HISTORY OF ECONOMIC THOUGHT I (Eco 307)

Lecture Notes

Introduction and Definitions

History of economic thought deals with different thinkers and theories in the subject that became political economy and later economics, from the ancient world to the present day. It encompasses many different schools of economic thought.

History of economics thought deals with the origin and development of economic ideas and their interrelations. It is a historical account of economic doctrines.

According to H.L. Bhatia history of economic thought includes the doctrines and generalizations of various thinkers which deal with the economic phenomena of our life. It went through a lot of evolution with specific contributions from various thinkers that had great impact upon the future of economic thought.

Prof. Schumpeter defines Economic thought as the sum total of all the opinions and desires concerning economic subjects especially with public policies of different times and places. He stated further that the history of economic thought traces the historical change of attitudes. It also speaks about economic problems and various approaches to those problems.

Prof. Haney defines history of economic thought as a critical account of the development of economic ideas, searching into their origin, interrelations and manifestations.

Prof. Bell says the history of economics thought is the study of the heritage left by the writers on economic subject.

History of economc thought is different from Economic History and History of economics.

While History of Economic thought deals with the development of economic ideas; Economic History is the study of the economic development of a nation or country. On the other hand, History of economics deals with the science of economics.

Even though Economic History and History of Economic Thought constitute separate branches of study they are closely related. Economic ideas are directly or indirectly motivated by economic conditions and environment of a country. Ideas and environment are very important hence the close relationship between History of economic thought and Economic History.

The History and development of economic ideas can be studied under three (3) periods, namely;

1. Ancient 2. Medieval and 3. Modern

Ancient Greek writers such as the **philosopher** Aristotle examined ideas about the art of wealth acquisition, and questioned whether property is best left in private or public hands.

In medieval times, with its root medi – meaning "Middle", and ev – meaning "Age" that is the period in the history of Europe , the middle Age period from the 5^{th} to the 15^{th} (500 to 1500) century. It started with the fall of the great Western Roman Empire and merged into the Renaissance and the Age of discovery. That is after the "rebirth" of culture that we call Renaissance. Scholastics such as Thomas Aquinas argued that it was a moral obligation of businesses to sell goods at a just price.

The history of economic thought can further be broadly divided into two parts;

1. The Origin and the development of economic ideas before the development of economics as science.
2. The second part deals with economic ideas after the development of economics as a Science.

The history of economic thought can be studied and analyzed by adopting different approaches;

1. Deductive or Classical approach
2. Inductive approach
3. Chronological approach
4. Conceptual approach
5. Philosophical approach
6. Neo-Classical approach
7. Welfare approach
8. Keynesian approach
9. Institutional approach

There are a variety of modern **definitions of economics**. Some of the differences may reflect evolving views of the subject itself or different views among economists.

The earlier term for 'economics' was political economy. It was adapted from the French Mercantilist usage of *économie politique*, which extended *economy* from the ancient Greek term for household management to the national realm as public administration of the affairs of state.

The philosopher Adam Smith **(1776)**: defines the subject as "an inquiry into the nature and causes of the wealth of nations," in particular as:

> A branch of the science of a statesman or legislator [with the twofold objective of providing] a plentiful revenue or subsistence for the people and to supply the state or commonwealth with a revenue for the public services

J.B.Say **(1803)**: distinguishing the subject from its public-policy uses, defines it as the science *of* production, distribution, and consumption of wealth.

John Stuart Mill **(1844)**: defines the subject in a social context as:

> The science which traces the laws of phenomena of society as it arise from the combined operations of mankind for the production of wealth, so far as those phenomena are not modified by the pursuit of any other subject.

Alfred Marshall in (1890): provides a still widely cited and accepted definition in his textbook *Principles of Economics* (1890) that extends analysis beyond wealth and from the societal to the microeconomic level:

> Economics is a study of man in the ordinary business of life. It enquires how he gets his income and how he uses it. Thus, it is on the one side, the study of wealth and on the other and more important side, a part of the study of man.

Lionel Robbins **(1932):** developed implications of what has been termed "perhaps the most commonly accepted current definition of the subject "Economics is a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses".

Robbins describes the definition as not *classificatory* in "picking out certain *kinds* of behaviour" but rather *analytical* in "focusing attention on a particular *aspect* of behaviour, the form imposed by the influence of scarcity."

Some subsequent comments criticized the definition as overly broad in failing to limit its subject matter to analysis of markets. From the 1960s, however, such comments abated as the economic theory of maximizing behavior and rational-choice modeling expanded the domain of the subject to areas previously treated in other fields.

There are other criticisms as well, such as in scarcity not accounting for the macroeconomics of high unemployment.

ECONOMICS AS A SOCIAL SCIENCE:

The scientific study of the society of human behavior and of social interactions. Economics is one of several social sciences. Others are sociology, political science, Psychology, Geography and anthropology. Economics is considered a social science because it seeks to explain how society deals with the scarcity problem.

Economics is one of several disciplines that apply the scientific method to the study of human behavior in social science. The social part of this phrase means the study of society, human behavior, and social interactions. The science part means the use of the scientific method to describe and explain the world. Economics stands apart from other social sciences because it is the scientific study of human behavior related to the problem of scarcity.

SCIENTIFIC METHOD:

A structured way of investigating and explaining the operation of the world by testing and verifying hypothesized relations. The scientific method is a process of discovery, a method of explaining the way the world operates. Positive economics is the application of the scientific method to economic analysis.

The **scientific method** is a body of techniques for investigating phenomena, acquiring new knowledge, or correcting and integrating previous knowledge. To be termed scientific, a method of inquiry is commonly based on empirical or measurable evidence subject to specific principles of reasoning

The Oxford Dictionaries Online define the scientific method as "a method or procedure that has characterized natural science since the 17th century, consisting in systematic observation, measurement, and experiment, and the formulation, testing, and modification of hypotheses". Experiments need to be designed to test hypotheses. The most important part of the scientific method is **the experiment**.

The scientific method is a continuous process, which usually begins with observations about the natural world. Human beings are naturally inquisitive, so they often come up with questions about things they see or hear and often develop ideas (hypotheses) about why things are the way they are. The best hypotheses lead to predictions that can be tested in various ways, including making further observations about nature.

In general, the strongest tests of hypotheses come from carefully controlled and replicated experiments that gather empirical data. Depending on how well the tests match the predictions, the original hypothesis may require refinement, alteration, expansion or even rejection. If a particular hypothesis becomes very well supported a general theory may be developed.

The scientific method is the process used to study, explain, and analyze economic phenomena. It helps make sense of the seemingly chaotic events of economic life. The price of gasoline rises. Why? A local factory lays off a hundred employees. Why? The President proposes a tax cut to stimulate the economy. Why?

Answering these questions, and thousands of others, is what the scientific method is all about.

Explaining Things:

The scientific method seeks to explain the mechanisms of the world and how things work. Science seeks to identify the basic laws of nature that govern the world. More to the point, economic science, or positive economics, seeks to explain how the economic world works, to identify the economic laws of nature.

It is one thing to attribute the daily movement of the sun across the sky to the efforts of a Greek god. It is quite another to explain this movement using gravity and planetary orbits.

The great thing about the ability to explain is the resulting ability to predict. Knowing that the sun's movement is guided by the law of gravity which makes it possible to predict its position tomorrow, next week, or next year. This information helps when doing things like flying to the moon.

Components of the Scientific Method

A little more insight into the scientific method with an overview of several key components ; Model, Theory, Principles, World view, Hypothesis, and Verification.

- **Model** is a theoretical construct representing economic processes by a set of variables and a set of logical and/or quantitative relationships between them. The economic model is a simplified framework designed to illustrate complex processes, often but not always using mathematical techniques. Frequently, economic models posit structural parameters. Structural parameters are underlying parameters in a model or class of models.

  A model may have various parameters and those parameters may change to create various properties. Methodological uses of models include investigation, theorizing, and fitting theories to the world.

- **Theory:** The starting point, but also the end result of doing science is the theory. A theory is a scientifically accepted, interrelated body of general principles used to explain and understand some aspect of the world. A theory creates a framework for investigating and explaining the world. It helps make sense out of what might appear to be random events. A theory offers an explanation for these events. It explains WHY things happen.

- **Principles:** Principles are generally accepted, verified, fundamental laws of nature. As a house is constructed from concrete, lumber, and nails, a theory is constructed from principles. To be a fundamental law of nature, a principle must capture a cause-and-effect relation about the workings of the world. One example might be something like, "people seek the greatest benefit at the lowest cost." The scientific method is essentially the process of building theories by identifying and verifying these fundamental laws of nature.

- **World View:** A world view contains fundamental and unverifiable axioms, beliefs, and values about how the world works. Religious beliefs, political philosophies, and cultural conditioning are just a few of the components that go into a person's world view. These components are largely "accepted on faith" and cannot be tested or verified directly.

  Without a doubt, the best example of a world view component is the belief in God - a supreme, omniscient, omnipotent being. Another example is the presumption that human beings are basically good (as opposed to basically evil). These beliefs cannot be directly verified and must be accepted on faith.

- **Hypotheses:** Principles are the end result of a long, scrutinizing process that starts with hypotheses. A hypothesis is a reasonable proposition about the workings of the world that is inspired or implied by a theory and which may or may not be true. Hypotheses are generated from informed ignorance. Informed, because they are implied by a theory that has been previously subjected to a great deal of scrutiny, but ignorance, because no one yet knows if the hypothesis is right.

- **Verification:** This gives rise to the fifth and last part of the scientific method, verification. It seeks know if a hypothesis is right or wrong. Comparison is made with data, empirical observations drawn

from the real world. The scientific method is ultimately concerned with explaining the workings of the real world.

Perhaps a Greek god carries the sun across the sky. Perhaps the sun's apparent trek across the sky is caused by the rotation of the earth. Both are hypothesized relations for the perceived motion of the sun. Which is correct? The only way to know is through verification and testing to compare the hypotheses with what actually happens in the real world.

Verifying hypotheses with real world data is the crucial step in transforming a hypothetical relation into a fundamental law of nature that is a principle. A hypothesis must pass the real-world-data test to become a principle. And this is the scientific method.

Other components of the scientific method:

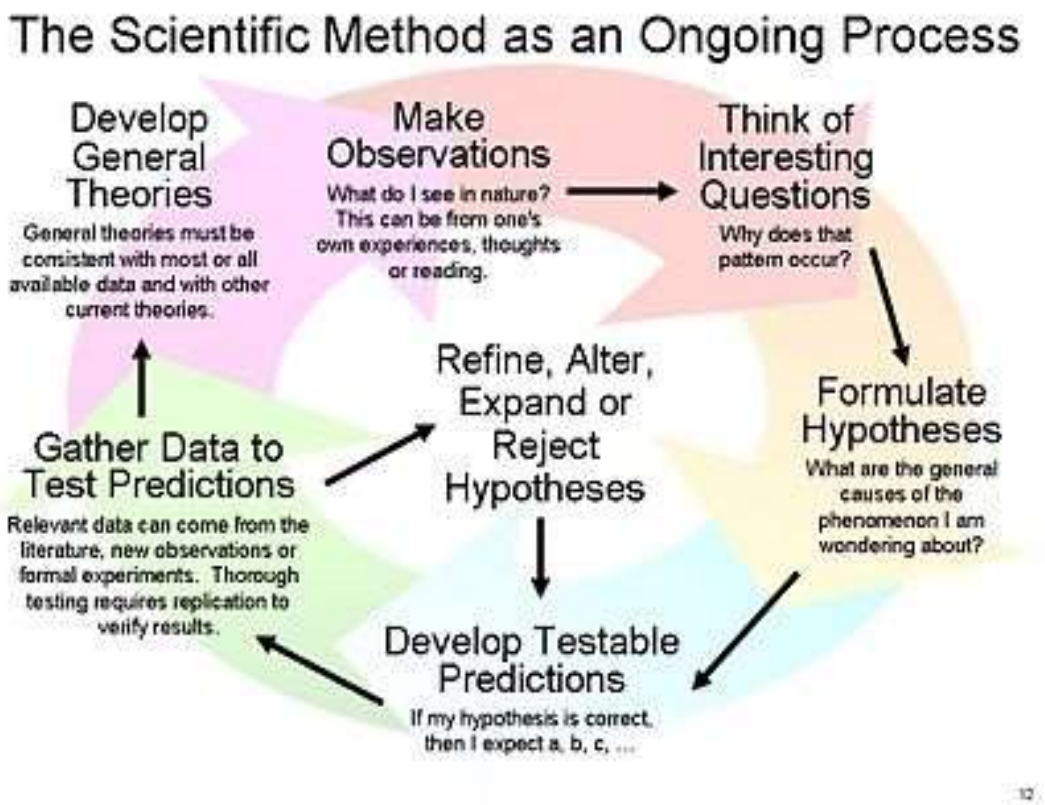
The scientific method also includes other components required even when all the iterations of the steps above have been completed.

Replication: If an experiment cannot be repeated to produce the same results, this implies that the original results might have been in error. As a result, it is common for a single experiment to be performed multiple times, especially when there are uncontrolled variables or other indications of experimental error. For significant or surprising results, other scientists may also attempt to replicate the results for themselves, especially if those results would be important to their own work.

External review: The process of peer review involves evaluation of the experiment by experts, who typically give their opinions anonymously. Some journals request that the experimenter provide lists of possible peer reviewers, especially if the field is highly specialized. Peer review does not certify correctness of the results only that, in the opinion of the reviewer, the experiments themselves were sound (based on the description supplied by the experimenter).

If the work passes peer review, which occasionally may require new experiments requested by the reviewers, it will be published in a peer-reviewed scientific journal. The specific journal that publishes the results indicates the perceived quality of the work.

- **Data recording and sharing:** Scientists typically are careful in recording their data, a requirement promoted by **Ludwik Fleck** (1896–1961) and others. Though not typically required, they might be requested to **supply this data** to other scientists who wish to replicate their original results (or parts of their original results), extending to the sharing of any experimental samples that may be difficult to obtain.



The steps of the scientific method are to:

- Ask a Question.(Problem)
- Do Background Research. (Observation)
- Construct a Hypothesis. (Formuate Hypotheses)
- Test Your Hypotheses. (By Doing an Experiment)
- Analyze your Data .(Analyze Your Results)
- Communicate Your Results. (Conclusion)

Thus systematic thought process is usually broken down into induction and deduction both of which are used in the scientific method. They are:

Inductive and Deductive Method of Reasoning:

In logic, we often refer to the two broad methods of reasoning as the **Deductive or Classical** and **Inductive** approaches.

1. **Deductive or Classical Reasoning Approach:** It works from the more general to the more specific. The classical believe in the universal application of economic laws. They adopted the deductive approach. Sometimes this is informally called a "top-down" approach. We might begin with thinking up a **theory** about our topic of interest. We then narrow that down into more specific

hypotheses that we can test. We narrow down even further when we collect **observations** to address the hypotheses. This ultimately leads us to be able to test the hypotheses with specific data - ***a*** **confirmation** (or not) of our original theories.

Example;

All birds have wings……. 1st premise (major or general rule)

Eagles are birds…… 2nd premise (Specific or minor rule)

Therefore eagles have wings ….. 3rd premise (conclusion)

2. **Inductive Reasoning Approach**: The Historical school emphasized on the inductive method. These economists believe that the laws of economics are not universal in nature. Inductive reasoning works the other way, moving from specific observations to broader generalizations and theories.

Informally, we sometimes call this a "bottom up" approach (please note that it's "bottom up" and *not* "bottoms up" which is the kind of thing the bar tender says to customers when he's trying to close for the night!). In inductive reasoning, we begin with specific observations and measures, begin to detect patterns and regularities, formulate some tentative hypotheses that we can explore, and finally end up developing some general conclusions or theories.

These two methods of reasoning have a very different "feel" to them when you're conducting research. **Inductive reasoning**, by its very nature, is more open-ended and exploratory, especially at the beginning.

Deductive reasoning is more narrow in nature and is concerned with testing or confirming of hypotheses. Even though a particular study may look like it's purely deductive (e.g., an experiment designed to test the hypothesized effects of some treatment on some outcome), most social research involves both inductive and deductive reasoning processes at some time in the project.

In fact, it doesn't take a rocket scientist to see that we could assemble the two graphs into a single circular one that continually cycles from theories down to observations and back up again to theories. Even in the most constrained experiment, the researchers may observe patterns in the data that lead them to develop new theories.

3. **Chronological approach:** The Chronological approach discusses economic ideas in order of time. The economic ideas of different economists can be presented year wise and can be studied. In this approach we can find continuity in the economic ideas of different economists.
4. **Conceptual approach:** This approach speaks about the evaluation of different economic concepts (ideas) and the interdependence of these concepts. Conceptual approach can also be called ideological approach.

5. **Philosophical approach:** This was first adopted by Greek philosopher, Plato. In the past economics was considered as a handmade of ethics. Naturally philosophical approach was adopted by the very early writers/thinkers to discuss economic ideas.

6. **Neo-Classical approach:** This approach aims at improving the classical ideas by modifying them. The Neo-classical approach was first adopted by Marshall. The Neo-classical approach believed that "Inductive and Deductive reasoning are necessary for the science of economics just as the right and left feet are necessary for walking".

7. **Welfare approach:** This approach mainly aims at providing the basis for adopting policies which are likely to maximize social welfare.

8. **Institutional approach:** The institutionalists questioned the validity of the classical ideas and gave more importance to psychological factors.

9. **Keynesian approach:** This is a major development in modern economics and is associated with the name J.M. Keynes. His approach is new and different from the classical school. It takes into consideration the operation of business cycles that affect the entire economic policies. Keynesian approach deals with the problem of the aggregate economy as a whole.

SIGNIFICANCE/IMPORTANCE OF HISTORY OF ECONOMIC THOUGHT

The Study of History of economic thought is important for the following reasons:

1. The study of history of economic thought clearly shows that there is a certain unity in economic thought and this unity connects us with ancient times.
2. The study helps us to avoid committing the same mistakes of the earlier economic thinkers.
3. The significance of history of economic thought is that it is an important tool of Knowledge.
4. The study will help students realize that economics is different from economists.
5. It helps students to know that economic ideas are conditioned by time, place and circumstances.
6. The study enables us to know the economic thinker responsible for the formulation of certain important economic principles and concepts.
7. The study of History of economic thought will help us to understand the origin of economics as a discipline.
8. The study will help students to know that economic ideas have been instrumental to the shaping of economic and political policies of different countries of the world.
9. A study of the History of economic thought will help to provide a broad basis for comparison of different economic ideas. It will enable a person to have a well-balanced and reasonable judgment.

HISTORICAL VIEW OF ECONOMIC THEORIES

Ancient Economic Thought

The study of the Ancient of Economic Thought may not appear to be fascinating to modern student but there can be little doubt that for a clear understanding of economic theories and institutions in a proper sequence,

such a study has more than mere historical value. It gives us an insight into the life, habit and customs of ancient communities and also provides a wider spectrum of the growth of modern economics. It shows the origin of economic thought and the factors responsible for its development. Ideas are passed from one generation to another with the necessary modification and adoptions. There for they have to be judged in their historical perspectives.

The study of ancient economic thought do not provide only the necessary bridge between ancient and modern but also between accidental and oriental economic thought. Its importance lies not only in providing a continuity of ideas but also in an understanding of the interaction of these ideas in their proper relationship. It is a very important link between the old and the new. Between East and west and between ethics and economics.

Economic Thought of Hebrews:

The beginning of the science of economics and economic institutions are often traced back to the Hebrew and the Jewish time. The society discussed in the Old Testament mentioned some of the characteristics of modern capitalism and private property. The Hebrews belong to the ancient civilizations of the world. Their period dates back to 2500 B.C. It is believed by some scholars that western civilization has its origin in Hebrew civilization.

Division of labour, Market, Exchange, Money etc. were the institutions of those times. The philosophers of those time were real founders of all social theories even though their writings were in a scattered form.

