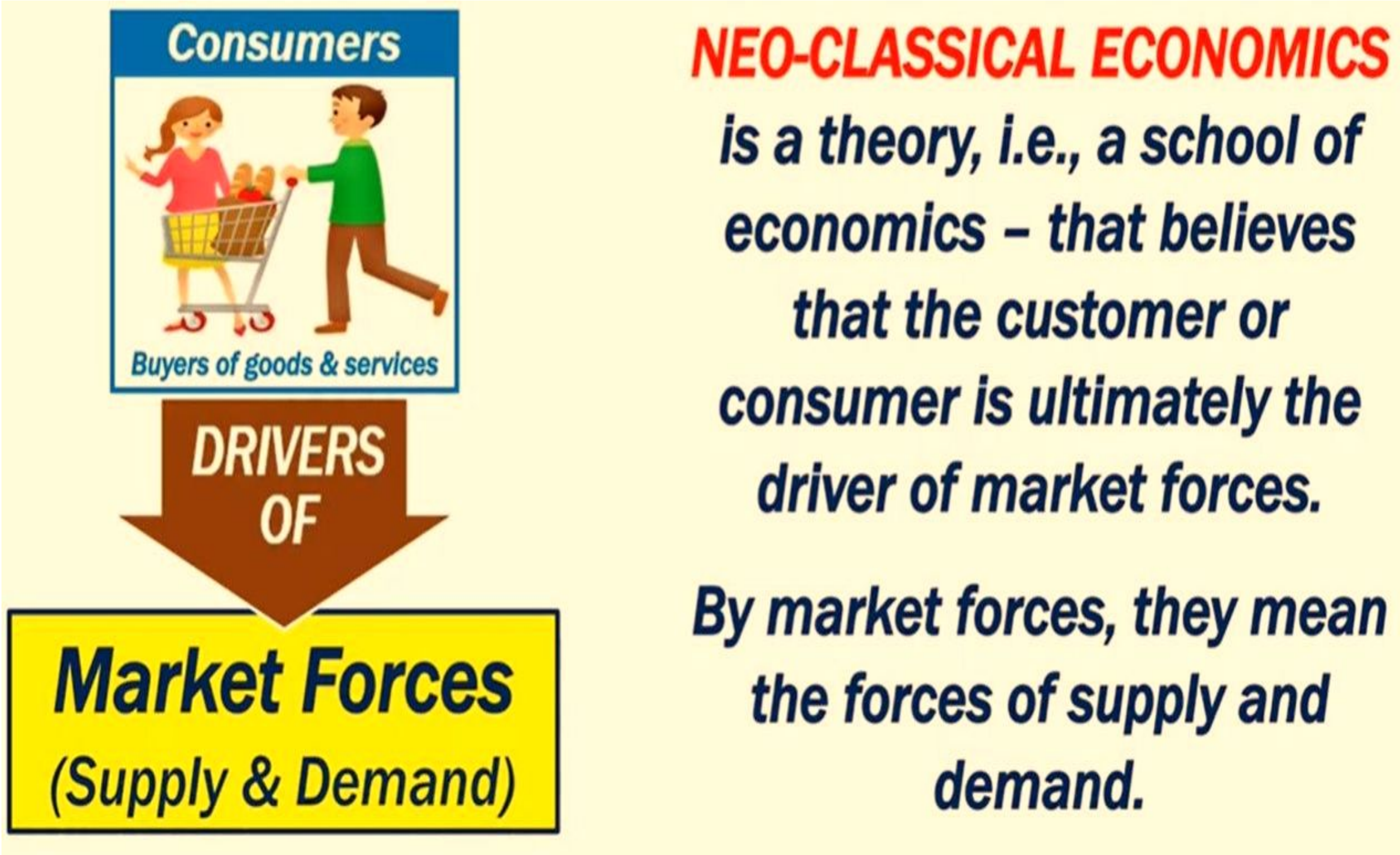
7.1 Classical school



7.1 Classical school

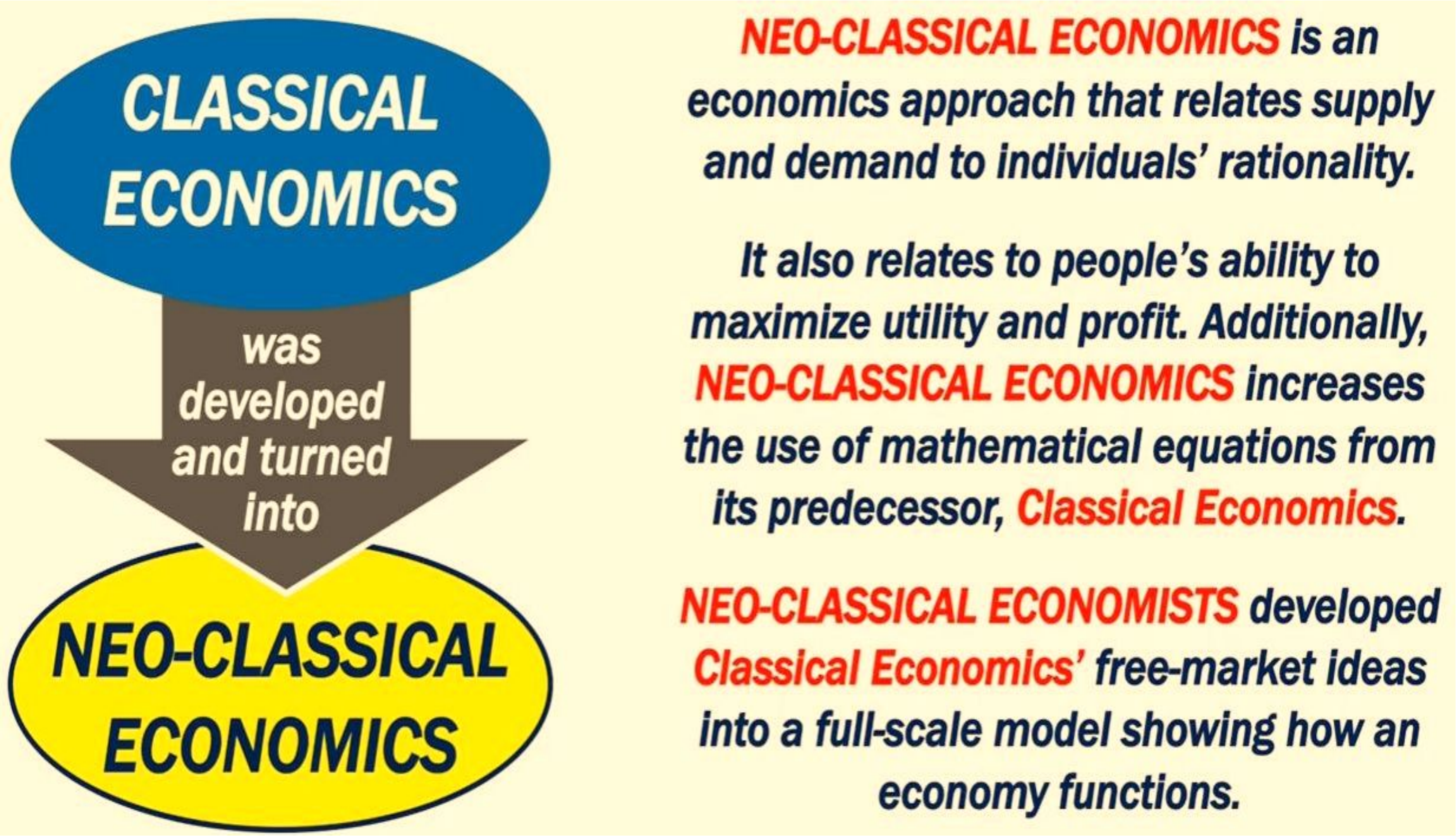


7.2 Neo-Classical school

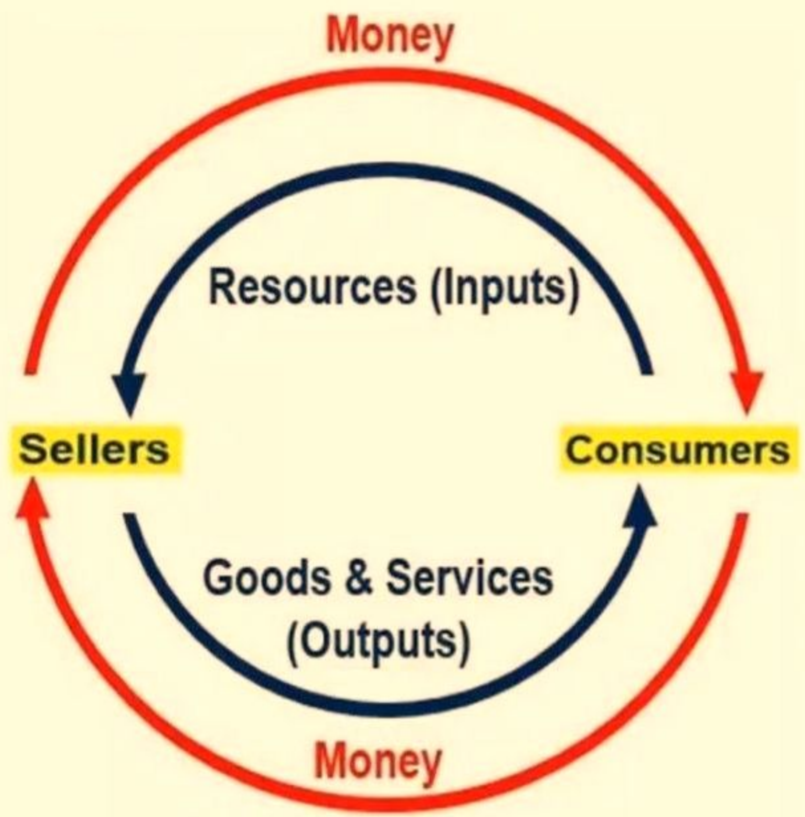


7.2 Neo-Classical school

7.2 Neo-Classical school



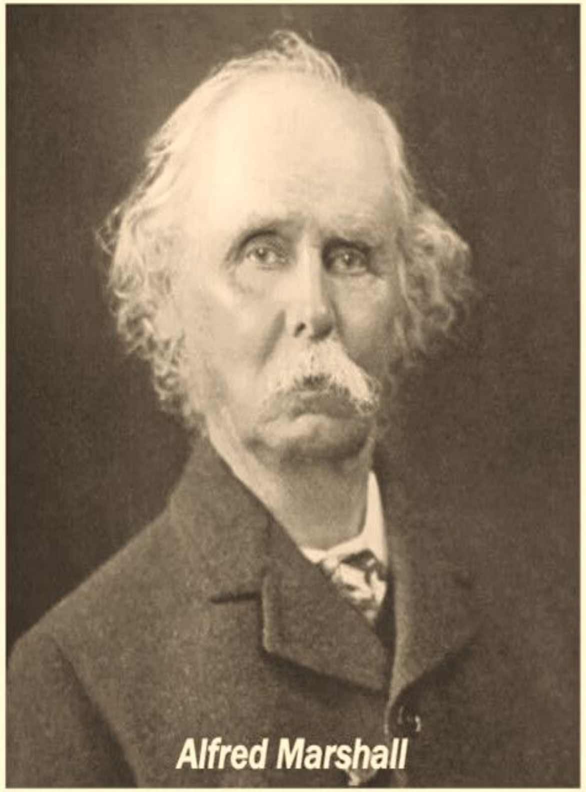
7.2 Neo-Classical school



*According to **NEO-CLASSICAL ECONOMICS**, the rational behaviors and goals of the sellers and consumers in the marketplace drive the flow of resources, goods, services, and money.*

Their objectives and actions lead to market equilibrium.

7.2 Neo-Classical school



One of the most influential economists of his time.

The most famous NEO-CLASSICAL ECONOMIST is Alfred Marshall (1842-1924), a British economist.

Marshall took economics to a more mathematically rigorous level.

He extended economics away from the classical market economy focus.

He subsequently made it popular by focusing on human behavior.

