MICROECONOMICS

1. Introduction & Basic Concepts

I Nature of economics. Definition. Contents. Scope.
II Economic systems.
III Some basic concepts.

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I Nature of Economics

Economics, as a social science subject, is the study of <u>human behavior</u> in relation to the functioning of the <u>economy</u> (operation of the market mechanism), based on a <u>scientific approach</u> to obtain <u>theories</u> which are to explain economic issues and behavior.
The study of human behavior in the market is treated in two main areas - microeconomics & macroeconomics. The scientific approach refers to the formation of theories for analysis & explanation through the positive methods. This approach is often called <u>positive economics.</u>

<u>Definition of Economics</u>
Many people treat economics as a dismal science because economists had to face with the scarcity of resources all the time. As a result, we have a certain degree of limitation imposed by the nature.

John M. Keynes, " the theory of economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind , a technique of thinking which helps its possessor to draw correct conclusions. "

Paul Heyne, " I want beginning students to master a concept that will help them think more coherently and consistently about the wide range of social problems that economic theory illuminates ..... the principle of economics must therefore be taught as tools of analysis. "

Alchian & Allen, " economics enables a more accurate inquiry into how our behavior is influenced by the kind of economic system we have. "

<u>Contents of Economics</u>

<u>Subject matter</u> : Want, Scarcity, Choice ----------------------------Concept of opportunity cost
↓
<u>Problems/Goals</u> : What/ How/ For Whom : to produce ? ----------Basic economic problems
↓
Allocation of resources
Distribution of products & income ----------Economic goals & economic systems
Stability of prices & economy
Growth of the economy
↓

Microeconomics
↓
Production Theory — Consumer Theory
Factor Market — Product Market
Market Structure/Mechanism
Existence of Externality

Macroeconomics
↓
Money & Banking → Monetary Policy
Public Finance → Govt. & Fiscal Policy
National Income → Economic Models
Inter. Trade → Trade Theory & Ex. Rates
Economic Issues - Inflation & Unemployment.

Scope of Economics : Subject Matter

Want > Resources for production
↓
Scarcity (A Constraint)
↓
Choice & Sacrifice--------------------Cost
↓
Competition---------------------------Rule of the game
↓
Price competition | Non-price competition

We want (which is **relatively** unlimited or) more than we could have (based on our resources). As a result, scarcity arises. It is this constraint (scarcity) that forces us to choose and sacrifice - eventually leading to different types of human behavior.

Methodology

1 The Nature of Science

Scientists believe that :

- there are rules or laws governing any phenomena or behavior ; and
- the occurrence of any phenomena or behavior must have its cause or its reason. In order to explain any phenomena (observation, facts or behavior) we need some abstract theories because fact cannot explain itself.

2 The Starting Point In Economics

As a social science, economics begins with some postulates or axioms.

* The basic unit of economic analysis is the individual because it is the individual who makes a choice or decision. The individual behavior is an act of choice based on **rationality**. It follows that the individual behavior must be predicted (not forecasted).
* The behavior is to seek the maximum benefit (**self-interest** not selfish) for the individual. Man seeks to settle himself in a situation under which he finds himself in a highest-valued position based on his constraints.
* to begin with, economists develop economic theories to explain individual choices & behavior which are again based on :
  - taste or preference - these are subjective valuation & not observable. We need to make postulates about them.
  - constraints or opportunity sets - they include all factors which affect behavior and are measurable, e.g. income, laws, technology and culture.