The economic philosophy of the Hebrews was simple. The society in which they lived was also a simple one. Economic problems were never studied separately. Economics, Politics, Ethics and philosophy were interconnected. But the religion and Ethics were given greater importance. Economic life was controlled by priests. They gave importance to agriculture. The Hebrews had definite ideas on subjects such as interest, agriculture, property taxation etc.

ECONOMIC IDEAS OF THE HEBREWS:

Interest – The Mosaic Law prohibited interest taking or usury (High rate of interest) However the Hebrew prophets did not use the term interest. The law applied only to the Hebrews. Lending of money at interest to strangers was allowed. The Hebrews were told or directed not to collect interest on money from the poor because they borrow money mainly for the purpose consumption. The rule was modified in the time of King Solomon when charging of interest at low rates was justified. Security for loans was in the form or nature of pledge with well-defined rules for it. Thus the ideas of the Hebrews on interest were similar to those expressed by the ancient Hindu thinkers.

Just Price – Both Hebrews and Hindus exercised great care in formulating laws against false weights and measures and adulteration of articles of consumption. These were strictly prohibited. Raising price for speculative means was disapproved. There were also ceiling on the profits of the retail shopkeepers which could not exceed the limit of 162/3 percent. The export of food grains was prohibited and in times of scarcity and famine, hoarding of food grains was not permitted. Thus the concept of just price included correct weight, competitive price and reasonable rate of profit.

Labour and wages - The Hebrews recognized labour but the pride of place was given to agricultural labour. There was no wage issues as we have now. Then wages of workers were common to the knowledge of all. They did not lay down any rules for regulating the relationship between the employer and the employee. The chief regulations were concerning mercy and justice to them. Payments were made in kind .

Agriculture - The Hebrews gave greater preference to agriculture. At that time the purpose of lawgivers was to fix the people in agricultural life which was a settled one. There was the tendency to disregard trade and the mercantile community. They were encouraged to be great farmers and owners of farm lands.

Money – The Hebrews seemed to have understood the functions of money. Money was used mainly in the form of bullion. There was no question of stamped money.

Seventh and jubilee year - There was a peculiar institution of seventh and jubilee year in the history of te hebrws. It was their culture to work for six years and in the seventh year they rest after cultivating the land for six years so as to preserve the fertility of the soil. At this time slaves serving for six years are freed in th seventh year. In this year all debts should be cancelled or forgiven. The jubilee year was another peculiar institution of the Hebrews.

It was the fiftieth year. According to this provision the land bought from someone would be returned to its original owner in the 50^{th} year. In those days of the Hebrews land was a very good source or main source of wealth. They tried to prevent the acquisition of small lands from their owners by the owners of large lands. By this the Hebrews tried to or desired to prevent inequality in wealth.

Sabbath - The Sabbath was the corner stone of Hebrews economic thought. It was their weekly day of rest, relaxation, and good living. It was enjoyed by the masters and their households with their slaves and servants. According to Spiegel, "the institution of the weekend was a social invention that has no parallel in the civilization of Greek, Rome or other ancient culture.

Property – The Hebrews in those days used land as their main form of property**.** They measured wealth in lands, slaves, talents, silvers and other precious metals**.** The owner of a land is the owner of all that is above it and below it including all natural resources. According to the law of inheritance Hebrews the land goes to the first son. In the absence of a son it goes to the first daughter, In her absent to any other relations of the land owner like brother, sister or close relation.

Trade – In those days only surplus was sold in the market. The Hebrews wives were craft – women who used spin wool and flax. Commerce flourished in the reign of King Solomon. He made successful voyage to distant lands including India.

Taxes – Taxes did not exist in the Hebrew economy. Labor services were utilized for the construction of bridges, roads, and other public utility services. Customs and toll tax were also collected.

The toll tax was known as a tribute realized from every male for the maintenance of temples. The Hebrew laws helped the dependents, fatherless, and widows. The corner portion of the field and vineyards were available for the poor.

In conclusion the whole economic life of the Hebrews was very simple. Their life was dominated by the priestly class. Religion, law, ethics, philosophy and economic ideas were bound together. Their education system was very much influenced by religion and ethics. Though their economic ideas were simple and scattered they had a greater power to influence the minds of people.

Greek Economic Thought

The Greek were the first to develop an economic theory, but it appeared in the form of incidental observations, thrown off in the pursuit of a more worthy end. "It was in the Greek writers that theorizing on economic matters first explicitly emerges" according to Alexander Gray.

Though the Greek being the pioneers in many branches of Knowledge, they did not contribute much to the growth of economic ideas. There was no demonstration between politics, economic and ethics.

The ancient world was founded on a system of cast distinctions. The masters did not give due respect to odd jobs done by slaves. In the absence of freedom of choosing one's occupation there was hardly any incentive for economic activities.

According to Prof. Haney the contribution of Greek ideas in the development of modern economic thought demands no small attention.

We give credit to Plato for giving some attention to the economic aspects of social organization. Plato was the first of a long line of reformers and his student Aristotle was the first analytical economist.

PLATO (427 – 347 BC)

Plato was a Greek philosopher who was born in Athens in an aristocratic family. He was a pupil of Socrates. He taught mathematics and philosophy in the first great school of philosophers.

The academy founded by him. His famous writing, "the Republic and The Laws" are the most important sources of his economic thought. Credit goes to Plato for giving some attention to the economic aspects of social organizations.

Plato attempted to offer a systematic exposition of the principles of society and of the origin of the city state, as well as a plan for the ideal social structure". He regarded economics a branch of ethics and politics.

The Origin of the State:

Plato traced the origin of the state to economic considerations. Plato said "a state arises out of the needs of mankind. No one is self-sufficient. All of us have many wants". The state in order to supply the necessary commodities to satisfy human wants gathered together.

The partners and the helpers of this gathering is called the state. In Plato's ideal state there were two classes, the rulers and the ruled.

The rulers were the Kings and the Warriors while the ruled were the artisans and the unskilled workers. The members of the ruling class must be set apart from early childhood and they should be educated in philosophy and arts of war because they will have to protect the state against foreign attack.

At age thirty they will have to pass an examination. This examination selects the future philosopher King and those who cannot pass are concerned with general administrative duties.

Plato distinguished five types of government. They are;

1. Aristocracy - Rule by the best.
2. Timocracy - Rule by the Soldiers

3. Oligarchy - Rule by a Few
4. The rule by the Wealthy
5. Democracy

Economic ideas of Plato in Greek:

Division of Labour: Plato's main contribution was his account of division of labour. By this he means the division of employment as an aid to social organization. He based the origin of the state on division of labour. Plato believed that the essential needs of mankind are food, clothing and shelter.

Therefore to Plato a city state must include a builder, a weaver, a farmer and a shoe maker or a representative of some other similar occupation.

To Plato every individual should do the job suitable for him. This enabled the production of products or commodities in large quantities. The division of labour into various trades was thus recognized as a necessary condition to economic welfare even though division of each trade into various tasks was not conceived by Plato.

Plato did not consider the necessity of a wider market for the application of the principle.

Thus Plato's idea of division of labour is different from that of Adam Smith in the following ways;

1. Adam Smith's Division of Labour is determined by the market, but Plato's division of labour determines the market**.**

2. To Adams Smith the advantages of division of labour go to only the employers, but to Plato it is beneficial to the entire society.

3. The cost of division of labour according to Plato is the difference in skill and talent. But according to Adams Smith division of labour leads to differences in skill and talent.

Size of the Population: Plato analyzed the size of the population in his state on the basis of the best results of division of labour. He provided a careful regulation of the population to maintain stability in the economy. The right number of population suggested by Plato for a state was 5040.

Only such a number provided opportunity for everyone to be familiar with all the other persons and help the economy to achieve self-sufficiency. It also helps to reap maximum productive efficiency.

If the number showed a decreasing tendency, the state should offer prizes to encourage the growth of population. But if the number exceeds 5040 new colonies must be established.

Money: Plato recognized the value of money as medium of exchange. He did not favour the idea of allowing gold and silver to be common to men. Instead Plato suggested the use of domestic coins for payment of wages and other transactions. Plato wanted the state to have a common Hellenic currency for the use of travellers, ambassadors, visitors etc.

Interest: Plato prohibited interest taking for loans in the ancient Greek. But later on he permitted interest taking as a penalty for delayed payment.

Value: Plato considered value as an inherent quality of the commodity. To him a man should not attempt to raise his price, but simply ask the value of the commodity.

Agriculture: Plato and the Greek's like the Hebrews considered agriculture as the most desirable occupation.

ARISTOTELIAN ECONOMIC VIEW

Aristotle (384-322 B.C.), The Greek philosopher who really laid the foundation of economics as a science. The most important thinker, who has ever lived, advanced a body of thought with respect to the development of the components of a market economy. He was the student of Plato. He analyzed the economic processes surrounding him and endeavored to delineate the place of economy within a society that included commercial buying and selling. He was the first analytical economist.

Aristotle provides his philosophical analysis of human ends and means. He explains that means or instruments of production as valuable because their end products are useful to people. The more useful or desirable a good is, the higher the value of the means of production is. Aristotle then goes on to derive a number of economic ideas from axiomatic concepts including the necessity of human action, the pursuit of ends by ordering and allocating scarce means, and the reality of human inequality and diversity.

Aristotle explains that actions are necessarily and fundamentally singular. For Aristotle, the individual human action of using wealth is what constitutes the economic dimension. The purpose of economic action is to use things that are necessary for life (i.e. survival) and for the Good Life (i.e. flourishing). The Good Life is the moral life of virtue through which human beings attain happiness.

Aristotle taught that economics is concerned with both the household and the *polis* and that economics deals with the use of things required for the good life (virtuous). As a pragmatic or practical science, economics is aimed at the good and is fundamentally moral. Because Aristotle saw that economics was embedded in politics, an argument can be made that the study of political economy began with him.

For Aristotle, the primary meaning of economics is the action of using things required for the Good Life. In addition, he also sees economics as a practical science and as a capacity that fosters habits that expedite the action.

Economics is a type of prudence or practical knowledge that aids a person in properly obtaining and using those things that are necessary for living.

Given that human actions are voluntary and intentional, it follows that action requires the prior internal mental acts of deliberation and choice. Human beings seek to fulfill their perfection via action.

Observing that human nature has capacities pertaining to its dual material and spiritual character, Aristotle explains that economics is an expression of that dual character. The economic sphere is the intersection between the corporal and mental aspects of the human person.

SAINT THOMAS AQUINAS:

St. Thomas Aquinas, a medieval theologian and philosopher, is an important figure in the history of economic thought. Aquinas understands the economic ideas that economists rely on today, such as the law of supply and demand, subjective value theory, and the theory of time preference.

However, St. Thomas Aquinas had misunderstandings in his economic understanding as well, such as in his philosophy of the society and of global trade. Aquinas applies his economic understanding to determine justice in economic matters such as pricing and usury. While economists study economics as a value free science, Thomas Aquinas readily enters into a value-laden form of practical economics.

The just price is a theory of ethics in economics that attempts to set standards of fairness in transactions. With intellectual roots in ancient Greek philosophy, it was advanced by Thomas Aquinas based on an argument against usury, which in his time referred to the making of any rate of interest on loans.

Usury; is concerned with money lending and interest. He emphasized that usury is good if it increases the production of goods which are used to satisfy human needs.

MEDIEVAL ECONOMIC THOUGHT (1500 – 1750AD)

Mercantilism

Mercantilism or Commercialism**:** It is defined as a system, a policy or an initiative or strategy or an economic theory and practice, dominant in Europe from the 16th to the 18th century that promoted governmental regulation of a nation's economy for the purpose of augmenting or enhancing state power at the expense of rival national powers (other nations or countries). The enhancement was to be achieved through a number of policies and strategies that formed the frame work of the system that included government protection for native industries and commerce (protectionism), favourable balance of trade with emphasis on more exports than imports and the stockpiling of precious metals (i.e. Bullionism) among other policies and strategies. It is the economic counterpart of political absolutism.

Among the researchers and writers of mercantilism was Adam Smith who according to a number of scholars coined the word mercantilism in his book, "The Wealth of Nations". Other scholars also wrote on mercantilism and explained bullionism as generally a policy aimed at regulating gold and silver movements in and out of a state. This scholars include Thomas Mann, Cantillon David Hume among others

It is an economic system which developed during the decay of the feudal system (Feudalism) to unify and increase the power and especially the monetary wealth of a nation by a strict governmental regulation of the entire national economy usually through policies designed to secure an accumulation of bullion, a favourable balance of trade, the development of agriculture and manufactures, and the establishment of foreign trading monopolies.

Mercantilism includes a national economy aimed at accumulating monetary reserves through a positive balance of trade, especially of finished goods. Historically, such policies frequently lead to war and also motivate colonial expansion.

Mercantilist theory varies in sophistication from one writer to another and has evolved over time. High tariffs, especially on manufactured goods, are an almost universal feature of mercantilist policy. Other policies have included:

- Building overseas colonies;
- Forbidding colonies to trade with other nations;
- Banning the export of gold and silver, even for payments;
- Forbidding trade to be carried in foreign ships;
- Export subsidies;
- Promoting manufacturing with research or direct subsidies;
- Limiting wages;
- Maximizing the use of domestic resources;
- Restricting domestic consumption with non-tariff barriers to trade.

It is a body of economics thought popular during the mid-16th and late 17th centuries. It held that money was wealth, accumulation of gold and silver was the key to prosperity, and one nation's gain was another's loss.

Supported by economists such as Gerard de Malynes (1586-1641), Edward Misselden (1608-54), and Sir Thomas Mun (1571-1641) in the UK, Jean Baptiste Colbert (1619-83) in France ,and Antonio Serra in Italy (1570-?), it exhorted governments to maintain surplus of exports over imports through tariffs (duties), colonialism, and other such measures.

1. The fundamental aim of Mercantilism was to make a country strong. The strength of a country was tested with the help of the wealth of the country, above all, in that portion of wealth which consisted of precious metals like gold and silver. So the Mercantilists attached greater importance to bullion (gold) because it was the most durable, useful and generally acceptable form of wealth.

2. If a country has gold mines and silver mines, it can get gold and silver but if a country has no mines, it can get gold and silver through trade. The country should have a favorable balance of trade. In other words, there should be an excess of exports over imports.

3. In the Mercantilist system of thought trade was the most important occupation. Industry and commerce were ranked second in importance. Agriculture was the least important of all. The state had an important role to play in the Mercantilist system. It should come forward to exploit the natural resources of the country to increase its exports. There was regulation of economic life by the government.

Mercantilism in its simplest form is bullionism, but mercantilist writers have emphasized the circulation of money and reject hoarding. Their emphasis on monetary metals accords with current ideas regarding the money supply, such as the simulative effect of a growing money supply.

Bullionism is an economic theory that defines wealth by the amount of precious metals owned. It believed that money (gold) was the only form of wealth that was important. Countries during the 16^{th} to 18^{th} century in Europe horded gold and accumulated gold bullion in their treasuries. Bullionism is the name given to essential features of economic thought in the first mercantilist era during the 16^{th} century.

A bullionist is a person who advocates a system in which currency is directly convertible to gold or silver.

Factors Shaping Mercantilism:

Some economic, political, religious and cultural factors were responsible for the emergence of mercantilism.

1. Economic Factors:

Towards the end of the 15th century changes were taking place in the economic life of the people. Domestic economy was giving way to an exchange economy. Agriculture was giving place to industry. Trade became very important and it changed the foundation of socio-economic set-up of the middle ages.

Trade necessitated the use of money which was available in the form of gold and silver. Along with the expansion of commerce there were improvements in transport, agriculture, population, etc., so the Mercantilist thought was the outcome of these developments.

2. Political Factors:

Towards the end of the middle ages nationalism became the strong force. Europe changed greatly due to Renaissance. As a result, there was a fundamental political change. It resulted in the emergence of strong nations like England, France, Spain, etc., Feudalism came to an end and the King became more powerful. Each nation wanted to preserve its independence and considered other nations as enemies. In order to create a strong and powerful state the Mercantilists tried to regulate the political and economic activities of the people.

3. Religious Factors:

The Reformation Movement was revolt against Roman Catholic Church. It challenged the authority of Pope. Initially the Roman Catholic Church controlled the political and economic activities of the nation. But after the Reformation the authority of the Pope was challenged.

4. Cultural Factors:

Culturally also Europe was undergoing a sharp change. Renaissance gave a new light of learning to the people. People were made to realise that this worldly life was more important than the heavenly life. As a result, money came to occupy an important place in human activities.

5. Scientific Factors:

In the field of science and technology great improvements and inventions were made. The discoveries of compass and printing press were of great importance, with the help of compass navigation became easier and it led to the discovery of new countries. Thus new countries opened the gates to a variety of raw materials and markets. The invention of printing press helped the spread of new ideas and knowledge.

Mercantilism's demise was initiated by David Hume, Adam Smith (who coined the term), and other classical economist (see Classical Economics) who saw it as serving only the merchant class and argued that real wealth was to be equated with full employment through greater production of goods and services.

In more recent times, the mercantilism dogma was revived by the UK economist John Maynard Keynes (1883-1946) when he stated that a surplus in balance-of-trade stimulates demand, thus increasing the national wealth. When corporations, politicians, and unions demand control over imports through higher-duties to protect local jobs and industries, they are resorting to mercantilism.

The philosophy of mercantilism in centuries past was a problem for foreign policy, and frequently caused stress between nations. The countries that held this belief close to their heart frequently were at conflict with their neighbors.

Using Mercantilism for example:

1. Johnny, Dave and Susie are competing for resources and land in Settlers of Catan, a game where ever increased production, coupled with selfish trading behavior, rewards the players with the strongest sense of mercantilism.

2. The economy of the United States started to decline when they abandoned mercantilism in favor of cheaper outsourced labor in other countries.

Main ideas or Characteristics of Mercantilism:

1. Wealth:

The fundamental aim of the mercantilists was to make the country strong. The strength of the country was found in the wealth of the country, especially that portion of wealth which consisted of precious metals like gold and silver.

Mercantilism firmly believed that gold was the basis of wealth and power. Hence the mercantilist slogan was 'more gold, more wealth and more power'. All the economic activities in the country were centred around wealth. According to Gray, "Everybody thought that his country was engaged in a race with other countries and in that race it must not be the looser".

In this respect it seems that the mercantilists should have drawn inspiration from their predecessors because in ancient Greek and Roman and throughout the middle ages power was considered to be synonymous with accumulation of treasure or precious metals. Commerce was also encouraged on the same ground. To quote Columbus "Gold is a wonderful thing; whoever possesses it, is a master of everything he desires; with gold one can get souls into paradise".

This greatest importance given to precious metals may be attributed to the following reasons:

(i) In the 16th century, the only form of wealth, most useful and generally acceptable was gold and silver. Naturally the mercantilist attached more importance to gold and silver.

(ii) With the rise of absolute monarchy, taxation could be possible only if money was used as measure of value. Thus on the political side also money came to occupy greater importance.

(iii) For conducting wars money was essential. Three things were required for war—money, more money and still more money.

(iv) Mercantilists believed that trade depended on plentiful of money.

(v) Money was also needed for development of exchange economy.

(vi) Money in those days was identified with capital.

Thus the Mercantilists had a high regard for money. If we consider the circumstances of the day, Mercantilists were justified in attaching greater importance to gold. According to Keynes, "the Mercantilists understood the important role of money in the economic system. They studied the effects of an increase in the quantity of money on the price level and employment."

2. Foreign Trade:

The Mercantilist theory of foreign trade is known as the balance of trade theory. The aim of this theory was to get large amount of precious metals. Foreign trade was considered to be the only Source for getting gold and silver. They believed that all those nations which did not possess their own gold and silver mines could become rich after getting gold and silver from foreign countries through trade.

Sir Thomas Mun the greatest representative of Mercantilist declared that, "foreign trade ought to be encouraged, for, upon it hinges the great revenue of the King, the honour of the kingdom, the noble profession of the merchant, the supply of our poor, the improvement of our lands and means of our treasure".