7.2 Neo-Classical school

7.2 Neo-Classical school

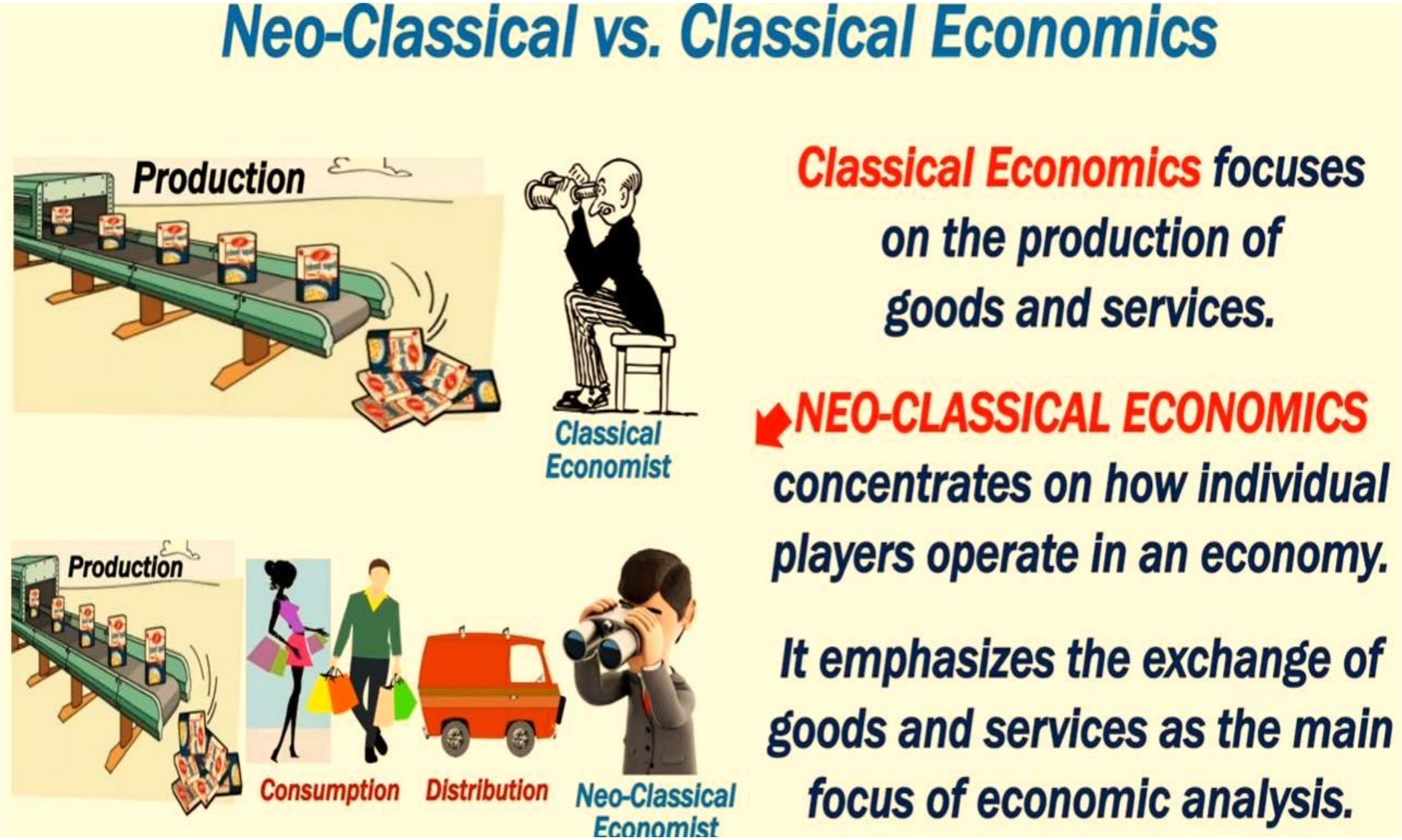
NEO-CLASSICAL ECONOMISTS believe that there should be some legislation to make sure business behavior is ethical.

There should also be laws to protect consumers.

That is why we have regulatory bodies in even the world's most laissez-faire economies.

Without oversight in the banking industry, for example, there is a greater risk of frequent and extremely severe financial crises.

7.2 Neo-Classical school



7.2 Neo-Classical school

- Neoclassical economists believe that a consumer's first concern is to **maximize personal satisfaction**.
- Therefore, they make **purchasing decisions** based on their evaluations of the **utility of a product or service**.
- This theory coincides with rational behavior theory, which states that **people act rationally when making economic decisions**.
- It emerged in around 1900 to compete with the earlier theories of classical economics.
- Classical economists assume that the **most important factor** in a product's price is its cost of production.
- Neoclassical economists argue that the **consumer's perception of a product's value** is the driving factor in its price.
- They call the **difference between actual production costs and retail price the economic surplus**.

7.2 Neo-Classical school

- Further, neoclassical economics stipulates that a product or service often has value above and beyond its production costs.