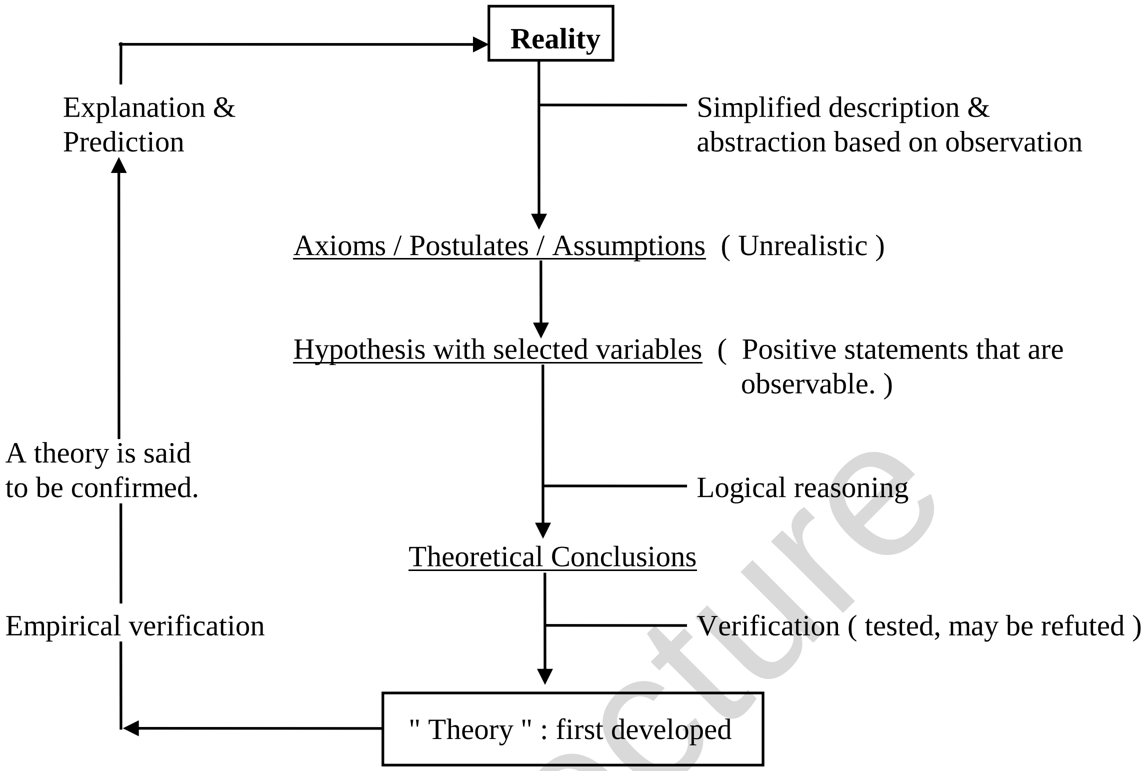
Based on the changes of these constraints, economists try to explain human behavior. For example, when income changes, what is the resulting change in your quantity demanded for a particular kind of good ?

3 The Formation Of Economic Theory

Facts do not explain by themselves. In order to obtain the relevant facts, some sets of axioms are needed. Such a notion is the beginning of a theory.

* A theory contains a set of assertions or postulates (based on reality) and a set of tested conditions or hypotheses under which the behavioral postulates are to be tested.

Economists start by simplifying the complicated reality into some simple postulates or assumptions based on the belief of scientifically determinable laws.



Economic analysis refers mainly to the explanation of facts with the use of economic theories. Theories are different from truth. Even a good theory can be wrong, i.e. it can be refuted.

In fact, a good theory includes three aspects :
* It should be simple so that it can be easily understood and applicable.
* It has good or strong predictive power on human behavior.
* It **can be** falsified, i.e. it might be refuted but has **NOT** yet refuted.

4 The Context of Economics

Given the constraints or the rules of the game, economists try to predict the criterion of competition. Based on the criterion, they try to predict human behavior, the allocation of resources and the distribution of income.
They try to explain how these rules of the game are formed.

II Economic Systems

An economic system contains many sets of rules, values, institutions, laws and decision-making agents with the main of optimum allocation, distribution, stability and growth.
Production needs organized actions which depends on a source of authority or a power of command. Such an arrangement for the purpose of production leads to the formation of an economic system.

From anther view, scarcity leads to some sorts of competition. Competition relies on some rules and regulations as guidelines so that an economic system is required.

The Two Main Economic Systems : A Brief Comparison

		Market Economy	**Command Economy**
1	Operation of the system	Competitive market with price signal	Central planning board to form systematized markets
2	Decision-making agents	Consumers with consumer rights	Central planning by the state
3	Ownership & property	Private and individual	Collective ownership
4	Coordination and information channel	Price and market	Government units
5	Incentive on growth & development	Profit motive and self-interest	Moral persuasion and political philosophy

III Some Basic Concepts

Scarcity
The condition of **limited** resources relative to **unlimited** human wants, thus generating the need for economic decision-making.

Competition
Whenever there is more than one person demanding the same economic good, competition arises.
It is also the method of coordinating economic activity through the free exchange of productive resources and final goods & services, under the system of (private) property rights.

$\boxed{\text{Scarcity}} \longrightarrow \boxed{\text{Allocation \& Competition}} \longrightarrow \boxed{\text{Discrimination : win or lose}}$

Non-price competition
The competition for resources other than the use of price, or in addition to the use of price, e.g. rationing, first-one-first-served, queue, ballot or privileges.

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Appendix 1 : Some Great Economists - Past & Present

Adam Smith 1723 - 1790

Adam Smith is assumed to be the father of modern economics. His family book " An Inquiry into the Nature and Causes of the Wealth of Nations " (published in 1776) would appear to be classic rather than a modern economic textbook.

One of his most significant contributions to economic thought was his explanation of the importance of the division of labour, and its relation with economic development.

His central theme was the value of **self-interest and laissez-faire**. Economic freedom was stressed and the power of the government should be minimized. The society will be better if everyone is allowed to seek and fulfill its personal desires, based on law & order.

The market mechanism (in Smith's famous words : the **invisible hand**) should be allowed to operate freely so that everyone would be better off & satisfied.