The mercantilists insisted that the value of export should always be greater than imports. In short, they advocated a favourable balance of trade. Hence they encouraged exports and discouraged imports. "Export more, import less and collect the balance in the form of gold and silver", was the essence of this theory. Accordingly every exporter was considered to be a close friend of the state and every importer as an enemy.

However, the mercantilists theory of foreign trade has no validity in modern times. If every nation exports more, there would be an end to international trade. Further, the mercantilists did not distinguish between particular balance of trade and general balance of trade. By general balance of trade we mean balance of the country's trade with other countries and particular country.

Further, the mercantilists were ignorant of the fact that favourable balance of trade cannot be maintained for ever because if gold comes into a country more and more, there would be inflation. Thus the mercantilist theory of foreign trade is not a correct one.

3. Commerce and Industry:

The mercantilists considered commerce and industry as the most important branches of the national economy. They wanted to increase the national productive efficiency by means of regulation of industry and commerce. They believed, that commerce and trade were the most productive occupation and agriculture was the least productive.

Further, as they believed that manufacturing industries were more closely connected with commerce, they must receive all attention from the government. However, it should not be misunderstood that the mercantilists regarded agriculture as insignificant. They thought that agriculture did not contribute directly to the strength of the country.

4. Population:

Mercantilists encouraged large population for making the nation militarily strong and for increasing its productive capacity. They believed that cheap and abundant supply of labour would keep the cost of production low.

This would enable a country to sell its commodity at a lower price in the international market According to Davenant, "People were the real strength of a country". The mercantilists even encouraged immigration because they would bring wealth and enrich the country.

5. Natural Resources:

The mercantilists wanted to utilize all the natural resources to the maximum extent so as to produce more, export more and import less. They also attached importance to agriculture in order to solve the food problem. Colonies were developed to supply the required raw materials. Further, the colonies were not allowed to export directly to foreign countries. All the commodities should be exported to the mother country only.

6. Wages and Rent:

The mercantilists discussed the problems of production only. So they did not give much importance to the problems of distribution, especially to wages and rent.

7. Interest:

No unanimity existed among the mercantilist writers on the subject of interest. Sir Thomas Mun, a famous mercantilist writer favoured interest taking for the loans on the ground that lending helped the poor and young merchants. It also led to the employment of the savings of the widows. Thomas Mun and his followers told that the rate of interest would be high or low depending upon the industrial conditions of the country.

8. Taxation:

The views of the mercantilists on taxation were interesting because they were more scientific and ahead of their time. Broadly speaking the mercantilists favoured a multiple tax system based on the principle of "each should pay according to the benefits received from the state".

9. Theory of Value:

Regarding value, both subjective and objective approaches existed. Prior to the mercantilists, value was regarded as an intrinsic quality possessed by a commodity, it depended upon the utility of the commodity. Value was thus considered to be different from price. By the end of the mercantilist period, market value was recognised. Scarcity also determined the value of a commodity. According to the mercantilists the normal value of a commodity depended on the cost of production.

10. Factors of Production:

Mercantilists recognised three important factors of production, namely, land, labour and capital. Here we can quote Sir William Petty's saying "Labour is the father and active principle of wealth as land is the mother". The Mercantilists emphasised the cultivation of agricultural waste lands so that food production might increase and the country might become self-sufficient and imports might be reduced.

11. Commercial Regulation:

Mercantilists believed that commercial regulations were essential for maximising social welfare. Commercial laws were passed to restrict the import of food materials. But no regulation was applied to the import of raw materials because they were required for the industrial development of the country. The state supported the export industries and shipping which would secure a favourable balance of trade.

12. Role of State:

The mercantilists regarded the state as the supreme power for controlling the activities of the people. State was the master and its citizens, the servants. The mercantilists believed that state intervention was necessary to solve the problems of the society. They believed that for securing success in wars a strong nation was required.

Nearly, all the mercantilist writers believed that since the total economic resources of the world were limited, the economic policy must be framed in such a manner as to increase the power of the state. As a result they suggested the policy of protection.

The state policies were shaped according to this idea. Special acts were passed to encourage exports and the development of industries. Protection was given to the industries because their main objective was to maintain a favourable balance of trade.

12. Land Banking Schemes:

Mercantilists ideas regarding money gave rise to the establishment of Land Banking Schemes. Land Bank Schemes were introduced by Chamberlin and Barbon.

13. Occupation:

Mercantilists believed that merchants were the most profitable members of the society. To them occupation was productive only if it increased wealth of a country.

Critical Estimate of Mercantilism:

Mercantilist theories and practices have been criticised by many writers. The opposition actually started towards the end of the 17th century. The storm of criticism against mercantilism was particularly strong in France. The criticism against mercantilism reached its climax towards the end of the 18th century when Adam Smith published his book "The Wealth of Nations", one fourth of which was devoted to this.

MARXISM:

It is a system of economic, social, and political philosophy based on ideas that view social change in terms of economic factors. A central tenet is that the means of production is the economic base that influences or determines the political life.

Under Marxism, outdated class structures were supposed to be overthrown with force (revolution) instead of being replaced through patient modification. It held that as capitalism has succeeded feudalism, it too will be removed by a dictatorship of the workers (proletariat) called socialism, followed quickly and inevitably by a classless society which governs itself without a governing class or structure.

Developed in the 19th century jointly by two lifelong German friends living in London - Karl Marx (1818-1883) and Friedrich Engels (1820-1895) - it forms the foundation of communism.

Using Marxism in sentence or example:

Some have pointed to the fall of states like the USSR as proof that Marxism does not work and that they retained the corruption and class systems that they were meant to end.

DIFFERENCE BETWEEN CLASSICAL AND MARXIST POLITICAL ECONOMY:

Political economy is a science of the study of the interconnectedness between economics and politics in a state which is the basis for the change and development in the society. As a field of study, political economy refers to a branch of the social sciences which deals with the production of material wealth considered as the foundation of all human society. It attempts to study the laws that govern the development of human society based on the economic relations of the people in the process of production, distribution and consumption. There are different approaches the study of political economy, they include: classical, neo-classical and Marxist approaches.

In this work, the main area of concentration is on the classical political economy and the Marxist political economy; we are also going give a clear distinction between the two concepts of classical and Marxist political economy, then we are also going to give the differences between the two concepts.

CLARIFICATION OF TERMS - CLASSICAL ECONOMICS

BRIEF HISTORY OF CLASSICAL ECONOMICS

Classical economics can trace its roots to Adam Smith in 1776. In The Wealth of Nations Adam Smith presented a comprehensive analysis of economic phenomena based on the notions of free markets and actions guided by individual self interests in a laissez faire environment. This work by Smith was motivated in large part as a critique of the existing mercantilist system.

Under mercantilism the ruling aristocracy directed economic activity with the primary goal of benefiting the ruling aristocracy. The mercantilist view was that the wealth of a nation was based on the wealth of the ruling aristocracy. Smith argued, quite convincingly, that the wealth of a nation was actually based on the productivity of resources, which was best achieved if the Producers, consumers, and resource owners were left to their own "selfish" actions.

An efficient allocation of resources, higher living standards, and economic growth were achieved if producers sought higher profit and consumers sought greater satisfaction. Higher profit motivated producers to offer

the most desired goods at the lowest expense. Greater satisfaction motivated to seek the most desired goods at the lost expense. The result is the best, more efficient use of available resources.

The classical framework developed by Adam Smith was enhanced, refined, and improved over the ensuring 150 years by a number of scholars. The basic principles were refined and applied to an assortment of topics and issues, including resource markets, international trade, economic development, and industrial activity--to name just a few. Much of this work remains relevant to the modern study of microeconomics, often termed neoclassical economics.

Economists also applied this classical framework to macroeconomic issues, especially unemployment, economic growth, and business-cycle stability. With this application a comprehensive theory of macroeconomics was developed that offered an explanation for macroeconomic phenomena and provided recommendations for government policies.

THE CONCEPT CLASSICAL ECONOMICS

Classical economics dominated the study of economics for 150 years after it was introduced. This work not only launched the modern study of economics, it continues to provide the foundation for modern microeconomics. Classical economic principles were also adapted to macroeconomic phenomena and provided a guide for macroeconomic policy until the beginning of the Great Depression in 1929. Classical economics fell out of favor in the 1930s largely because it did not adequately explain the occurrence of high rates of unemployment during the Great Depression.

The term "classical economics" was coined in the first half of the 1800s by Karl Marx, who is considered by some as an important contributor to the development of classical economics and by others as a primary critic of this theory. The term gained new life in the early 1900s when John Maynard Keynes developed Keynesian economics as an alternative theory of macroeconomics.

Highlights of classical economics include:

One, classical economics is based on three key assumptions--flexible prices, Say's law, and savings-investment equality.

Two, the theoretical structure of classical economics is based on a view that the macro economy operates in aggregate according to the same basic economic principles that guide markets and other microeconomics phenomena.

Three, the economic principles of classical economics indicate that aggregated markets, especially resource markets, automatically achieve equilibrium, meaning full employment that is, full employment of resources is assured.

Four, classical economics indicates that full employment is achieved and maintained without the need for government intervention and that government intervention is more likely to cause than to correct macroeconomic problems.

SHORTCOMINGS OF CLASSICAL ECONOMICS

(1) It was superficial and too shallow; it was just concern about product and did not tell us the intricate process that takes place in the concept of production. They is a link between politics and the economy, the economy determines politics

(2) They also fail to recognize the contradictions in capitalism. They see capitalism as a God ordained system that will one day be over thrown by other political system.

(3) It does not recognize the importance of labor in the political system; they consider profit as not cheating. Under the Neo-classical economy, the scholars here oppose the idea of laissez faire**.**

(4) State intervention is needed in the economy to boost economic growth, that if it continues to depend on demand and supply one day they will be a problem, those in this group are the Keynesians and neo-Keynes.

MARXIST POLITICAL ECONOMY

It is based on the theory of Karl Marx, he came to the scene to explain that there is a process of exploitation taking place during the process of production, because the classical economics did not explain the exploitation of workers for him the economic system determine the politics of any country and the economy also determines other aspect of the society, like religion, morality e.t.c the economy according to Karl Marx is the engine that drives other aspect of the society. The mode of production here refers to the organic unity of the productive forces and social relation of production. The centre piece of Marx work is an incisive analysis of the strengths and weaknesses of capitalism. Marx argued that all commodity value is determined by labour content- both the direct labour and indirect labour embodied in capital equipment. For example, the value of a shirt comes from the efforts of textile workers put together plus the value of the person who made the looms. By imputing all the values of output to labour, Marx attempted to show that profits- the part of output that is produced by workers but received by capitalists- amount to unearned income. It is the opinion of Marx that the injustice of capitalist receiving unearned income justifies transferring the ownership of factories and other means of production from capitalists to workers.

The Marxian approach is consistent with socialist worldview, which accommodates extensive state intervention and control of the economy of the nation. It is the expectation of scholars of Marxian orientation that state monopoly of the productive process will make for a better redistribution income in the society.

DIFFERENCES BETWEEN CLASSICAL ECONOMY AND MARXIST POLITICAL ECONOMY

After finish discussing about classical economy and Marxist political approach I am going to discuss about the differences between classical and Marxist political approach.

The classical political approach considers the state as a neutral judge, which is it does not allow the interference of the state in the affairs of the economy. Whatever is implemented in the economy and is good for the growth of the economy, the government is not allowed to interfere. The state is used by the ruling class to dominate the workers or the masses. That is the rich or the bourgeoisies oppress the poor masses with their wealth and influence. while the in the Marxist political economy The fundamental ideology is communism, it holds that all people are entitled to enjoy the fruits of their labour but are prevented from doing so in a capitalist economic system, which divides society into two classes: nonowning workers and nonworking owners. Marx called the resulting situation alienation, and he said that when the workers repossessed the fruits of their labour, alienation would be overcome and class divisions would cease. The Marxist theory of history posits class struggle as history's driving force, and it sees capitalism as the most recent and most critical historical stagemost critical because at this stage the proletariat will at last arise united. The failure of the European Revolutions of 1848 and an increasing need to elaborate on Marxist theory, whose orientation is more analytical than practical, led to adaptations such as Leninism and Maoism.

The classical economics here gives value to commodities, while in the Marxist political approach value is been given to labor because without labor, the production of goods and services cannot be possible. In classical political economy and especially Karl Marx's critique of political economy, a **commodity** is any good or service ("products" or "activities") produced by human labour and offered as a product for general sale on the market. Some other priced goods are also treated as commodities, e.g. human labor-power, works of art and natural resources, even though they may not be produced specifically for the market, or be non-reproducible goods.

Classical economy sees capitalism as a God ordained system that will last forever. That is they see capitalism as a system which has come to stay permanently and can never be destroyed by any other economic system, while the Marxist political economy see capitalism as something that is not above destruction, for them capitalism will one day be destroyed and over thrown just like other economic system like feudalism which were also overthrown.

Another significant difference that is inevitable in this discussion is that capitalism considers wages and salaries of labor as the true worth of labor. That is what the laborer gets as a result of work done is what is considered under capitalism, while in Marxist political economy they see salaries and wages as not the real worth of a laborer, for this system they is something else they deserve which is been held by the capitalist.

Classical political economy considers the market as the basis for wealth creation, that is it is the market that gives wealth which implies that the more buyers are made available for products produced the more profit is made which leads to wealth creation because if there are no buyers for commodities produced it will lead to waste of materials and resources they by leading to loss of in profit which in turns leads to poverty, While the Marxist consider productive forces which has to do with productive forces and means of labor as the basis for creation of wealth.

The classical consider political economy as economics which simply consider economics as just production, distribution and exchange, while the Marxist political considers the relationship between the economy and other as of the society.

The scholars of classical economy advocated or praise capitalism, that it promotes industrialization. Here they include Adam Smith, David Ricardo and Thomas Malthus, while the scholars in the Marxist include Fredrick Enges and Karl Marx, and this Marxist political economy is evil and exploitative.

Smith, in *The Wealth of Nations* (1776), argued that the most important characteristic of a market economy was that it permitted a rapid growth in productive abilities. Smith claimed that a growing market stimulated a greater "division of labor" (i.e., specialization of businesses and/or workers) and this, in turn, led to greater productivity. Although Smith generally said little about laborers, he did note that an increased division of labor could at some point cause harm to those whose jobs became narrower and narrower as the division of labor expanded. Smith maintained that a laissez-faire economy would naturally correct itself over time.

Marx followed Smith by claiming that the most important beneficial economic consequence of capitalism was a rapid growth in productivity abilities. Marx also expanded greatly on the notion that laborers could come to harm as capitalism became more productive. Additionally, in *Theories of Surplus Value*, Marx noted, "We see the great advance made by Adam Smith beyond the Physiocrats in the analysis of surplus-value and hence of capital. In their view, it is only one definite kind of concrete labour—agricultural labour —that creates surplus-value....But to Adam Smith, it is general social labour—no matter in what use-values it manifests itself—the mere quantity of necessary labour, which creates value. Surplus-value, whether it takes the form of profit, rent, or the secondary form of interest, is nothing but a part of this labour, appropriated by the owners of the material conditions of labour in the exchange with living labour."

Differences in their mode of production

In the writings of Karl Marx and the Marxist theory of historical materialism, a mode of production (in German: Produktionsweise, meaning 'the way of producing') is a specific combination of: **Productive forces:** these include human labour power and available knowledge given the level of technology in the means of production (e.g. tools, equipment, buildings and technologies, materials, and improved land).**Social and technical relations of production:** these include the property, power, and control relations governing society's productive assets (often codified in law, cooperative work relations, and forms of association), relations between people and the objects of their work, and the relations between social classes.

While the classical mode of production refers to the system of organizing production and distribution within capitalist societies. The process of capitalism, the dynamic of capital accumulation, preceded the development of the capitalist mode of production, beginning sometime in the 15th century. The capitalist mode of production, involving the dominance of wage-based labour and private ownership of the means of production, began growing rapidly in Western Europe from the 18th century, later extending to most of the world. The capitalist mode of production is characterized by private ownership of the means of production, extraction of the surplus value created in production by a class of private owners (referred to as exploitation), wage-based labour, and distribution of both capital goods and consumer goods in a mainly market-based economy (referred to as commodity production).

CONCLUSION

The distribution of wealth and power has been a point of debate for every civilization. The economic and governmental framework of a society structures the lives of members of that society. Classical and Marxist political economic are on opposite ends of a spectrum, the one valuing a free market, the other an attempt to redress the unjust gap between the poor and the wealthy. Although the debate between the two can often be reduced to a sort of clash of classes, business versus labor, the distinction between socialism and capitalism is nuanced, and both systems demonstrate strengths and drawbacks.

Karl Marx and Keynes

In terminating our formal study of Marxism, we will examine an issue that has drawn attention over the past three decades. What is the relationship between Marxian and Keynesian economics—the latter now generally accepted by Western economists? As is often found in studying economic institutions, there are no clear-cut answers.

The theories of John Maynard Keynes seem to be neither "socialism-Marxism," as one group in the United States would have us believe, nor the purely "non-Marxian manifesto" that some defenders of Keynes categorically claim. In fact, there are areas of both similarity and conflict in the two schools of thought.

Similarities:

From the beginnings of their careers, both Marx and Keynes showed heterodox tendencies with respect to accepted economic doctrines of their times. Both were appalled by the inability of accepted doctrines to explain serious problems of the real capitalist world in which they lived. Hence, each attempted to formulate an economic theory fitting the way the economy actually functions.

Marx violently rejected the abstract "vulgar economics" of Ricardo, Nassau Senior, and John Stuart Mill, for he felt that these "classical economists" did little to explain the harsh reality of industrial capitalism during the period 1840-1880. Keynes felt that the bases of the later neoclassical economics, which was accepted with little question before 1929, "happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience."

The common ground between the two schools goes further. Both explicitly repudiate one special classical assumption, embodied in "Say's law of markets"—that aggregate production (supply) equals aggregate income (demand) and that as a result there can be no sustained lack of overall demand for the output of the entire economy, since production itself automatically creates demand.

An increase in output supposedly always generates a sufficient increase in income, purchasing power, and spending to clear the market of the extra goods. Before Marx, little heed was paid to Malthus' warnings of "ineffectual demand" and a "general overproduction glut"—Say's law had proved that to be "impossible." Marx pointedly noted the "childish" reasoning of Say's "dogma that the circulation of commodities necessarily implies an equilibrium of sales and purchases," and claimed that "if the split between the sale and the purchase becomes too pronounced, it asserts itself by producing— a crisis.""

Keynes also built his theories on a refutation of Say's law as being "not the true law relating the aggregate demand and supply functions. . . ." Both men, in rejecting Say's law, firmly established explanations for the existence of recession and crisis in the capitalist system. Instead of the "equilibrium" situations of stable production and full employment that the neoclassicists in particular postulated after 1870, Marx and Keynes envisioned a capitalist system whose norm was instability.

This might take the form of dynamic growth cycles of prosperity and crisis, raising national product over the long run but bringing about the ultimate collapse of the system through a final breakdown (Marx), or of a tendency toward irregular patterns of growth, slump, or even stagnation, depending chiefly on the level of private capital investment (Keynes).

But regardless of the precise sort of instability, the mere emphasis on instability as a fact led both men to reject the optimistic view that free market capitalism naturally brings about a harmony of all economic forces and an automatic adjustment ensuring long-run stability and full employment. Neither Marxists nor Western Keynesian economists in general accept such preestablished harmony as normal under laissez-faire capitalism.

Why did rejection of Say's law carry with it such assumptions of capitalist instability? The main reason is that if aggregate demand and supply are not in balance, and if there are no automatic forces in a capitalist economy to right the balance, then there can be cases of aggregate error. One result might be market gluts, if overall demand is insufficient to take up all goods supplied. Another might be aggregate money demand in excess of production, leading to inflation.

Both Marx and Keynes hold that capitalism has an inherent tendency to develop the first kind of crisis—overproduction stemming from lack of effective demand. Marx wrote that lack of purchasing power resulted from exploitation of the working masses by capitalists, who paid laborers only subsistence wages. Keynes

believed that lack of effective demand would be caused principally by the inability of private investment to absorb growing quantities of savings produced by highly developed capitalist economies.