- While classical economic theory assumes that a product's value derives from the cost of materials plus the cost of labour, neoclassical economists say that **consumer perceptions of the value of a product affect its price and demand**.

- Finally, this economic theory states that **competition leads to an efficient allocation of resources** within an economy. The forces of **supply and demand create market equilibrium**.

7.3 New Classical school

- New classical economics dates from the 1970s, and is an **attempt to explain** macro-economic problems and issues using **micro-economic concepts like rational behaviour, and rational expectations**.
- New classical economics is associated with the work of Chicago economist, Robert Lucas.
- The New Classical school is **built largely on the Neoclassical School**.
- The New Classical School **emphasizes the importance of microeconomics** and models based on that behaviour. New Classical economists assume that **all agents try to maximize their utility** and have rational expectations.
- They also believe that the **market clears at all times**.
- New Classical economists believe that **unemployment is largely voluntary** and that **discretionary fiscal policy is destabilizing**, while **inflation can be controlled with monetary policy**.

7.4 Keynesian Economics

- A school of thoughts in which **government plays an important role** in mitigating economic recession
- Keynesian theory was **very useful** when there was a **Great Depression** (1929-1933)
- It suggest that **in the time of economic prosperity** when everyone have enough money to spend **government should not pump in money** into system & **in time of recession** where people are struggling with the problem **government should take proper measures** to correct the economy

7.4 Keynesian Economics

Keynesian Economics

The market is imperfect and not self-sustaining

Equilibrium may include unemployment, negative growth

John Maynard Keynes

Consumer income stimulates demand, which causes economic growth.

When economic growth is lacking, the government should stimulate demand.

Historical Background: The Great Depression

7.4 Keynesian Economics

Classical Economics	Points	Keynesian Economics
Laissez-faire approach-market is perfect	Approach	Market is not perfect & not self sustaining
Very less	Government Intervention	It is must
No impact on market	Government Policy	Govt. Policy can influence Demand
Creating Long term solution	Long Term Solution	In long rum everything is dead
Supply creates its own demand	Demand	Demand depends on consumer income
Popularised during Industrialisation	Popularity	After The Great Depression

7.6 Monetarist Economics

- The Monetarist school is largely credited to the works of Milton Friedman.

- Monetarist economists believe that the **role of government is to control inflation by controlling the money supply**.

- Monetarists believe that **markets are typically clear** and that **participants have rational expectations**.

- Monetarists **reject the Keynesian notion** that governments can “manage” demand and that attempts to do so are destabilizing and likely to lead to inflation.

7.6 New Keynesian Economics

- The New Keynesian school attempts to **add microeconomic foundations to traditional Keynesian economic theories**.

- While New Keynesians do accept that households and firms operate on the basis of **rational expectations**, they still maintain that **there are a variety of market failures**, including sticky prices and wages.

- Because of this "stickiness", the **government can improve macroeconomic conditions through fiscal and monetary policy**.

Quick Recap

- **Economics** – The study of how individual & society make decision about ways to use scare resources to fulfill want & needs.

- **Economy** – The economy is the sum total of the work we must perform to produce the goods and services we need to survive and live.

- Human wants are unlimited and resources are limited leading to **scarcity.**

- Scarcity leads to **choice.**

- Scarcity and choice lead to 3 fundamental economic problems
  1. **What** to produce
  2. **How** to produce
  3. **For whom** to produce

- **Opportunity cost** – The forgone benefit that would have been derived by an option not chosen.