David Ricardo 1772 - 1823

He was born in London. At the age of 14, he helped his father's business only after a brief education. At the age of 19, he tried on his own and in a decade, he had some 2 million pounds. He retired and in 1814 held a seat in the Parliament after buying a country estate.

One of his famous thought was the theory of rent and diminishing returns.
He went on to set forth the theory of comparative advantages in the analysis of international trade. Like Smith, he was treated as a classical liberalist of the time.

Alfred Marshall 1842 - 1924

He was an early pioneer of neo-classical economist. As the Cambridge University Professor of political economy, he was also the father of modern microeconomics. He introduced many concepts in economics - the representative firm ; the dimension of time (short & long run) ; consumer surplus ; the interaction of demand & supply ; and also the refining of the concept of elasticity.
To him, economics was not a body of truth but " an engine to discover the truth ".

Karl Marx 1818 - 83

He was a German revolutionary at first. He tried to build to his own philosophy - dialectical materialism - to explain the evolution of history. According to him, history was filled up with " class struggles ". History goes when one class rises up in the society by a revolution and wins over the previous ruling class. He severely attacked the evils of " capitalism " and laid down his philosophy - the so-called **Marxism**.

In 1848, Marx and Friederick Engels published a pamphlet - the Communist Manifesto - to declare international communist movement as well as their philosophy and social ideals.
In 1867, the first volume of Marx's great work - The Capital - was published. It analyzed the concepts of labour, labour value and capital. He supposed that under socialism the society can reach a state which :

" from each according to his ability, to each according to his work. "

Under communism, it is a society without a state, a government and even police. The society can reach a state which :

" from each according to his work, to each according to his need. "

All socialist nations proposed Marxism as orthodoxy until the year 1989.

John Maynard Keynes 1883 - 1946

Keynes was brilliant in contemporary economics and the father of modern macroeconomics. When the world was hard-hit by the Great Depression in the 1930's Keynes declared that the market mechanism had its failure to cause the collapse of the world economy. It could only be remedied by government action - the use of fiscal policy - which becomes an important topic in public finance.

His masterpiece - the General Theory of Employment, Interest and Money - was published in 1936 which led to the analysis of economics in a macro-view.

Milton Friedman 1912 -

As one of the leading monetarists and member of the Chicago School of economics, the 1976 Nobel Prize Laureate advocates the confinement of the role of government. He suggested that the central bank should have a stable increase in money supply to cope with economic growth, and at the same time, to maintain a monetary policy so as to prevent inflation.
In short, inflation is basically a monetary phenomenon so that money matters very much.

Paul A. Samuelson 1915 -

He was notable in his extensive application of mathematics in economics with innovative results. He won the Nobel Prize in 1970.

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Appendix 2 : The Scope of Economic Analysis

The following terms are helpful in understanding the methodology in economics.

1 Axiom
a statement accepted as truth without proof or argument.

2 Fact
observation which has been verified by formal investigation.

3 Positive statements
statements concern with what was, is or will be. They involve verifiable facts.

4 Normative statements
statements concern with what ought to be. They involve value judgement of good or bad.

5 Deductive method (from ***general*** to ***particular***)
the treatment of a problem by commencing from a premise accepted as being true, and with the use of logical reasoning, arriving at one or more conclusions. Its usefulness depends upon the correctness of the reasoning, and the truthfulness of the premise.

6 Inductive method (from ***particular*** to ***general***)
a logical process starting from the examination of facts with the intention of arriving at generalizations.

7 Hypothesis
statement showing the relation between (observable) variables. They are often expressed in the form of " if A then B ".

8 Tautology
statement which cannot be falsified under all circumstances. Such statements are void in itself.

9 Logical reasoning
the reasoning must be logical and consistent. The hypothesis of " if A then B " can be represented by
" $A \rightarrow B$ " where A : antecedent ; and B : consequent.
Once A is confirmed to be true, it follows that B is also true.

However, there are two logical fallacies :

- the fallacy of confirming the consequent such that " $A \rightarrow B$ " is true but " $B \rightarrow A$ " is only a fallacy.
- the fallacy of denying the antecedent such that " $A \rightarrow B$ " is true but " not $A \rightarrow$ not B " is also a fallacy.

10 Fallacy of composition
what is true when applied to an individual or single item may not be true if applied to the whole.

11 Usefulness of a theory
all useful theories are unrealistic. To be useful, an economic theory must be able to :
(1) isolate the importance economic variables that help to explain the behaviour of the goals ;
(2) create useful generalizations to describe the relationships among groups of variables ; &
(3) test whether the generalizations have predictive power.

12 Prediction
economic theories have predictive power, **not** forecasting power. Though useful theories are unrealistic, the core is whether or not the implications of such theories are " realistic " enough that they can be observed, tested and refutable by evidence.

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