Finally, the arena in which Marx and Keynes saw these developments taking shape was far removed from the classical microeconomics of price, value, and individual firms. They look at the capitalist system essentially as an aggregative whole, one that calls for the study of the total social product, its composition, and the forces determining it (Marx) or of the determination of national income and its components of consumption, savings, and investment (Keynes).

Thus, along with the idea that capitalism would not automatically gravitate toward an "ideal" equilibrium, the modern concern with the aggregate level of economic performance, or macroeconomics, is a legacy of both schools.

Differences:

On the simplest level, the economics of the Marxian and Keynesian theories are wholly different. Marx adopted many of the accepted mid-nineteenth-century classical economics tools, such as the labor theory of value and the subsistence wage, to deduce drastically new conclusions regarding capitalism as a system.

Keynes thought little of such tools. His own analysis owes much to the post-1870 neoclassical school; he wrote that "if our central controls succeed in establishing an aggregate volume of output corresponding to full employment as nearly as is practicable, the [neo] classical theory comes into its own from that point onwards. To Marx such hope would have seemed futile.

However, the more important differences are broader in scope. Keynes was motivated by the desire to preserve capitalism insofar as possible, and to this end he formulated a theory that he hoped might be used to construct a reformed, "liberal" capitalism. He was a conservative who desired to extend the life of capitalism rather than to replace it by another economic system.

The contrast with Marx is striking. Marx wrote works that were passionate, bitterly critical, and destructive. His sole interest was to prove how capitalism had already fulfilled its historical mission and had consequently outlived its usefulness. For Marx, all thought of reform was either pointless or at worst reactionary, since capitalism was doomed by the progressive forces of history. In short, "Keynes wanted to apologize and conserve, while Marx wanted to criticize and destroy."

It is true that Keynesian theories regarding the weaknesses of capitalism have been used by socialists to promote their own cause. This must be regarded as somewhat ironic, because Keynes made his personal distaste for socialism quite clear. That he was strongly opposed to widespread nationalization of industry, to collectivism, and to the economic system of the Soviet Union was well known.

Perhaps only his often-stated low opinion of Karl Marx surpassed his dislike of any alternative prospect to capitalism. In his General Theory Keynes even relegated Marx to the "underworld" of economics, along with such minor and forgotten figures as Silvio Gesell and Major Douglas. The future predicted by Marx filled Keynes with consternation; he had no desire to live in a society dominated by "the boorish proletariat."

Another difference just as great exists in the social bases of the two schools. The Keynesian system, despite its desire to preserve capitalism, is socially indifferent in its analytical structure. Its aggregate variables can be used to study economic activity in any country at all, whatever its economic institutions. In the eyes of Marxian economists, "The Keynesians tear the economic system out of its social context and treat it as though it were a machine to be sent to the repair shop, there to be overhauled by an engineer state."16 For Marx, economic systems cannot be separated from the social, cultural, political, and psychological institutions to be found with them at any given stage of history. He believed that economic theory cannot be

treated apart and alone, as Keynes, the neoclassicists, or the classicists do. Marxism purports to be a complete historical system that explains all material phenomena, not only the economic.

What's the difference between Socialism, Marxism and Communism?

In classic Marxist theory, Communism is the final stage of the evolution of human socioeconomic relations. In the Marxist model, the feudal state is overthrown by the rise of the bourgeoisie, ushering in the capitalist epoch. Capitalism is then overthrown by the rise of the proletariat, which ushers in not communism, but the Socialist state. Each previous step is the necessary precondition for the next.

The socialist state is thus the pre-condition for communism, and its function is to alter the state of human material conditions in such a way that communism can function. The socialist state then "withers away," leading to the end of political power in any centralized form – including nation states, as communism as envisioned by Marx is to be an international system. Equally important is the disappearance of social class distinctions, which goes hand in hand with the end of political power.

When in the course of development, class distinctions have disappeared, and all production has been concentrated in the hands of a vast association of the whole nation, the public power will lose its political character. Political power, properly so called, is merely the organized power of one class for oppressing another.

These conditions all have to be met before the communist society can develop. In the most reductionist sense, socialism presupposes a strong centralized state, while communism follows once the state is no longer necessary. Marx summarized communism in this way: "an association in which the free development of each is the condition for the free development of all."

Countries which were termed communist never in fact were communist, they were socialist countries where the *goal* was achieving communism. Cuba, PRC, DPRK, USSR, Warsaw pact countries, all of these countries practise(d) socialism, with the intent of achieving communism by Dialectical materialism. The idea here is that capitalism is the thesis, socialism is the antithesis (or opposite), and communism is the synthesis (or result of having gone through the two). The State ideology was definitely communist; they practiced socialism in order to obtain communism eventually.

Socialism is workers' ownership of the means of production, central planning of the economy and the absence of markets, and enforced equality; in practice this has invariably turned into the nightmare of single-party totalitarian dictatorship, resulting in warfare, conquest, famine, poverty, genocide, corruption, absence of the most basic human rights especially freedom of speech, and intense propaganda and revisionism. What people call today socialism is more properly termed social democracy, something completely different.

Communism is essentially anarchy, where the state doesn't exist anymore, social classes don't exist anymore, nor is there any money (socialist countries all have money). The very existence of communism is entirely theoretical and mostly pseudoscientific, more akin to an unobtainable utopia. Communism has never existed, there is no evidence that it is even possible (or desirable), and every attempt at having it, through socialism, resulted in complete disaster.

If there's one which should have a definite meaning, it's Marxism, as that would be "the theories of Karl Marx". Marx tried to define "communism" and "socialism" in The Communist Manifesto. In his definition, "communism" is the end state of having key means of production owned in common (communally) without class, while "socialism" is an intermediate transition state where a social revolution (that is, of the workers, the vast majority of society) is required to get to communism.

Accepting Marx's definitions and the economic and social consequences he believed would arise from them makes you a Marxist, and whether you're a socialist or a communist depends on where you are in history.

Other self-described socialists and communists define the terms differently; both terms predated Marx and he has no particular claim to defining them aside from popularity. They are all loosely-defined theories in which private property (i.e. capital) is no longer the defining force of economics.

Ideally, **Socialism** is a political/economic concept wherein everything you can think of, is owned by the public. The allocation, use and control of the resources are in the hands of the public or representatives who are again chosen by the public.
This system advocates equality, both social and monetary, among all individuals.
So, Socialism cuts across as a just economic system but only in theory

Communism is a political/economic system aims for a true utopian society devoid of sexism, casteism or any other forms of oppression. Communism is seen as one of the possible solution. It is a system wherein everyone in the society receives equal share of labor and the society may attain a monetary equilibrium.

COMMUNISM VS SOCIALISM:

More often than not, in media and in conversation the concepts of Communism and Socialism are used interchangeably to refer to the essentially the same economic/political philosophy. In reality these are two different philosophies that while having some similarities also have some very stark differences. Understanding the similarities and the differences can be useful in terms of appreciation the nuances of Communism vs. Socialism in discussions or publications.

Similarities Between Communism & Socialism:
Communism and Socialism both arose in the context of the Industrial Revolution and largely as a response to a time when business owners were becoming extremely wealthy by exploiting their workers. Through different processes both philosophies looked at the current situation as being unsustainable and eventually societal pressures would result in drastic changes.

Other key similarities include:

- Each is built on the premise that individual will contribute to society based on their own ability.
- Both advocate that institutions are centralized and either controlled by government or by collectives, this effectively removes private business as a producer of goods and services.
- Government (or some form of it) plays a large role in economic investment and planning, either in a centralized form or decentralized to local government bodies.

Differences Between Communism & Socialism:
While there are certainly key similarities in the philosophy's of Communism and Socialism, there are differences that make considering them interchangeable incorrect. The most fundamental difference is that under Communism individuals are provided for or compensated based on their needs, in effect meaning that

in a true communist system you wouldn't have money and you'd simply be given what the government thinks you need in terms of food, clothing, accommodation, etc. Central to socialism is that individuals are compensated for based on their individual contribution, so people that work harder or smarter would receive more than those that don't contribute. This difference highlights a key flaw in the Communist model, where no one has any motivation to work harder or smarter as it would have no impact or benefit for them.

Other key differences include:

- Communism views all property as being public property and effectively there is no personal property or items held by individuals. Socialism rather sees individuals still having their personal property but all industrial and production capacity would be communally owned and managed by consensus or government.
- Socialism is at its core an economic philosophy, whereas Communism is economic and political in its requirement that government be the central owner and decision maker in all matters.
- Communism rejects any religion and in a true Communist state religion is effectively abolished. As Socialism is economic only in its focus, freedom of religion is allowed, though some interpretations see it as promoting secularism in its nature (even if religion is not effectively banned).
- Communism sees the complete abolishment of class distinctions as everyone is effectively treated the same. Socialism sees a diminishment here but class distinctions would still exist as there is capacity for some to achieve more wealth than others.
- Communism sees the transition from Capitalism as being a violent revolution where the existing system is effectively destroyed as the workers rise up against the middle and upper classes. Socialism rather sees a gradual transition from capitalism through legal and political processes that see everyone essentially being treated equally at birth. People would still have the ability to excel and enter the equivalent of the middle class, but their children would have to work just as hard as they did to achieve the same.

Communism and Socialism in Practice:

Contrary to what many would think there has never actually been a purely Communist state since the philosophy was created. The Soviet Union, China, Vietnam, Cuba, and North Korea are the closest examples, although none of them fully achieved (or have yet achieved) a purely communist structure. Personal property, the abolition of money, and elimination of class systems are all areas where Communism wasn't achieved even in these near examples. These countries focused more on the central government's dominant role in all aspects of the economy, politics, and decision-making.

Socialism similarly has never been fully adopted in any country since the philosophy was created. Some countries such as Norway, Sweden, France, and Canada have many socialist policies (such as free health care and a dominant government role in many shared services) but still have very strong capitalist Structures and traditions, in place.

Only time will tell if either of these economic/political philosophies will ever be realized.

Conservative vs. Liberal:

Conservative and Liberal are two words that work their way into just about every politically focused discussion or article one comes across. These two views basically represent the opposite poles of the political spectrum. This article will highlight the key perspectives of the two and help you understand the big differences that exist when you see something labelled as Conservative vs. Liberal.

Conservative:

Politics and the Economy

- Conservative views or affiliations reflect the right-wing of the political spectrum. The common political views associated with this are support for small government, less regulation, lower taxes, and the idea that private business can address the needs of the people in a free market.
- Government should spend less and tax less and get out of the way of private business.
- Less government involvement will drive increased investment and profits from both companies and high income individuals This is generally encompasses in the oft used phrase 'trickle down economics'.
- A strong embrace of capitalist economic policies and the belief that a fair market and supply and demand will be the strongest economy.
- Conservative views are considered to oppose social issues like gay marriage, abortion, and addressing the gender pay gap.
- Also linked to a strong support of a strong military and the right for individuals to bear arms.

Social Issues

Essentially the Conservative view places far more emphasis on the individual to manage their own affairs and not have the interference of government in doing so. The government exists to enforce law and order but should stay out of most other issues.

Liberal:

Politics and the Economy

- Liberal views or affiliations reflect the left-wing of the political spectrum. The common political views associated with this are a more involved government that actively manages things like health care and the environment, more regulation and guidance, and often higher taxes to pay for this 'larger' government.
- The government should provide more support for individuals who are less fortunate, i.e. low income individuals and the sick.
    - Socialist economic policies are generally supported here in terms of shared responsibility and administration of aspects of the economy that service everyone (i.e. healthcare).
    - Support for legalization of gay marriage and abortion are two issues considered to be Liberal views.
    - Increased regulation of gun ownership is also considered a Liberal view.

Social Issues

The Liberal view is generally seen to involve a more active and communal social view and the need for government to ensure everyone is taken care of. The government doesn't solely exist to enforce law and order but also to support the people and help those who need it.

Closing Point

- One thing to always consider is that labeling something as Conservative or Liberal is easy to do but doesn't necessarily reflect the nuances of a government policy, an organization, or an individual.

  While it is all too common for media to label something or someone as Conservative or Liberal there is often a blend of the two there.

  A government bill can be passed that increases regulation (Liberal) but through process reduces taxes (Conservative). Similarly an individual can support small government (Conservative) but also believe that gay marriage and abortion should be legal (Liberal). When the Liberal vs. Conservative label is used, always apply some skepticism and consider the points above.

  ASSUMPTION:

  1. Belief, logical construct, or unconfirmed fact. See assumptions for more.
  2. Taking on (assuming) the duties and powers of an office, a responsibility, or someone else's obligation (such as a loan).

  Example: The policeman's **assumption** that all skateboarders were "punks" was proven wrong when several of the teens collected money to help the shop owner pay for his broken benches.

Physiocracy:

From the Greek it stands for "Government of Nature" It is an economic theory developed by a group of 18th century French economists who believed that the wealth of nations was derived solely from the value of "land agriculture" or "land development" and that agricultural products should be highly priced. Their theories originated in France and were most popular during the second half of the 18th century. Physiocracy is perhaps the first well-developed theory of economics.

The movement was particularly dominated by François Quesnay (1694–1774) and Anne-Robert-Jacques Turgot (1727–1781). It immediately preceded the first modern school, classical economics, which began with the publication of Adam Smith's *The Wealth of Nations* in 1776.

The most significant contribution of the Physiocrats was their emphasis on productive work as the source of national wealth. This is in contrast to earlier schools, in particular mercantilism, which often focused on the ruler's wealth, accumulation of gold, or the balance of trade.

Whereas, the Mercantilist school of economics said that value in the products of society was created at the point of sale, by the seller exchanging his products for more money than the products had "previously" been worth, the Physiocratic school of economics was the first to see labor as the sole source of value.

However, for the Physiocrats, only agricultural labor created this value in the products of society. All "industrial" and non-agricultural labor was "unproductive appendages" to agricultural labor.

The Physiocrats thought there was a "Natural order" that allowed human beings to live together. Men did not come together via a somewhat arbitrary "social contract". Rather, we have to discover the laws of the natural order that will allow individuals to live in society without losing significant freedoms

CLASSICAL ECONOMICS (CLASSICALIST)

Classical economics, developed in the 18th and 19th centuries, included a value theory and distribution theory. The value of a product was thought to depend on the costs involved in producing that product. The explanation of costs in Classical economics was simultaneously an explanation of distribution. A landlord received rent, workers received wages, and a capitalist tenant farmer received profits on their investment. This classic approach included the work of Adam Smith and David Ricardo. The Classical Economist are Jeremy Bentham · Bernard Mandeville · John Ramsay McCulloch · Thomas Malthus · James Mill · John Stuart Mill · David Ricardo · Jean-Baptiste Say · Nassau William Senior · Jean Charles Léonard de Sismondi · Adam Smith · Johann Heinrich von Thünen.

The fundamental principle of the **classical theory** is that the economy is self-regulating. **Classical** economists maintain that the economy is always capable of achieving the natural level of real GDP or output, which is the level of real GDP that is obtained when the economy's resources are fully employed.

However, some economists gradually began emphasizing the perceived value of a good to the consumer. They proposed a theory that the value of a product was to be explained with differences in utility (usefulness) to the consumer. (In England, economists tended to conceptualize utility in keeping with the Utilitarianism of Jeremy Bentham and later of John Stuart Mill.)

The third step from political economy to economics was the introduction of marginalism and the proposition that economic actors made decisions based on margins. For example, a person decides to buy a second sandwich based on how full he or she is after the first one, a firm hires a new employee based on the expected increase in profits the employee will bring. This differs from the aggregate decision making of classical political economy in that it explains how vital goods such as water can be cheap, while luxuries can be expensive.

Classical economics is widely regarded as the first modern school of economic thought. Its major developers include Adam Smith, Jean-Baptiste Say , David Ricardo, Thomas Malthus, John Stuart Mill, David Hume, Alfred Marshal etc.

The Scottish philosopher David Hume was an early exponent of what was later known as monetary economics, and was an opponent of "mercantilism".

Mercanilist policy at the time, regulated trade in ways that subsidised exports so as to promote inflows of gold and silver, and restricted imports in order to discourage outflows.

Hume contested the mercantilist thesis, partly on the grounds that an inflow of money would cause inflation, and partly on the grounds that nations would benefit from the international specialisation that would result from the introduction of free trade. More generally, Hume argued that all government intervention in commerce tended to obstruct economic progress.

ASSUMPTIONS OF CLASSICAL ECONOMICS:

Classical economics, especially as directed toward macroeconomics, relies on three key **assumptions** –

1. Flexible prices
2. Say's law
3. Saving-investment equality.

1. **Flexible prices:** ensure that markets adjust to equilibrium and eliminate shortages and surpluses.
The first assumption of classical economics is that prices are flexible. Price flexibility means that markets are able to adjust quickly and efficiently to equilibrium. While this assumption does not mean that every market in the economy is in equilibrium at all times, any imbalance (shortage or surplus) is short lived. Moreover, the adjust to equilibrium is accomplished automatically through the market forces of demand and supply without the need for government action.

The most important macroeconomic dimension of this assumption applies to resource markets, especially labor markets. The unemployment of labor, particularly involuntary unemployment, arises if a surplus exists in labor markets. With a surplus, the quantity of labor supplied exceeds the quantity of labor demanded at the existing price of labor (wages). With flexible prices, any surplus is temporary. Wages fall to eliminate the surplus imbalance and restore equilibrium and achieve full employment.

If, for example, aggregate demand in the economy takes a bit of a drop (perhaps due to fewer exports of goods to other countries), then production also declines (temporarily) and so too does the demand for labor, creating a surplus of labor and involuntarily unemployed workers. However, flexible prices means that wages decline to eliminate the surplus.

2. **Say's law:** States that supply creates its own demand and means that enough income is generated by production to purchase the resulting production. The second assumption of classical economics is that the aggregate production of good and services in the economy generates enough income to exactly purchase all output. This notion commonly summarized by the phrase "supply creates its own demand" which is attributed to the Jean-Baptiste Say, a French economist who helped to popularize the work of Adam Smith in the early 1800s. Say's law was a cornerstone of classical economics, and although it was subject to intense criticism by Keynesian economists, it remains relevant in modern times and is reflected in the circular flow model.

Say's law is occasionally misinterpreted as applying to a single good, that is, the production of a good is ensured to be purchased by waiting buyers. That law actually applies to aggregate, economy-wide supply and demand. A more accurate phrase is "aggregate supply creates its own aggregate demand." This interpretation means that the act of production adds to the overall pool of aggregate income, which is then used to buy a corresponding value of production, although most likely not the original production.

This law, first and foremost, directed attention to the production or supply-side of the economy. That is, focus on production and the rest of the economy will fall in line. Say's law further implied that extended periods of excess production and limited demand, the sort of thing that might cause an economic downturn, were unlikely. Economic downturns could occur, but not due to the lack of aggregate demand.

3. **The saving-investment equality:** ensures that any income leaked from consumption into saving is replaced by an equal amount of investment.

The last assumption of classical economics is that saving by the household sector exactly matches investment expenditures on capital goods by the business sector. A potential problem with Say's law is that not all income generated by the production of goods is necessarily spent by the household sector on consumption demand--some income is saved.

In other words, while the production of $100 million of output generates $100 million of income, the household sector might choose to spend only $90 million, directing the remaining $10 million to saving. If so, then supply does NOT create its own demand. Supply falls $10 million short of creating enough demand.

If this happens, then producers reduce production and lay off workers, which causes a drop in income and induces a decline in consumption, which then triggers further reductions in production, employment, income, and consumption in a contractionary downward spiral.

However, if this $10 million of saving is matched by an equal amount of investment, then no drop off in aggregate demand occurs. Such a match between saving and investment is assured in classical economics through flexible prices. However, in this case price flexibility applies to interest rates. Should saving not match investment, then interest rates adjust to restore balance. In particular, if saving exceeds investment, then interest rates fall, which stimulates investment and curtails saving until the two are once again equal.

Although of questionable realism, these three assumptions imply that the economy would operate at full employment.