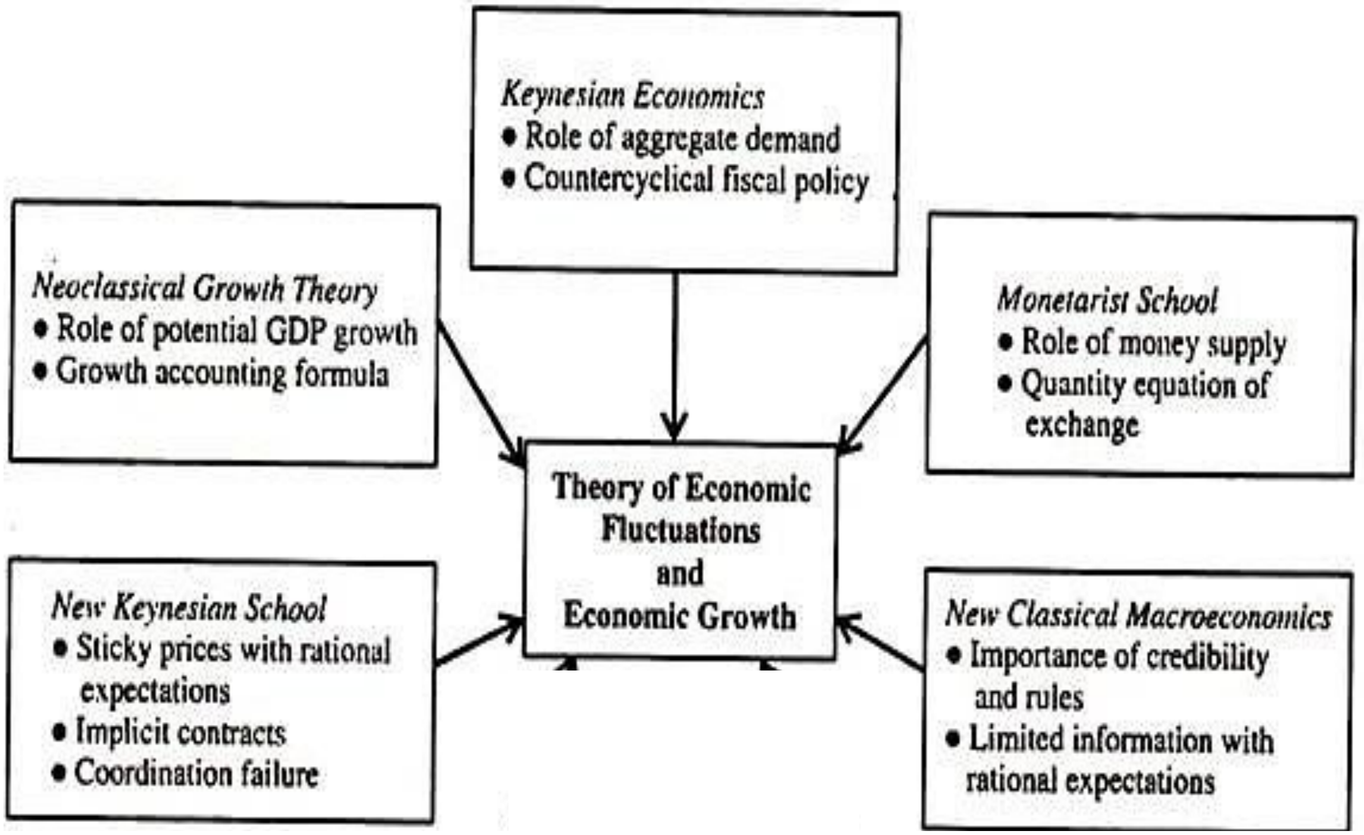
- Economics is dividend into microeconomics and macroeconomics

Quick Recap

Comparing Different Schools of Economics

	CLASSICAL	NEOCLASSICAL	MARXIST	KEYNESIAN
The economy is made up of...	classes	individuals	classes	classes
Individuals are...	selfish and rational (but rationality is defined in class terms)	selfish and rational	selfish and rational, except for workers fighting for socialism	not very rational (driven by habits and animal spirits); ambiguous on selfishness
The world is...	certain ('iron laws')	certain with calculable risk	certain ('laws of motion')	uncertain
The most important domain of the economy is...	production	exchange and consumption	production	ambiguous, with a minority paying attention to production
Economies change through...	capital accumulation (investment)	individual choices	class struggle, capital accumulation and technological progress	ambiguous, depends on the economist
Policy recommendations	free market	free market or interventionism, depending on the economist's view on market failures and government failures	socialist revolution and central planning	active fiscal policy, income redistribution towards the poor

Quick Recap


Keynesian Economics
• Role of aggregate demand
• Countercyclical fiscal policy
Neoclassical Growth Theory
• Role of potential GDP growth
• Growth accounting formula
Monetarist School
• Role of money supply
• Quantity equation of exchange
Theory of Economic Fluctuations and Economic Growth
New Keynesian School
• Sticky prices with rational expectations
• Implicit contracts
• Coordination failure
New Classical Macroeconomics
• Importance of credibility and rules
• Limited information with rational expectations