These three assumptions ensure that the macroeconomy would continue to produce the quantity of aggregate output that fully employs available resources. While a few resources might be temporarily unemployed, they would be quickly reemployed as resource prices (especially wages) adjust to equilibrium balance.

Keynesian Critique of the classical Economics Assumptions:

Keynesian economics was developed by John Maynard Keynes in 1936 during the depths of the Great Depression. Keynes promoted his new theory of macroeconomics it part by showing where the existing classical economics went wrong, especially why it was unable to explain the length and severity of the Great Depression. A discussion of each of the three assumptions of classical economics provides a bit of insight.

- Flexible Prices: First up is the classical proposition that wages and prices are flexible. Keynes argued that prices are really inflexible, especially in the downward direct. This inflexibility or rigidity of prices results because sellers, both output produces and resource owners, are unwilling or unable to accept lower prices. Inflexible prices thus prevent markets from eliminating shortages and surpluses. In particular, rigid wages allow a surplus of labor (that is, involuntary unemployment) to persist.

- Say's Law: Keynes was perhaps most critical of Say's law that supply creates its own demand. Keynes questioned whether or not supply does in fact create demand. While, in principle, revenue generated by production ultimately ends up as household income, this does not happen instantaneously. In the meantime, households can only spend the income that they actually have. If they have less income, then they spend less, less is sold, less is produced, and less revenue is generated.

- Saving-Investment Equality: The assumed equality between saving and investment was also criticized by Keynes. The lack of flexible prices might also prevent equilibrium in financial markets. Should interest rates not adjust, then saving might not match investment. Moreover, the attainment of equilibrium might actually require negative interest rates. Keynes suggested that interest rates were not the only or even most important factors affecting saving and investment. Factors such as a dismal outlook on the economy might reduce investment well below saving at any positive interest rate. A such, a disequilibrium in which saving exceeds investment means aggregate demand falls short of aggregate production and is just the sort of thing that would create a sustained depression.

These three critiques suggest why, contrary to the expectations of classical economics, high unemployment rates persisted during the Great Depression. Aggregate demand fell short of production, probably due to a lack of investment expenditures. Resource owners had less income and thus reduced their expenditures. Unemployment increased and the surplus of resources persisted because resource prices did not decline to restore balance.

The Classical Economic Model

If we had to apply the classical model principles to the global economy nowadays, it would be extremely difficult to make such simple assumptions really work. However, classical theorists like Pigou and Say were aware that a capitalist market economy could not self-adjust to the equilibrium point they described.

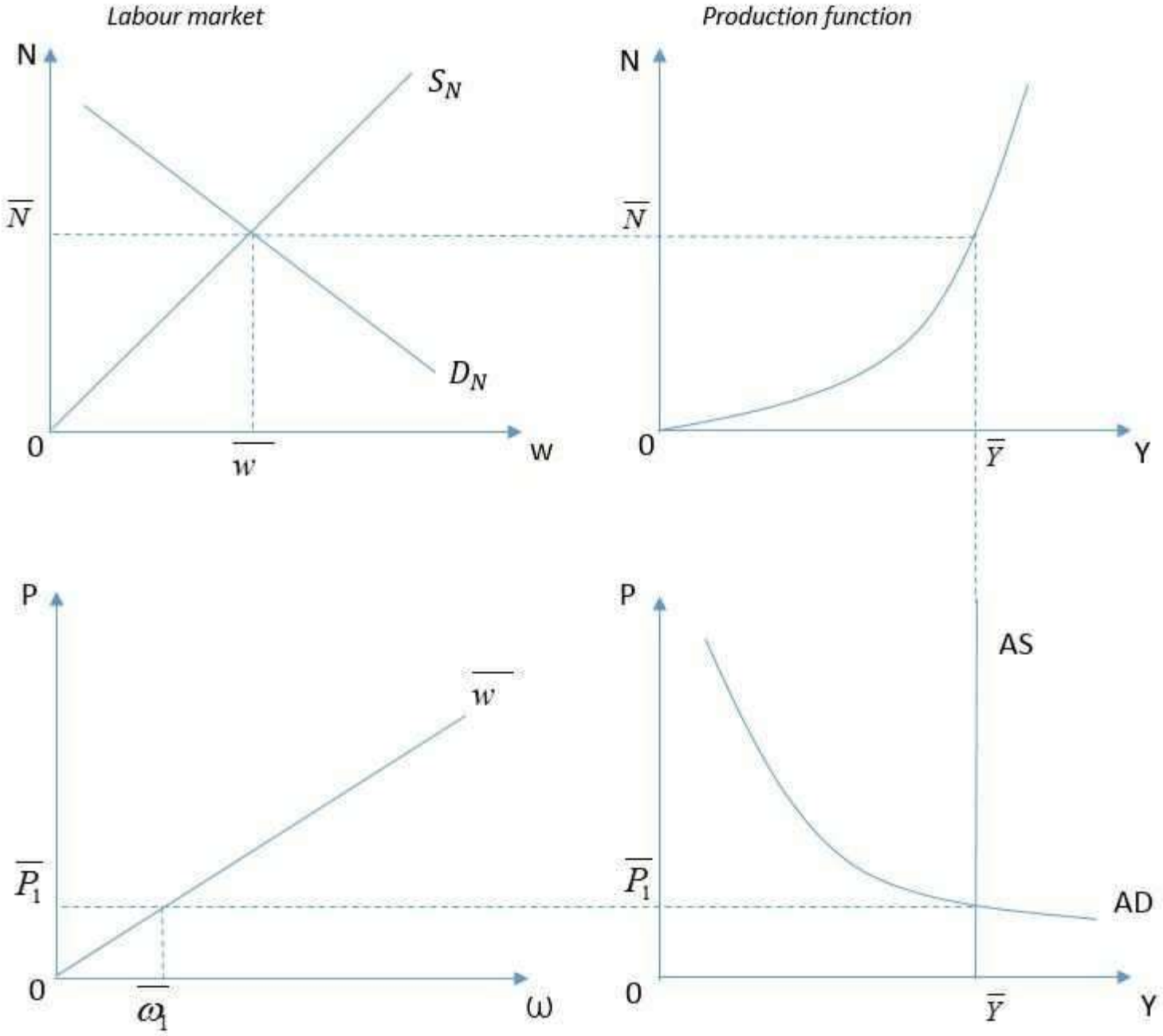
Nevertheless, their 'laissez-faire' economy still makes the subject of current discussions among policy makers. This only suggests that a non-interventionist economy might not be completely out fashioned.

Assumptions of the classical model:

A very brief version of the classical model starts from the following assumptions:

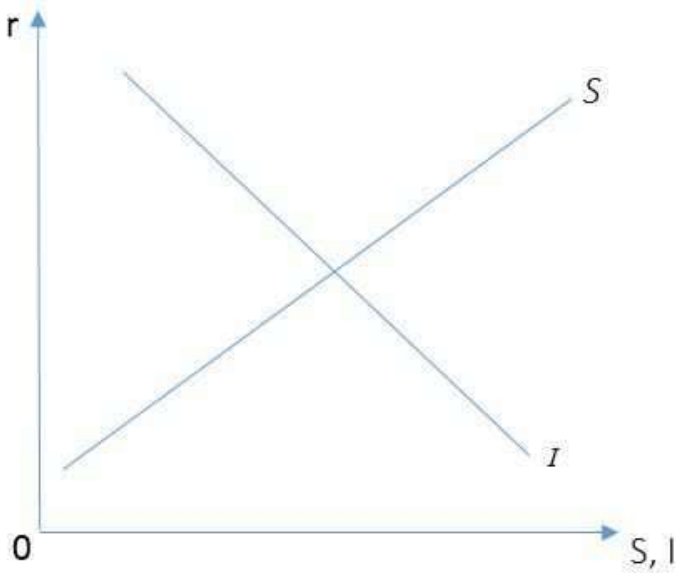
1. All economic agents can decide how much to buy or sell, in order to maximize their utility, as rational agents;
2. All economic agents have the same level of information regarding prices;
3. Prices are perfectly flexible which allows them to adjust until the market-clearing level;
4. There is a fictional Walrasian auctioneer who makes sure that no good is traded until the market-clearing price is agreed;
5. Agents have stable expectations.

Fig. 1



Nominal (money) wage determination

Aggregate demand and supply



Interest rate determination

- N = employment level
- W = real wage (nominal wage/price)
- Sn = labour supply
- Dn = labour demand
- Y = output (production)
- P = price level
- AS = aggregate supply
- AD = aggregate demand
- ω = nominal (money) wage
- r = interest rate
- S = savings
- I = investments

Mechanisms of the classical model:

Based on the assumptions of the classical model, all markets clear since prices are perfectly flexible and able to adjust until supply equals demand.

This is also valid for the labour market. Under the classical model frame, an increase in the money supply, for instance, does not alter real variables like employment level or real wage. Real wage, which we can of as the price of the labour market, will adjust until labour demand will be equal to labour supply. The only thing that will change is the level of nominal (money) wages and price level, as seen in Fig. 2.

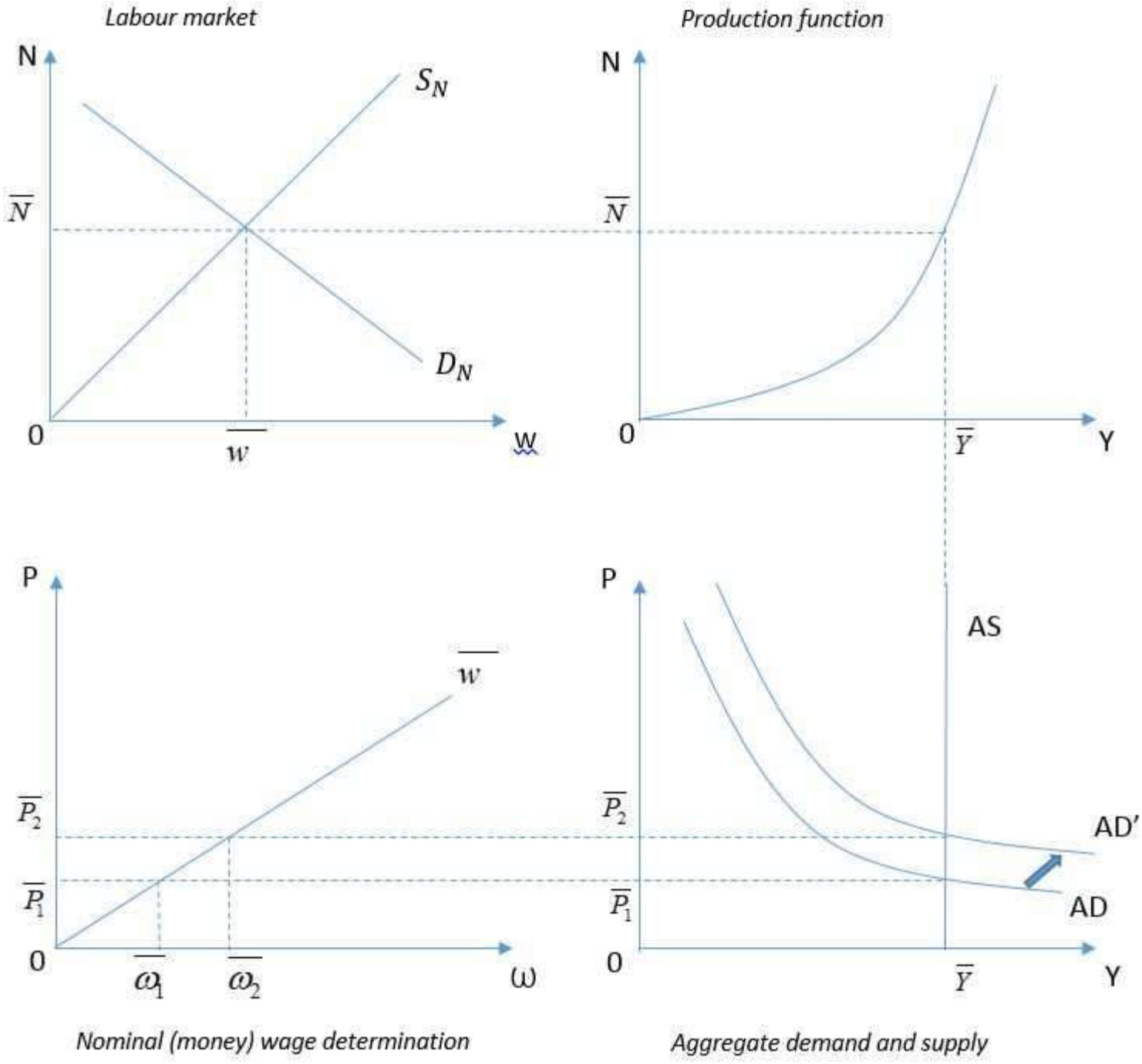
An increase in money supply, from M1 to M2 leads to a shift in the aggregate demand curve, from AD to AD'. This is because the classical model employs the Quantity Theory of Money: MV = PY, where M is the money supply, V is the velocity of money in circulation, P is the level of price and Y is the output. The Quantity Theory of Money, reinterpreted in the Cambridge approach, equates PY with the demand for money times the velocity of money, which can be aggregated under AD.

To come back to the previous point, when money supply increases, the aggregate demand curve will shift to the right. This will yield a higher price, but the aggregate supply is independent of the price level. Since prices are perfectly flexible, changes in the price level will be matched by corresponding changes in the nominal (money wage) to maintain the same market-clearing level of employment.

The new equilibrium will be reached at the same level of employment and same real wage, but at a higher price level and nominal wages. The fact that values of the real variables in the model are independent of the value of nominal money stock generates a paradox which is often called the **classical dichotomy**.

The last part of the classical model, the determination of the interest rate, is 'Say's law' which suggests that 'supply generates its own demand'. It shows that savings increase when the interest rate increases and that investments decrease when the interest rate decreases. Moreover, the market clears when savings equate investments. In our discussion about the impact of the money supply on the labour market and goods market, this last part can be omitted. Due to the classical dichotomy, a change in the money supply will not affect interest rates.

Fig. 2



How can the Classical Model be used today

At this point, it should be mentioned that the classical model was not held in its entirety by any economist. Therefore, even if economists and policy makers still refer to the classical model nowadays, the points being made refer to specific components of the classical model, taking in consideration only some assumptions.

Theorists of the classical model argued that the 'normal state' of the economy is the one at full employment. Hence, if unemployment arises, this is only because of market rigidities, like trade union pressures and minimum wage legislation. Although today's global economy is too complex to be looked at through 'the classics' glasses', discussions on balancing the power of trade unions in France and debates on removing the minimum wage in the U.S. make the model useful. Of course, the classical economic model should not be treated as anything else than a simplified tool to work with in solving more complex problems.

Classical Theory of Employment (With Diagram):

The word, classical economists, was first used by Karl Marx to define the thoughts and perceptions of various economics experts, such as Ricardo and Adam Smith.

On the other hand, Keynes considered classical economists as the followers of David Ricardo.

According to him, these followers were John Stuart Mill, Alfred Marshall, and Pigou.

Keynes was of the opinion that classical economics refers to traditional or conventional principles of economics. He also advocated that these classical principles were accepted by several renowned economists. In fact, Keynes himself acknowledged and taught these classical principles and rejected the principles of laissez-faire.

The classical economists did not propound any particular theory of employment. However, they have given a number of assumptions. There are two main assumptions of classical theory of employment, namely, assumption of full employment and flexibility of price and wages. Let us study these two broad features in detail.

Assumption of Full Employment:

In simpler terms, full employment refers to an economic condition in which every individual is employed. In economics terminology, full employment signifies the market condition where the demand for labor is equivalent to the supply of labor at every level of real wage. Therefore, full employment is the employment level at which every individual who desires to work at the prevalent wage rate gets employed.

Some of the definitions of full employment given by different economists are as follows:

According to Lerner, "Full employment is a situation in which all those who are able to and want to work at the existing rate of wage get work without any due difficulty."

According to Spencer, "Full employment is a situation in which everyone who wants to work is working except for those who fictionally and structurally unemployed."

The classical economists had a notion that labor and other resources are utilized completely or fully employed. According to classical economists, over-production is a general condition of an economy. Therefore, the condition of unemployment does not occur in the economy.

According to them, if the condition of unemployment occurs, it is a temporary or abnormal condition in the economy. In addition, classical economists also propounded that the condition of unemployment occurs due to the interference of government or private organizations in normal mechanism of market forces.

In addition, it can be due to wrong speculation of organizations regarding the economic condition. Therefore, classical economists considered that there would always be a condition of full employment in the economy.

According to classical economists, the lassiez-faire approach of economy helps in adjusting employment and maintaining the full employment condition. The classical economists believed that full employment is dependent on various economic factors, such as perfect competition, objective of profit maximization, and mechanism of price.

The opinion of classical economists regarding full employment is not true. The condition of unemployment can also exist in the economy in the form of unfilled vacancies. According to modern theory of employment, the market is dynamic, thus, the demand and supply of labor changes, which would result in unemployment in an economy. In the condition of unemployment, individuals who desire to work may not get employed. Therefore, there would also be a condition of unemployment in case of full employment.

As a result, in modem economics, the definition of full employment has slightly distinguished from its previous version. Now, full employment refers to the state at which the vacancies and competent individuals are at equilibrium. In addition, a certain amount of unemployment also exists in the economy. Such unemployment is termed as natural rate of unemployment.

According to Rullin and Gregory, "The natural rate of unemployment is the rate of unemployment arising from normal labor market frictions that exist when the labor market is in equilibrium." The natural unemployment refers to frictional and structural unemployment. Therefore, we can conclude that full employment docs not refer to the condition in which the unemployment is nil; however, it is a state of natural rate of unemployment.

According to Ward, "Full employment is the level of employment associated with a normal level of unemployment."

Flexibility of Price and Wages:

The classical economists believed that there is always a condition of full employment of resources in an economy. Besides this, they also advocated that the flexibility or adjustments in price of products and wages of individuals facilitate the condition of full employment.

For example, in case of over-production, the prices of products decrease, which further leads to an increase in demand and rate of consumption. Consequently, employment opportunities would increase and unemployment would eliminate.

The classical economists also propounded another approach of reducing unemployment, which signifies that the condition of full employment can be achieved by cutting down wages. This would result in increase in demand for labor and lead to the condition of full employment.

According to Pigou, "With perfectly free competition, there will always be at work a strong tendency for wage rates to be so related to demand that everybody is employed." Therefore, according to classical economists, the prices and wages adjust themselves to bring full employment in an economy.

Apart from aforementioned assumptions, which are assumption of full employment and flexibility of price and wages. **Another important basis for classical theory of employment is Say's Law.**

Say's Law:

Say's Law was given by J.B. Say, who was a French economist of early nineteenth century. With the help of this law, classical economists justified the assumption of full employment. In addition, Say's Law also helped

classical economists to believe that overproduction and unemployment are not possible in normal economic conditions.

This law was stringently followed by classical economists, such as Alfred Marshall and Pigou. According to J.B. Say, Supply creates its own demand." He also stated, "It is production which creates market for goods; for selling is at the same time buying and more of production, more of creating demand for other goods. Every producer finds a buyer." In simple terms, the supply of a product develops the demand for that product, which avoids the problem of over-production.

Therefore, according to Say s Law, there is very less possibility that there is no aggregate demand in the economy. He also stated that the demand for a product is originated from the income earned by the factor of production involved in the production of the product.

When a new factor is added to the production, it increases the demand for the product, which would cause simultaneous increase in the supply of that product. Therefore, it can be concluded that production is responsible for the demand for a product.

According to David Ricardo, an important classical economist, "No man produces but with a view to consume or sell, and he never sells but with a view to consume or sell, and he never sells but with an intention to purchase some other commodity which may be useful to him or which contributes to future production."

As per James Mill, "Consumption is co-extensive with production."

Therefore, the supply of a product develops an equal and immediate demand of its own. The supply produces income in the form of wages, interest and profit. The purchasing power of labor results in the increase of demand and consumption of product and services. Therefore, the aggregate supply gets equal to the aggregate demand. This reduces the possibility of overproduction in the economy.

Basic Assumptions of Say's Law:

Every law is based on certain assumptions. These assumptions are required for the effective implication of laws. In case the assumptions are not satisfied in a particular situation, then the law would not hold true. Therefore, in Say's Law, there are certain assumptions that need to be satisfied for its proper application.

The basic assumptions of Say's law are as follows:

a. Requires a perfectly competitive market and free exchange economy for the application of Say's Law

b. Assumes that all the saving is invested and income is spend immediately

c. Assumes that the flexibility in interest rate makes the saving and investment equal

d. Assumes that the government intervention is nil in the market, which implies that there is no government expenditure government revenue, taxation, and subsidies

e. Decides and limits the market size on the basis of production volume of an organization that makes aggregate demand equal to

f. Requires a closed economy for the application of the law

Another classical theory of employment was given by Pigou.

Implications of Say's Law:

From the discussion of Say's law so far in the above, there can be certain implication of the law.

Some of the implications of Say's Law are discussed in the following points:

(a) Self-adjusting economy:

Assumes that market forces adjust themselves for the stabilization of an economy and do not require any controlling authority for this purpose. Say's Law also assumes that in a self-adjusting economy, the condition of disequilibrium is momentary or for a shorter duration of time and the condition of equilibrium persists.

For example, if there is a condition of over-production, then prices would fall, which would automatically lead to increase in demand. Consequently, the problem of surplus of products would solve and demand and supply would remain equal. Such a condition is termed as equilibrium condition.

Similarly, in the condition of unemployment, wages would fall. In such a case, it would be beneficial for organizations to hire more labor to reduce unemployment. In this manner, an economy can adjust itself without any controlling units.

(b) Laissez-faire Approach:

States that there is no interference of the government in the economic activity. The law assumes that if government intervenes in the self-adjusting economy, then it would create the state of disequilibrium.

In the absence of government intervention, the condition of disequilibrium would be for a shorter duration and tend to be solved by he free implication of market forces. Therefore, government should not create hurdles in the normal working of an economy.

(c) Over-production:

Assumes that the condition of over-production does riot exist in an economy in general. This is because of the reason that if there is over-production, then the prices would fall immediately and the demand would increase without any time lag.

As a result, the surplus of products would disappear from the market. According to the law, over-production may arise in an industry in specific conditions, which is also not permanent and can be resolved by market forces.

(d) Unemployment:

Concludes that the condition of unemployment cannot exist in normal economic conditions. This is because as the unemployment arises, wages would fall. In such a case, organizations would prefer to hire new employees, which would result in eliminating unemployment.

The law also assumes that there should neither be any intervention of government to regulate the rate of wages nor any role of trade unions. According to Say's Law, the condition of unemployment exists only under some specific conditions, but this condition is momentary.

(e) Money Supply:

Assumes that whole income is spent on consumer goods and the whole amount of savings is invested immediately. Thus, money comes back to organizations only. According to Say's Law, there is always a closed economy and there is no interference of government, such as subsidies, taxes, and tariffs.

(f) Limitless Productive Activities:

Assumes that the productive activities in an economy are limitless. In simple terms, the activities related to economic development can be performed to any extent as aggregate demand cannot be nil. This leads to unlimited economic development opportunities for under-developed countries.

Concept of Equality of Savings and Investment:

According to Say's Law, there would always be a certain amount of total spending for keeping the available resources fully employed. The income generated by various factors of production is spent on consumer goods. In addition, some part of this income is also saved.

However, according to classical economists, the amount of saving is utilized for investment purposes. This is because of the reason that saving and investment are equal and are interchangeable concepts. It helps in maintaining the flow of income in an economy. As a result, supply of a product is able to create demand for the product.

The assumptions of classical theory of employment with respect to the concept of savings and investment are as follows:

(a) Flexibility in Interest Rate:

Assumes that rate of interest is directly affected by the supply of saving and inversely affected by the demand of investment. According to classical economists, the fluctuations in the economy can be managed by market forces themselves to bring the economy back at equilibrium position.

The relationship between the rate of interest (ROI) and the demand of investment (I) is shown in Figure-1:

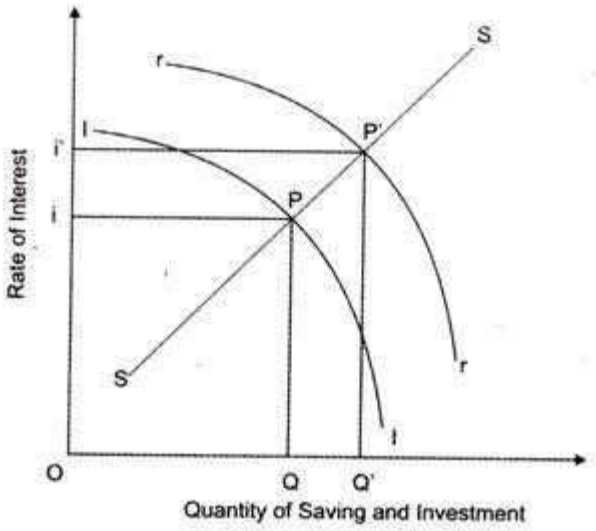


Figure-1: Relationship between Rate of Interest and Investment

In Figure-1, II represents the demand of investment while SS represents the supply of saving. At point P, II intersects SS, which implies that demand of investment gets equal to the supply of saving. Therefore, P is the point of equilibrium at which the interest rate is Oi with the investment and saving quantity of OQ.

When the investment increases to I', then the rate of interest becomes Oi' and economy reaches to new equilibrium point that is P'. Therefore, it can be concluded that economy would always be in equilibrium and there would be no situation of unemployment in the economy. In addition, the rate of interest helps in bringing back the equilibrium condition of an economy when there is a gap between savings and investment.

(b) Flexibility in Wage Rate:

Assumes that full employment condition can be achieved by cutting down the wage rate. Unemployment would be eliminated when wages are determined by the mechanism of economy itself.

Figure-2 shows the relationship between wage rate and employment:

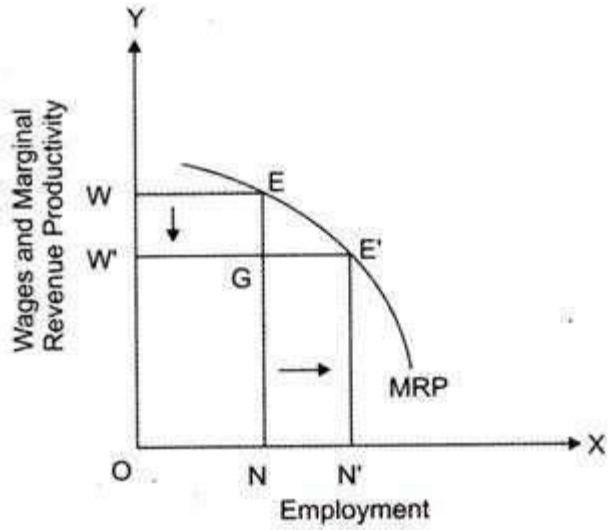


Figure-2: Relationship between Wage Rate and Employment

In Figure-2, when the wage rate is OW, then the employment is ON. As the wage rate is reduced to OW, then the employment has increased to ON'. Prof. Pigou has taken this theory as base for developing the solution of unemployment problem.

(c) Balanced Budget:

Assumes that the intervention of government in economic activities should be negligible. In addition, the government should balance its income and expenditure. The classical economists advocated that the government should follow the laissez-faire approach of economy.

Criticism of Classical Theory:

Several economists have criticized the classical theory of employment.

The main points of criticism of classical theories are as follows:

a. States that supply creates its own demand that is not possible if certain part of income is saved and aggregate revenue is not always equal to aggregate cost

b. Considers that the employment can be increased by decreasing the wage rate, which is not true in the real world

c. Assumes that rate of interest helps in maintaining equilibrium between savings and investments, which is not true in practical applications

d. Infers that the economy can be adjusted on its own and it does not require any government intervention, which is not possible

e. Considers that the wages and prices are very much flexible, which is not true in the real world economy

f. Regards money as a medium of exchange only; however, money plays an important role in the economy

g. Fails to explain the occurrence of trade cycles.

Richard Cantillon:

Richard Cantillon (French 1680 – May 1734) He was born at County Kerry, Ireland in 1680. He died at London in 1734. He was a political economist. He was an Irish-French economist in the era of the age of reasoning and author of *Essai sur la Nature du Commerce en Général* (*Essay on the Nature of Trade in General*), a book considered by William Stanley Jevons to be the "cradle of political economy". Although little information exists on Cantillon's life, it is known that he became a successful banker and merchant at an early age. His success was largely derived from the political and business connections he made through his family and through an early employer, James Brydges.

During the late 1710s and early 1720s, Cantillon speculated in, and later helped fund, John Law's Mississippi Company, from which he acquired great wealth. However, his success came at a cost to his debtors, who pursued him with lawsuits, criminal charges, and even murder plots until his death in 1734.

Essai remains Cantillon's only surviving contribution to economics. It was written around 1730 and circulated widely in manuscript form, but was not published until 1755. His work was translated into Spanish by Gaspar Melchor de Jovellanos, probably in the late 1770s, and considered essential reading for political economy. Despite having much influence on the early development of the physiocrat and classical schools of thought, *Essai* was largely forgotten until its rediscovery by Jevons in the late 19th century. Cantillon was influenced by his experiences as a banker, and especially by the speculative bubble of John Law's Mississippi Company. He was also heavily influenced by prior economists, especially William Petty.

Essai is considered the first complete treatise on economics, with numerous contributions to the science. These contributions include: his cause and effect methodology, monetary theories, his conception of the entrepreneur as a risk-bearer, and the development of spatial economics. Cantillon's *Essai* had significant influence on the early development of political economy, including the works of Adam Smith, Anne Turgot, Jean-Baptiste Say, Frédéric Bastiat and François Quesnay.

Richard Cantillon notable ideas are entrepreneur as risk-bearer, monetary theory, spatial economics, theory of population growth, cause and effect methodology

Richard Cantillon's Contribution to Economics:

Although there is evidence that Richard Cantillon wrote a wide variety of manuscripts, only his *Essai Sur La Nature Du Commerce En Général* (abbreviated *Essai*) survives. Written in 1730, it was published in French in 1755, and was translated into English by Henry Higgs in 1932. Evidence suggests that *Essai* had tremendous influence on the early development of economic science. However, Cantillon's treatise was largely neglected during the 19th century.

In the late 19th century and it was "rediscovered" by William Stanley Jevons, who considered it the "cradle of political economy". Since then, Cantillon's *Essai* has received growing attention. *Essai* is considered the first complete treatise on economic theory, and Cantillon has been called the "father of enterprise economics"

One of the greatest influences on Cantillon's writing was English economist William Petty and his 1662 tract *Treatise on Taxes*. Although Petty provided much of the groundwork for Cantillon's *Essai*, Anthony Brewer argues that Petty's influence has been overstated.

Apart from Petty, other possible influences on Cantillon include John Locke, Cicero, Livy, Pliny the Elder, Pliny the Younger, Charles Davenant, Edmond Halley, Isaac Newton, Sébastien Le Prestre de Vauban, and Jean Boisard. Cantillon's involvement in John Law's speculative bubble proved invaluable and likely heavily influenced his insight on the relationship between increases in the supply of money, price, and production.

Cantillon was the first to introduce the term in *Essai*. Cantillon divided society into two principal classes—fixed income wage-earners and non-fixed income earners. Entrepreneurs, according to Cantillon, are non-fixed income earners who pay known costs of production but earn uncertain incomes, due to the speculative nature of pandering to an unknown demand for their product.

Cantillon, while providing the foundations, did not develop a dedicated theory of uncertainty—the topic was not revisited until the 20th century, by Ludwig von Mises, Frank Knight, and John Maynard Keynes, among others. Furthermore, unlike later theories of entrepreneurship which saw the entrepreneur as a disruptive force, Cantillon anticipated the belief that the entrepreneur brought equilibrium to a market by correctly predicting consumer preferences.

Spatial economics deal with distance and area, and how these may affect a market through transportation costs and geographical limitations. The development of spatial economics is usually ascribed to German economist Johann Heinrich von Thünen; however, Cantillon addressed spatial economics nearly a century earlier.

Cantillon integrated his advancements in spatial economic theory into his microeconomic analysis of the market, describing how transportation costs influence the location of factories, markets and population centres—that is, individuals strive to lower transportation costs. Conclusions on spatial economics were derived from three premises: cost of raw materials of equal quality will always be higher near the capital city, due to transportation costs; transportation costs vary on transportation type (for example, water transportation was considered cheaper than land-based transportation); and larger goods that are more difficult to transport will always be cheaper closer to their area of production. For example, Cantillon believed markets were designed as they were to decrease costs to both merchants and villagers in terms of time and transportation.

Similarly, Cantillon posited that the locations of cities were the result in large part of the wealth of inhabiting property owners and their ability to afford transportation costs—wealthier property owners tended to live farther from their property, because they could afford the transportation costs. In *Essai*, spatial economic theory was used to derive why markets occupied the geographical area they did and why costs varied across different markets

Cantillon Entrepreneurship:

One of Cantillon's remarkable contributions to economic thought is that he was the first to stress and analyse the entrepreneur. To this real-world merchant, banker and speculator, it would have been inconceivable to fall into the Ricardian, Walrasian and neoclassical trap of assuming that the market is characterized by perfect knowledge and a static world of certainty.

The real-world marketplace is permeated by uncertainty, and it is the function of the businessman, the 'undertaker',, the entrepreneur, to meet and bear that uncertainty by investing, paying expenses and then hoping for a profitable return. Profits, then, are a reward for successful forecasting, for successful uncertainty-bearing, in the process of production. The crucial Smithian-Ricardian and Walrasian (classical and neoclassical) assumption that the economy is perpetually in a state of long-run equilibrium fatally rules out the real world of uncertainty. Instead, it focuses on a never-never land of no change, and hence of perfect certainty and perfect knowledge of present

and future.

Thus Cantillon divides producers in the market economy into two classes: 'hired people' who receive fixed wages, or fixed land rents, and entrepreneurs with non-fixed, uncertain returns. The farmer-entrepreneur bears the risk of fixed costs of production and of uncertain selling prices, while the merchantior manufacturer pays similar fixed costs and relies on an uncertain return. Except for those who only sell 'their own labour', business entrepreneurs must lay out monies which, after they have done so, are 'fixed' or given from their point of view. Since sales and selling prices are uncertain and not fixed, their business income becomes an uncertain residual.

Cantillon also sees that the pervasive uncertainty borne by the entrepreneurs is partly the consequence of a decentralized market. In a world of one monopoly owner, the owner himself decides upon prices and production, and there is little entrepreneurial uncertainty. But in the real world, the decentralized entrepreneurs face a great deal of uncertainty and must bear its risks. For Cantillon, competition and entrepreneurship go hand in hand.

As in the case of Frank Knight and the modern Austrians, Cantillon's theory of entrepreneurship focuses on his function, his role as uncertainty-bearer in the market, rather than, as in the case of Joseph Schumpeter, on facets of his personality.

Cantillon's concept also anticipates von Mises and the modern Austrians in another respect: his entrepreneur performs not a disruptive (as in Schumpeter) but an equilibrating function, that is, by successfully forecasting and investing resources in the future, the entrepreneur helps adjust and balance supply and demand in the various markets.

David Hume:

David Hume was a Scottish philosopher, historian, economist, and essayist, who is best known today for his highly influential system of radical philosophical empiricism, skepticism, and naturalism. He was born May 7th , 1711 at Edinburgh, United Kingdom. He died August 25th , 1776 at Edinburgh, United Kingdom. David Hume influenced Adam Smith, Noam Chomsky and Thomas Reid. He was influenced by John Locke, Rene Descartes, Thomas Hobbes and scholars.

David Hume was the second of two sons born to Joseph Home of Ninewells, an advocate, and his wife The Hon. Katherine (*née* Falconer), daughter of Sir David Falconer, 5th Lord Falconer of Halkerton. He was born on 26 April 1711 (Old Style) in a tenement on the north side of the Lawnmarket in Edinburgh. Hume's father died when he was a child, just after the author's second birthday, and he was raised by his mother, who never remarried.

He changed the spelling of his name in 1734, because of the fact that his surname *Home,* pronounced *Hume,* was not known in England. Throughout his life Hume, who never married, spent time occasionally at his family home at Ninewells in Berwickshire, which had belonged to his family since the sixteenth century. His finances as a young man were very "slender". His family was not rich and, as a younger son, he had little patrimony to live on. He was therefore forced to make a living somehow.

Hume attended the University of Edinburgh at the unusually early age of twelve (possibly as young as ten) at a time when fourteen was normal. At first, because of his family, he considered a career in law, but came to have, in his words, "an insurmountable aversion to everything but the pursuits of Philosophy and general Learning; and while [my family] fancied I was poring over Voet and Vinnius, Cicero and Virgil were the Authors which I was secretly devouring". He had little respect for the professors of his time, telling a friend in 1735 that "there is nothing to be learnt from a Professor, which is not to be met with in Books". Hume did not graduate.

Aged around 18, he made a philosophical discovery that opened up to him "a new Scene of Thought", which inspired him "to throw up every other Pleasure or Business to apply entirely to it". He did not recount what this scene was, and commentators have offered a variety of speculations.

David Hume Contributions to economic thought:

Through his discussions on politics, Hume developed many ideas that are prevalent in the field of economics. This includes ideas on private property, inflation, and foreign trade. Referring to his essay "Of the Balance of Trade", economist Paul Krugman has remarked that "David Hume created what I consider the first true economic model."

In contrast to Locke, Hume believes that private property is not a natural right. Hume argues it is justified, because resources are limited. Private property would be an unjustified, "idle ceremonial", if all goods were unlimited and available freely. Hume also believed in an unequal distribution of property, because perfect equality would destroy the ideas of thrift and industry. Perfect equality would thus lead to impoverishment.

Due to Hume's vast influence on contemporary philosophy, a large number of approaches in contemporary philosophy and cognitive science are today called "Humean."

Epistemological Issues

Much of Hume's epistemology is driven by a consideration of philosophically important issues, such as space and time, cause-effect, external objects, personal identity, and free will. In his analysis of these issues in the *Treatise*, he repeatedly does three things;

1. He skeptically argues that we are unable to gain complete knowledge of some important philosophical notion under consideration.
2. He shows how the understanding gives us a very limited idea of that notion.
3. He explains how some erroneous views of that notion are grounded in the fancy, and he accordingly recommends that we reject those erroneous ideas. We will follow this three-part scheme as we consider Hume's discussions of various topics.

a. Space

On the topic of space, Hume argues that our proper notions of space are confined to our visual and tactile experiences of the three-dimensional world, and we err if we think of space more abstractly and independently of those visual and tactile experiences.

In essence, our proper notion of space is like what Locke calls a "secondary quality" of an object, which is spectator dependent, meaning grounded in the physiology of our perceptual mental processes. Thus, our proper notion of space is not like a "primary quality" that refers to some external state of affairs independent of our perceptual mental process. Following the above three-part scheme;

(1) Hume skeptically argues that we have no ideas of infinitely divisible space (*Treatise*, 1.2.2.2).

(2) When accounting for the idea we do have of space, he argues that "the idea of space is convey'd to the mind by two senses, the sight and touch; nor does anything ever appear extended, that is not either visible or tangible" (*Treatise*, 1.2.3.15). Further, he argues that these objects—which are either visible or tangible—are composed of finite atoms or corpuscles, which are themselves "endow'd with colour and solidity." These impressions are then "comprehended" or conceived by the imagination; it is from the structuring of these impressions that we obtain a limited idea of space.

(3) In contrast to this idea of space, Hume argues that we frequently presume to have an idea of space that lacks visibility or solidity. He accounts for this erroneous notion in terms of a mistaken association that people naturally make between visual and tactile space (*Treatise*, 1.2.5.21).

b. Time

Hume's treatment of our idea of time is like his treatment of the idea of space, in that our proper idea of time is like a secondary quality, grounded in our mental operations, not a primary quality grounded in some external phenomenon beyond our experience.

(1) He first maintains that we have no idea of infinitely divisible time (*Treatise*, 1.2.4.1).

(2) He then notes Locke's point that our minds operate at a range of speeds that are "fix'd by the original nature and constitution of the mind, and beyond which no influence of external objects on the senses is ever able to hasten or retard our thought" (*Treatise*, 1.2.3.7). The idea of time, then, is not a simple idea derived from a simple impression; instead, it is a copy of impressions as they are perceived by the mind at its fixed speed (*Treatise*, 1.2.3.10).

(3) In contrast to this limited view of time, he argues that we frequently entertain a faulty notion of time that does not involve change or succession. The psychological account of this erroneous view is that we mistake time for the cause of succession instead of seeing it as the effect (*Treatise*, 1.2.5.29).

c. Necessary Connection between Causes and Effects

According to Hume, the notion of cause-effect is a complex idea that is made up of three more foundational ideas: priority in time, proximity in space, and necessary connection. Concerning priority in time, if I say that event A causes event B, one thing I mean is that A occurs prior to B. If B were to occur before A, then it would be absurd to say that A was the cause of B. Concerning the idea of proximity, if I say that A causes B, then I mean that B is in proximity to, or close to A. For example, if I throw a rock, and at that moment someone's window in China breaks, I would not conclude that my rock broke a window on the other side of the world.

The broken window and the rock must be in proximity with each other. Priority and proximity alone, however, do not make up our entire notion of causality. For example, if I sneeze and the lights go out, I would not conclude that my sneeze was the cause, even though the conditions of priority and proximity were fulfilled. We also believe that there is a necessary connection between cause A and effect B. During the modern period of philosophy, philosophers thought of necessary connection as a power or force connecting two events. When billiard ball A strikes billiard ball B, there is a power that the one event imparts to the other.

In keeping with his empiricist copy thesis, that all ideas are copied from impressions, Hume tries to uncover the experiences which give rise to our notions of priority, proximity, and necessary connection. The first two are easy to explain. Priority traces back to our various experiences of time. Proximity traces back to our

various experiences of space. But what is the experience which gives us the idea of necessary connection? This notion of necessary connection is the specific focus of Hume's analysis of cause-effect.

Hume's view is that our proper idea of necessary connection is like a secondary quality that is formed by the mind, and not, like a primary quality, a feature of the external world.

(1) He skeptically argues that we cannot get an idea of necessary connection by observing it through sensory experiences (*Treatise*, 1.3.14.12). We have no external sensory impression of causal power when we observe cause-effect relationships; all that we ever see is cause A constantly conjoined with effect B. Neither does it arise from an internal impression, such as when we introspectively reflect on willed bodily motions or willing the creation of thoughts. These internal experiences are too elusive, and nothing in them can give content to our idea of necessary connection.

(2) The idea we have of necessary connection arises as follows: we experience a constant conjunction of events A and B— repeated sense experiences where events resembling A are always followed by events resembling B. This produces a habit such that upon any further appearance of A, we expect B to follow. This, in turn, produces an internal feeling of expectation "to pass from an object to the idea of its usual attendant," which is the impression from which the idea of necessary connection is copied (*Treatise*, 1.3.14.20).

(3) A common but mistaken notion on this topic is that necessity resides within the objects themselves. He explains this mistaken belief by the natural tendency we have to impute subjectively perceived qualities to external things (*Treatise*, 1.3.14.24).

d. External Objects

Hume's view on external objects is that the mind is programmed to form some concept of the external world, although this concept or idea is really just a fabrication.

(1) Hume's skeptical claim here is that we have no valid conception of the existence of external things (*Treatise*, 1.2.6.9).

(2) Nevertheless, he argues that we have an unavoidable "vulgar" or common belief in the *continued* existence of objects, and this idea he accounts for. His explanation is lengthy, but involves the following features. Perceptions of objects are disjointed and have no unity in and of themselves (*Treatise*, 1.4.2.29). In an effort to organize our perceptions, we first naturally assume that there is no distinction between our perceptions and the objects that are perceived (this is the so-called "vulgar" view of perception). We then conflate all ideas (of perceptions), which put our minds in similar dispositions (*Treatise*, 1.4.2.33); that is, we associate resembling ideas and attribute identity to their causes. Consequently, we naturally invent the continued and external existence of the objects (or perceptions) that produced these ideas (*Treatise*, 1.4.2.35). Lastly, we go on to *believe* in the existence of these objects because of the force of the resemblance between ideas (*Treatise*, 1.4.2.36). Although this belief is philosophically unjustified, Hume feels he has given an accurate account of how we inevitably arrive at the idea of external existence.

(3) In contrast to the previous explanation of this idea, he recommends that we doubt a more sophisticated but erroneous notion of existence—the so-called philosophical view—which distinguishes between perceptions and the external objects that cause perceptions. The psychological motivation for accepting this view is this: our imagination tells us that resembling perceptions have a continued existence, yet our reflection tells us that they are interrupted. Appealing to both forces, we ascribe interruption to perceptions and continuance to objects (*Treatise*, 1.4.2.52).

e. Personal Identity

Regarding the issue of personal identity;

(1) Hume's skeptical claim is that we have no experience of a simple, individual impression that we can call *the self*—where the "self" is the totality of a person's conscious life. He writes, "For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception" (*Treatise*, 1.4.6.3).

(2) Even though my perceptions are fleeting and I am a bundle of different perceptions, I nevertheless have some idea of personal identity, and that must be accounted for (*Treatise*, 1.4.6.4). Because of the associative principles, the resemblance or causal connection within the chain of my perceptions gives rise to an idea of myself, and memory extends this idea past my immediate perceptions (*Treatise*, 1.4.6.18).

(3) A common abuse of the notion of personal identity occurs when the idea of a soul or unchanging substance is added to give us a stronger or more unified concept of the self (*Treatise*, 1.4.6.6).

f. Free Will

On the issue of free will and determinism—or "liberty" and "necessity" in Hume's terminology—Hume defends necessity;

(1) He first argues that "all actions of the will have particular causes" (*Treatise*, 2.3.2.8), and so there is no such thing as an uncaused willful action.

(2) He then defends the notion of a will that consistently responds to prior motivational causes: "our actions have a constant union with our motives, tempers, and circumstances" (*Treatise*, 2.3.1.4). These motives produce actions that have the same causal necessity observed in cause-effect relations that we see in external objects, such as when billiard ball A strikes and moves billiard ball B. In the same way, we regularly observe the rock-solid connection between motive A and action B, and we rely on that predictable connection in our normal lives.

Suppose that a traveler, in recounting his observation of the odd behavior of natives in a distant country, told us that identical motives led to entirely different actions among these natives. We would not believe the traveler's report. In business, politics, and military affairs, our leaders expect predicable behavior from us insofar as the same motives within us will always result in us performing the same action. A prisoner who is soon to be executed will assume that the motivations and actions of the prison guards and the executioner are so rigidly fixed that these people will mechanically carry out their duties and perform the execution, with no chance of a change of heart (*Treatise*, 2.3.1.5).

(3) Lastly, Hume explains why people commonly believe in an uncaused will (*Treatise*, 2.3.2.1). One explanation is that people erroneously believe they have a feeling of liberty when performing actions. The reason is that, when we perform actions, we feel a kind of "looseness or indifference" in how they come about, and some people wrongly see this as "an intuitive proof of human liberty" (*Treatise*, 2.3.2.2).

In the *Treatise* Hume rejects the notion of liberty completely. While he gives no definition of "liberty" in that work, he argues that the notion is incompatible with necessity, and, at best, "liberty" simply means chance. In the *Enquiry*, however, he takes a more compatiblist approach. All human actions are caused by specific prior motives, but liberty and necessity are reconcilable when we define liberty as "a power of acting or not

acting, according to the determinations of the will" (*Enquiry*, 8). Nothing in this definition of liberty is in conflict with the notion of necessity.

4. Skepticism

In all of the above discussions on epistemological topics, Hume performs a balancing act between making skeptical attacks (step 1) and offering positive theories based on natural beliefs (step 2). In the conclusion to Book 1, though, he appears to elevate his skepticism to a higher level and exposes the inherent contradictions in even his best philosophical theories.

He notes three such contradictions. One centers on what we call induction. Our judgments based on past experience all contain elements of doubt; we are then impelled to make a judgment about that doubt, and since this judgment is also based on past experience it will in turn produce a new doubt. Once again, though, we are impelled to make a judgment about this second doubt, and the cycle continues. He concludes that "no finite object can subsist under a decrease repeated *in infinitum*." A second contradiction involves a conflict between two theories of external perception, each of which our natural reasoning process leads us to.

One is our natural inclination to believe that we are directly seeing objects as they really are, and the other is the more philosophical view that we only ever see mental images or copies of external objects. The third contradiction involves a conflict between causal reasoning and belief in the continued existence of matter. After listing these contradictions, Hume despairs over the failure of his metaphysical reasoning:

The *intense* view of these manifold contradictions and imperfections in human reason has so wrought upon me, and heated my brain, that I am ready to reject all belief and reasoning, and can look upon no opinion even as more probable or likely than another [*Treatise*, 1.4.7.8].

He then pacifies his despair by recognizing that nature forces him to set aside his philosophical speculations and return to the normal activities of common life. He sees, though, that in time he will be drawn back into philosophical speculation in order to attack superstition and educate the world.

Hume's emphasis on these conceptual contradictions is a unique aspect of his skepticism, and if any part of his philosophy can be designated "Humean skepticism" it is this. However, during the course of his writing the *Treatise* his view of the nature of these contradictions changed. At first he felt that these contradictions were restricted to theories about the external world, but theories about the mind itself would be free from them, as he explains here:

The essence and composition of external bodies are so obscure, that we must necessarily, in our reasonings, or rather conjectures concerning them; involve ourselves in contradictions and absurdities. But as the perceptions of the mind are perfectly known, and I have us'd all imaginable caution in forming conclusions concerning them, I have always hoped to keep clear of those contradictions, which have attended every other system [*Treatise*, 2.2.6.2].

When composing the Appendix to the *Treatise* a year later, he changed his mind and felt that theories about the mind would also have contradictions:

I had entertained some hopes, that however deficient our theory of the intellectual world might be, it wou'd be free from those contradictions, and absurdities, which seem to attend every explication, that human reason can give of the material world. But upon a more strict review of the section concerning I find myself involv'd in such a labyrinth, that, I must confess, I neither know how to correct my former opinions, nor how to render them consistent.

If this be not a good *general* reason for scepticism, 'tis at least a sufficient one (if I were not already abundantly supplied) for me to entertain a diffidence and modesty in all my decisions [*Treatise*, Appendix].

Thus, in the *Treatise*, the skeptical bottom line is that even our best theories about both physical and mental phenomena will be plagued with contradictions. In the concluding section of his *Enquiry*, Hume again addresses the topic of skepticism, but treats the matter somewhat differently: he rejects extreme skepticism but accepts skepticism in a more moderate form.

He associates extreme *Pyrrhonian* skepticism with blanket attacks on all reasoning about the external world, abstract reasoning about space and time, or causal reasoning about matters of fact. He argues, though, that we must reject such skepticism since "no durable good can ever result from it." Instead, he recommends a more moderate or *Academic* skepticism that tones down Pyrrhonism by, first, exercising caution and modesty in our judgments, and, second, by restricting our speculations to abstract reasoning and matters of fact.

5. Theory of the Passions

Like many philosophers of his time, Hume developed a theory of the passions—that is, the emotions—categorizing them and explaining the psychological mechanisms by which they arise in the human mind. His most detailed account is in Book Two of the *Treatise*. Passions, according to Hume, fall under the category of impressions of reflection (as opposed to impressions of sensation). He opens his discussion with a taxonomy of types of passions, which are outlined here:

Reflective Impressions

1. Calm (reflective pleasures and pains)

2. Violent

a. Direct (desire, aversion, joy, grief, hope, fear)

b. Indirect (love, hate, pride, humility)

He initially divides passions between the calm and the violent. He concedes that this distinction is imprecise, but he explains that people commonly distinguish between types of passions in terms of their degrees of forcefulness. Adding more precision to this common distinction, he maintains that calm passions are emotional feelings of pleasure and pain associated with moral and aesthetic judgments. For example, when I see a person commit a horrible deed, I will experience a feeling of pain. When I view a good work of art, I will experience a feeling of pleasure. In contrast to the calm passions, violent ones constitute the bulk of our emotions, and these divide between direct and indirect passions. For Hume, the key direct passions are desire, aversion, joy, grief, hope, and fear.

They are called "direct" because they arise immediately—without complex reflection on our part—whenever we see something good or bad. For example, if I consider an unpleasant thing, such as being burglarized, then I will feel the passion of aversion. He suggests that sometimes these passions are sparked instinctively—for example, by my desire for food when I am hungry. Others, though, are not connected with instinct and are more the result of social conditioning. There is an interesting logic to the six direct passions, which Hume borrowed from a tradition that can be traced to ancient Greek Stoicism. We can diagram the relation between the six with this chart:

When good/bad objects are considered abstractly

Desire (towards good objects)

Aversion (towards evil objects)

When good/bad objects are actually present

Joy (towards good objects)

Grief (towards evil objects)

When good/bad objects are only anticipated

Hope (towards good objects)

Fear (towards evil objects)

Compare, for example, the passions that I will experience regarding winning the lottery vs. having my house burglarized. Suppose that I consider them purely in the abstract—or "consider'd simply" as Hume says (*Treatise*, 2.3.9.6). I will then desire to win the lottery and have an aversion towards being burglarized. Suppose that both situations are actually before me; I will then experience joy over winning the lottery and grief over being burglarized. Suppose, finally, that I know that at some unknown time in the future I will win the lottery and be burglarized. I will then experience hope regarding the lottery and fear of being burglarized.

Hume devotes most of Book 2 to an analysis of the indirect passions, his unique contribution to theories of the passions. The four principal passions are love, hate, pride, and humility. They are called "indirect" since they are the secondary effects of a previous feeling of pleasure and pain. Suppose, for example, that I paint a picture, which gives me a feeling of pleasure.

Since I am the artist, I will then experience an additional feeling of pride. He explains in detail the psychological process that triggers indirect passions such as pride. Specifically, he argues that these passions arise from a *double relation* between ideas and impressions, which we can illustrate here with the passion of pride:

1. I have an initial idea of some possession, or "subject", such as my painting, and this idea gives me pleasure.

2. Through the associative principle of resemblance, I then immediately associate this feeling of pleasure with a resembling feeling of pride (this association constitutes the first relation in the double relation).

3. This feeling of pride then causes me to have an idea of myself, as the "object" of pride.

4. Through some associative principle such as causality, I then associate the idea of myself with the idea of my painting, which is the "subject" of my pride (this association constitutes the second relation in the double relation).

According to Hume, the three other principal indirect passions arise in parallel ways. For example, if my painting is ugly and causes me pain, then I will experience the secondary passion of *humility*—perhaps more accurately expressed as "humiliation". By contrast, if someone else paints a pleasing picture, then this will trigger in me a feeling of *love* for that artist—perhaps more accurately expressed as "esteem". If the artist

paints a painfully ugly picture, then this will trigger in me a feeling of "hatred" towards the artist—perhaps more accurately expressed as "disesteem".

One of the most lasting contributions of Hume's discussion of the passions is his argument that human actions must be prompted by passion, and never can be motivated by reason. Reason, he argues, is completely inert when it comes to motivating conduct, and without some emotion we would not engage in any action. Thus, he writes, "Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them" (*Treatise*, 2.3.3.4).

6. Religious Belief

Like many of Hume's philosophical views, his position on religious belief is also skeptical. Critics of religion during the eighteenth-century needed to express themselves cautiously to avoid being fined, imprisoned, or worse. Sometimes this involved placing controversial views in the mouth of a character in a dialogue. Other times it involved adopting the persona of a deist or fideist as a means of concealing a more extreme religious skepticism.

Hume used all of the rhetorical devices at his disposal, and left it to his readers to decode his most controversial conclusions on religious subjects. During the Enlightenment, there were two pillars of traditional Christian belief: natural and revealed religion. *Natural religion* involves knowledge of God drawn from nature through the use of logic and reason, and typically involves logical proofs regarding the existence and nature of God, such as the causal and design arguments for God's existence.

Revealed religion involves knowledge of God contained in revelation, particularly the Bible, the quintessential examples of which are biblical prophesies and miracles where God intervenes in earthly affairs to confirm the Bible's message of salvation. Hume attacks both natural and revealed religious beliefs in his various writings.

a. Miracles

In a 1737 letter to Henry Home, Hume states that he intended to include a discussion of miracles in his *Treatise*, but ultimately left it out for fear of offending readers. His analysis of the subject eventually appeared some ten years later in his essay "Of Miracles" from the *Enquiry,* and is his first sustained attack on revealed religion. It is probably this main argument to which Hume refers.

The first of this two-part essay contains the argument for which Hume is most famous: uniform experience of natural law outweighs the testimony of any alleged miracle. Let us imagine a scale with two balancing pans. In the first pan we place the strongest evidence in support of the occurrence of a miracle. In the second we place our life-long experience of consistent laws of nature. According to Hume, the second pan will always outweigh the first. He writes:

It is experience only, which gives authority to human testimony [regarding miracles]; and it is the same experience, which assures us of the laws of nature. When, therefore, these two kinds of experience are contrary, we have nothing to do but subtract the one from the other, and embrace an opinion, either on one side or the other, with that assurance which arises from the remainder. But according to the principle here explained, this subtraction, with regard to all popular religions, amounts to an entire annihilation [*Enquiry*, 10.1].

Regardless of how strong the testimony is in favor of a given miracle, it can never come close to counterbalancing the overwhelming experience of unvaried laws of nature. Thus, proportioning one's belief to the evidence, the wise person must reject the weaker evidence concerning the alleged miracle.

In the second part of "Of Miracles", Hume discusses four factors that count against the credibility of most miracle testimonies:

(1) witnesses of miracles typically lack integrity;

(2) we are naturally inclined to enjoy sensational stories, and this has us uncritically perpetuate miracle accounts;

(3) miracle testimonies occur most often in less civilized countries;

(4) miracles support rival religious systems and thus discredit each other. But even if a miracle testimony is not encumbered by these four factors, we should still not believe it since it would be contrary to our consistent experience of laws of nature. He concludes his essay with the following cryptic comment about Christian belief in biblical miracles:

upon the whole, we may conclude, that the *Christian Religion* not only was at first attended with miracles, but even at this day cannot be believed by any reasonable person without one. Mere reason is insufficient to convince us of its veracity: And whoever is moved by *Faith* to assent to it, is conscious of a continued miracle in his own person, which subverts all the principles of his understanding, and gives him a determination to believe what is most contrary to custom and experience [*Enquiry*, 10.2].

At face value, his comment suggests a fideist approach to religious belief such as what Pascal recommends. That is, reason is incapable of establishing religious belief, and God must perform a miracle in our lives to make us open to belief through faith. However, according to the eighteenth-century Hume critic John Briggs, Hume's real point is that belief in Christianity requires "miraculous stupidity" (*The Nature of Religious Zeal*, 1775).

b. Psychology of Religious Belief

Another attack on revealed religion appears in Hume's essay "The Natural History of Religion" *(1757).* It is one of the first systematic attempts to explain the causes of religious belief solely in terms of psychological and sociological factors. We might see the "Natural History" as an answer to a challenge, such as the sort that William Adams poses here in his attack on Hume's "Of Miracles":

Whence could the religion and laws of this people [i.e., the Jews] so far exceed those of the wisest Heathens, and come out at once, in their first infancy, thus perfect and entire; when all human systems are found to grow up by degrees, and to ripen, after many improvements; into perfection [*An Essay*, Part 2]?

According to Adams, only divine intervention can account for the sophistication of the ancient Jewish religion. In the "Natural History," though, Hume offers an alternative explanation, and one that is grounded solely in human nature, without God's direct involvement in human history.

The work may be divided into three parts. In the first (Sections 1 and 4), Hume argues that polytheism, and not monotheism, was the original religion of primitive humans. Monotheism, he believes, was only a later development that emerged with the progress of various societies. The standard theory in Judeo-Christian theology was that early humans first believed in a single God, but as religious corruption crept in, people lapsed into polytheism. Hume was the first writer to systematically defend the position of original polytheism. In the second part (Sections 2-3, 5-8), Hume establishes the psychological principles that give rise to popular religious belief.

His thesis is that natural instincts—such as fear and the propensity to adulate—are the true causes of popular religious belief, and not divine intervention or rational argument. The third part of this work (Sections 9-15) compares various aspects of polytheism with monotheism, showing that one is no more superior than the other. Both contain points of absurdity. From this he concludes that we should suspend belief on the entire subject of religious truth.

c. Arguments for God's Existence

Around the same time that Hume was composing his "Natural History of Religion" he was also working on his *Dialogues Concerning Natural Religion*, which appeared in print two decades later, after his death. As the title of the work implies, it is a critique of *natural* religion, in contrast with *revealed* religion. There are three principal characters in the *Dialogues*. A character named Cleanthes, who espouses religious empiricism, defends the design argument for God's existence, but rejects the causal argument.

Next, a character named Demea, who is a religious rationalist, defends the causal argument for God's existence, but rejects the design argument. Finally, a character named Philo, who is a religious skeptic, argues against both the design and causal arguments. The main assaults on theistic proofs are conveyed by both Cleanthes and Philo, and, to that extent, both of their critiques likely represent Hume's views.

The specific version of the causal argument that Hume examines is one by Samuel Clarke (and Leibniz before him). Simplistic versions of the causal argument maintain that when we trace back the causes of things in the universe, the chain of causes cannot go back in time to infinity past; there must be a first cause to the causal sequence, which is God. Clarke's version differs in that it is theoretically possible for causal sequences of events to trace back through time to infinity past.

Thus, we cannot argue that God's existence is required to initiate a sequence of temporal causes. Nevertheless, Clarke argued, an important fact still needs to be explained: the fact that this infinite temporal sequence of causal events exists at all. Why does something exist rather than nothing? God, then, is the necessary cause of the whole series.

In response, the character Cleanthes argues that the flaw in the cosmological argument consists in assuming that there is some larger fact about the universe that needs explaining beyond the particular items in the series itself. Once we have a sufficient explanation for each particular fact in the infinite sequence of events, it makes no sense to inquire about the origin of the *collection* of these facts.

That is, once we adequately account for each individual fact, this constitutes a sufficient explanation of the whole collection. He writes, "Did I show you the particular causes of each individual in a collection of twenty particles of matter, I should think it very unreasonable, should you afterwards ask me, what was the cause of the whole twenty" (*Dialogues*, 9).

The design argument for God's existence is that the appearance of design in the natural world is evidence for the existence of a divine designer. The specific version of the argument that Hume examines is one from analogy, as stated here by Cleanthes:

The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance; of human designs, thought, wisdom, and intelligence. Since, therefore, the effects resemble each other, we are led to infer, by all the rules of analogy, that the causes also resemble; and that the Author of Nature is somewhat similar to the mind of man (*Dialogues*, 2).

Philo presents several criticisms against the design argument, many of which are now standard in discussions of the issue. According to Philo, the design argument is based on a faulty analogy: we do not

know whether the order in nature was the result of design, since, unlike our experience with the creation of machines, we did not witness the formation of the world. In Philo's words, "will any man tell me with a serious countenance, that an orderly universe must arise from some thought and art like the human, because we have experience of it?

To ascertain this reasoning, it were requisite that we had experience of the origin of worlds; and it is not sufficient, surely, that we have seen ships and cities arise from human art and contrivance" (ibid). Further, the vastness of the universe also weakens any comparison with human artifacts. Although the universe is orderly here, it may be chaotic elsewhere.

Similarly, if intelligent design is exhibited only in a small fraction of the universe, then we cannot say that it is the productive force of the *whole* universe. Philo states that "A very small part of this great system, during a very short time, is very imperfectly discovered to us; and do we thence pronounce decisively concerning the origin of the whole?" (ibid).

Philo also argues that natural design may be accounted for by nature alone, insofar as matter may contain within itself a principle of order, and "This at once solves all difficulties" (*Dialogues*, 6). And even if the design of the universe is of divine origin, we are not justified in concluding that this divine cause is a single, all powerful, or all good being. According to Philo, "Whether all these attributes are united in one subject, or dispersed among several independent beings, by what phenomena in nature can we pretend to decide the controversy?" (*Dialogues* 5).

7. Moral Theory

Hume's moral theory appears in Book 3 of the *Treatise* and in *An Enquiry Concerning the Principles of Morals* (1751). He opens his discussion in the *Treatise* by telling us what moral approval is *not*: it is not a rational judgment about either conceptual relations or empirical facts. To make his case he criticizes Samuel Clarke's rationalistic account of morality, which is that we rationally judge the fitness or unfitness of our actions in reference to eternal laws of righteousness, that are self-evidently known to all humans, just as is our knowledge of mathematical relations.

Hume presents several arguments against Clarke's view, one of which is an analogy from arboreal parricide: a young tree that overgrows and kills its parent exhibits the same alleged relations as a human child killing his parent. "Is not the one tree the cause of the other's existence; and the latter the cause of the destruction of the former, in the same manner as when a child murders his parent?" (*Treatise*, 3.1.1.24). If morality is a question of relations, then the young tree is immoral, which is absurd.

Hume also argues that moral assessments are not judgments about empirical facts. Take any immoral action, such as willful murder: "examine it in all lights, and see if you can find that matter of fact, or real existence, which you call *vice*" (*Treatise*, 3.1.1.25). You will not find any such fact, but only your own feelings of disapproval. In this context Hume makes his point that we cannot derive statements of obligation from statements of fact. When surveying various moral theories, Hume writes, "I am surpriz'd to find, that instead of the usual copulations of propositions, *is*, and *is not*, I meet with no proposition that is not connected with an *ought* or an *ought not*" (*Treatise*, 3.1.1.26). This move from *is* to *ought* is illegitimate, he argues, and is why people erroneously believe that morality is grounded in rational judgments.

Thus far Hume has only told us what moral approval is not, namely a judgment of reason. So what then does moral approval consist of? It is an emotional response, not a rational one. The details of this part of his theory rest on a distinction between three psychologically distinct players: the moral agent, the receiver, and the moral spectator. The moral *agent* is the person who performs an action, such as stealing a car; the

receiver is the person impacted by the conduct, such as the owner of the stolen car; and the moral *spectator* is the person who observes and, in this case, disapproves of the agent's action.

This agent-receiver-spectator distinction is the product of earlier moral sense theories championed by the Earl of Shaftesbury (1671-1713), Joseph Butler (1692-1752), and Francis Hutcheson (1694-1747). Most generally, moral sense theories maintained that humans have a faculty of *moral* perception, similar to our faculties of *sensory* perception. Just as our external senses detect qualities in external objects, such as colors and shapes, so too does our moral faculty detect good and bad moral qualities in people and actions.

For Hume, all actions of a moral agent are motivated by character traits, specifically either virtuous or vicious character traits. For example, if you donate money to a charity, then your action is motivated by a virtuous character trait. Hume argues that some virtuous character traits are instinctive or natural, such as benevolence, and others are acquired or artificial, such as justice. As an agent, your action will have an effect on a receiver. For example, if you as the agent give food to a starving person, then the receiver will experience an immediately agreeable feeling from your act. Also, the receiver may see the usefulness of your food donation, insofar as eating food will improve his health. When considering the usefulness of your food donation, then, the receiver will receive another agreeable feeling from your act. Finally, I, as a spectator, observe these agreeable feelings that the receiver experiences.

I, then, will sympathetically experience agreeable feelings along with the receiver. These sympathetic feelings of pleasure *constitute* my moral approval of the original act of charity that you, the agent, perform. By sympathetically experiencing this pleasure, I thereby pronounce your motivating character trait to be a virtue, as opposed to a vice. Suppose, on the other hand, that you as an agent did something to hurt the receiver, such as steal his car. I as the spectator would then sympathetically experience the receiver's pain and thereby pronounce your motivating character trait to be a vice, as opposed to a virtue.

In short, that is Hume's overall theory. There are, though, some important details that should also be mentioned. First, it is tricky to determine whether an agent's motivating character trait is natural or artificial, and Hume decides this one virtue at a time. For Hume, the natural virtues include benevolence, meekness, charity, and generosity. By contrast, the artificial virtues include justice, keeping promises, allegiance and chastity. Contrary to what one might expect, Hume classifies the key virtues that are necessary for a well-ordered state as artificial, and he classifies only the more supererogatory virtues as natural.

Hume's critics were quick to point out this paradox. Second, to spark a feeling of moral approval, the spectator does not have to actually witness the effect of an agent's action upon a receiver. The spectator might simply hear about it, or the spectator might even simply invent an entire scenario and think about the possible effects of hypothetical actions. This happens when we have moral reactions when reading works of fiction: "a very play or romance may afford us instances of this pleasure, which virtue conveys to us; and pain, which arises from vices" (*Treatise*, 3.1.2.2).

Third, although the agent, receiver, and spectator have psychologically distinct roles, in some situations a single person may perform more than one of these roles. For example, if I as an agent donate to charity, as a spectator to my own action I can also sympathize with the effect of my donation on the receiver. Finally, given various combinations of spectators and receivers, Hume concludes that there are four irreducible categories of qualities that exhaustively constitute moral virtue:

(1) qualities useful to others, which include benevolence, meekness, charity, justice, fidelity and veracity;

(2) qualities useful to oneself, which include industry, perseverance, and patience;

(3) qualities immediately agreeable to others, which include wit, eloquence and cleanliness;

(4) qualities immediately agreeable to oneself, which include good humor, self-esteem and pride. For Hume, most morally significant qualities and actions seem to fall into more than one of these categories. When Hume spoke about an agent's "useful" consequences, he often used the word "utility" as a synonym. This is particularly so in the *Enquiry Concerning the Principles of Morals* where the term "utility" appears over 50 times.

Moral theorists after Hume thus depicted his moral theory as the "theory of utility"—namely, that morality involves assessing the pleasing and painful consequences of actions on the receiver. It is this concept and terminology that inspired classic utilitarian philosophers, such as Jeremy Bentham (1748–1832).

8. Aesthetic, Political, and Economic Theory

Hume wrote two influential essays on the subject of aesthetic theory. In "Of Tragedy" (1757) he discusses the psychological reasons why we enjoy observing depictions of tragic events in theatrical production. He argues that "the energy of expression, the power of numbers, and the charm of imitation" convey the sense of pleasure. He particularly stresses the technical artistry involved when an artistic work imitates the original. In "*Of the Standard of Taste*" (1757) he argues that there is a uniform sense of artistic judgment in human nature, similar to our uniform sense of moral judgment.

Specific objects consistently trigger feelings of beauty within us, as our human nature dictates. Just as we can refine our external senses such as our palate, we can also refine our sense of artistic beauty and thus cultivate a delicacy of taste. In spite of this uniform standard of taste, two factors create some difference in our judgments: "the one is the different humours of particular men; the other, the particular manners and opinions of our age and country."

In political theory, Hume has both theoretical discussions on the origins of government and more informal essays on popular political controversies of his day. In his theoretical discussions, he attacks two basic notions in eighteenth-century political philosophy: the social contract and the instinctive nature of justice regarding private property.

In his 1748 essay "Of the Original Contract," he argues that political allegiance is not grounded in any social contract, but instead on our general observation that society cannot be maintained without a governmental system. He concedes that in savage times there may have been an unwritten contract among tribe members for the sake of peace and order. However, he argues, this was no permanent basis of government as social contract theorists pretend. There is nothing to transmit that original contract onwards from generation to generation, and our experience of actual political events shows that governmental authority is founded on conquest, not elections or consent.

We do not even tacitly consent to a contract since many of us have no real choice about remaining in our countries: "Can we seriously say that a poor peasant or artisan has a free choice to leave his country, when he knows no foreign language or manners, and lives from day to day by the small wages which he acquires?" Political allegiance, he concludes, is ultimately based on a primary instinct of selfishness, and only through reflection will we see how we benefit from an orderly society.

Concerning private property, in both the *Treatise* and the *Enquiry Concerning the Principles of Morals* (1751), Hume in essence argues against Locke's notion of the natural right to private property. For Hume, we have no primary instinct to recognize private property, and all conceptions of justice regarding property are founded solely on how useful the convention of property is to us. We can see how property ownership is tied to usefulness when considering scenarios concerning the availability of necessities.

When necessities are in overabundance, I can take what I want any time, and there is no usefulness in my claiming any property as my own. When the opposite happens and necessities are scarce, I do not acknowledge anyone's claim to property and take what I want from others for my own survival. Thus, "the rules of equity or justice [regarding property] depend entirely on the particular state and condition in which men are placed, and owe their origin and existence to that utility, which results to the public from their strict and regular observance" (*Enquiry Concerning the Principles of Morals*, 3). Further, if we closely inspect human nature, we will never find a primary instinct that inclines us to acknowledge private property. It is nothing like the primary instinct of nest building in birds. While the sense of justice regarding private property is a firmly fixed habit, it is nevertheless its usefulness to society that gives it value.

As for Hume's informal essays on popular political controversies, several of these involve party disputes between the politically conservative Tory party that supported a strong monarchy, and the politically liberal Whig party which supported a constitutional government. Two consistent themes emerge in these essays. First, in securing peace, a monarchy with strong authority is probably better than a pure republic. Hume sides with the Tories because of their traditional support of the monarchy.

Except in extreme cases, he opposes the Lockean argument offered by Whigs that justifies overthrowing political authorities when those authorities fail to protect the rights of the people. Hume notes, though, that monarchies and republics each have their strong points. Monarchies encourage the arts, and republics encourage science and trade. Hume also appreciates the mixed form of government within Great Britain, which fosters liberty of the press. The second theme in Hume's political essays is that revolutions and civil wars principally arise from zealousness within party factions. Political moderation, he argues, is the best antidote to potentially ruinous party conflict.

In economic theory, Hume wrote influential essays on money, interest, trade, credit, and taxes. Many of these target the mercantile system and its view that a country increases its wealth by increasing the quantity of gold and silver in that country. For mercantilists, three means were commonly employed to this end:

(1) capture gold, silver and raw material from other countries through colonization;

(2) discourage imports through tariffs and monopolies, which keeps acquired gold and silver within one's country's borders; and,

(3) increase exports, which brings in money from outside countries. In Great Britain, mercantile policies were instituted through the Navigation Acts, which prohibited trade between British colonies and foreign countries. These protectionist laws ultimately led to the American Revolution.

The most famous of Hume's anti-mercantilist arguments is now called *Hume's gold-flow theory*, and appears in his essays "Of Money" (1752) and "*Of the Balance of Trade" (1752)*. Contrary to mercantilists who advocated locking up money in one's home country, Hume argued that increased money in one country automatically disperses to other countries. Suppose, for example, that Great Britain receives an influx of new money.

This new money will drive up prices of labor and domestic products in Great Britain. Products in foreign countries, then, will be cheaper than in Great Britain; Britain, then, will import these products, thereby sending new money to foreign countries. Hume compares this reshuffling of wealth to the level of fluids in interconnected chambers: if I add fluid to one chamber, then, under the weight of gravity, this will disperse to the others until the level is the same in all chambers. A similar phenomenon will occur if we *lose* money in our home country by purchasing imports from foreign countries. As the quantity of money decreases in our home country, this will drive down the prices of labor and domestic products.

Our products, then, will be cheaper than foreign products, and we will gain money through exports. On the fluid analogy, by removing fluid from one chamber, more fluid is drawn in from surrounding chambers.

9. History and Philosophy

Although Hume is now remembered mainly as a philosopher, in his own day he had at least as much impact as a historian. His *History of England* appeared in four installments between 1754 and 1762 and covers the periods of British history from most ancient times through the seventeenth-century. To his 18th and 19th century readers, he was not just another historian, but a uniquely *philosophical* historian who had an ability to look into the minds of historical figures and uncover the motives behind their conduct. A political theme underlying the whole *History* is, once again, a conflict between Tory and Whig ideology.

In the Britain of Hume's day, a major point of contention between the two parties was whether the English government was historically an absolute or limited monarchy. Tories believed that it was traditionally absolute, with governmental authority being grounded in royal prerogative. Whigs, on the other hand, believed that it was traditionally limited, with the foundation of government resting in the individual liberty of the people, as expressed in the parliamentary voice of the commons. As a historian, Hume felt that he was politically moderate, tending to see both the strengths and weaknesses in opposing viewpoints:

With regard to politics and the character of princes and great men, I think I am very moderate. My views of things are more conformable to Whig principles; my representations of persons to Tory prejudices. Nothing can so much prove that men commonly regard more persons than things, as to find that I am commonly numbered among the Tories [Hume to John Clephane, 1756].

However, to radical Whig British readers, Hume was a conservative Tory who defended royal prerogative.

Hume takes two distinct positions on the prerogative issue. From a theoretical and idealistic perspective, he favored a mixed constitution, mediating between the authority of the monarch and that of the Parliament. Discussing this issue in his 1741 *Essays*, he holds that we should learn "the lesson of moderation in all our political controversies." However, from the perspective of how British history actually unfolded, he emphasized royal prerogative. And, as a "philosophical historian," he tried to show how human nature gave rise to the tendency towards royal prerogative.

In his brief autobiography, "My Own Life," he says that he rejected the "senseless clamour" of Whig ideology, and believed "It is ridiculous to consider the English constitution before that period [of the Stuart Monarchs] as a regular plan of liberty." Gilbert Stuart best encapsulated Hume's historical stance on the prerogative issue: "his history, from its beginning to its conclusion, is chiefly to be regarded as a plausible defence of prerogative" (*A View of Society in Europe*, 1778, 2.1.1). In short, Hume's Tory narrative is this. As early as the Anglo Saxon period, the commons did not participate in the king's advisory council.

The Witenagemot, for example, was only a council of nobles and bishops, which the king could listen to or ignore as he saw fit. Throughout the succeeding centuries, England's great kings were those who exercised absolute rule, and took advantage of prerogative courts such as the Star Chamber. Elizabeth—England's most beloved monarch—was in fact a tyrant, and her reign was much like that of a Turkish sultan. Charles I—a largely virtuous man—tried to follow in her footsteps as a strong monarch. After a few minor lapses in judgment, and a few too many concessions to Catholics, Protestant zealots rose up against him, and he was ultimately executed. To avoid over-characterizing royal prerogative, Hume occasionally condemns arbitrary actions of monarchs and praises efforts for preserving liberty. Nevertheless, Whig critics like Gilbert Stuart argued that Hume's emphasis was decisively in favor of prerogative.

There is an irony to Hume's preference for prerogative over civil liberty. His philosophical writings were among the most controversial pieces of literature of the time, and would have been impossible to publish if Britain was not a friend to liberty. Although Hume was certainly no enemy to liberty, he believed that it was best achieved through moderation rather than Whig radicalism. He writes, "If any other rule than established practice be followed, factions and dissentions must multiply without end" (*History*, Appendix 3).

To Hume's way of thinking, the loudest voices favoring liberty were Calvinistic religious fanatics who accomplished little more than dissention. A strong, centralized and moderating force was the best way to avoid factious disruption from the start.

ADAM SMITH:

Adam Smith (5 June 1723 – 17 July 1790) was a Scottish moral philosopher and a pioneer of political economy. One of the key figures of the Scottish Enlightenment, Smith is best known for two classic works: *The Theory of Moral Sentiments*(1759), and ***An Inquiry into the Nature and Causes of the Wealth of Nations***, generally referred to by its shortened title ***The Wealth of Nations***, is the *magnum opus* of the Scottish economist and moral philosopher Adam Smith.

First published in 1776, the book offers one of the world's first collected descriptions of what builds nations' wealth and is today a fundamental work in classical economics. Through reflection over the economics at the beginning of the Industrial Revolution the book touches upon such broad topics as the division of labour, productivity and free markets. Smith laid the foundations of classical free market economic theory.

The Wealth of Nations was a precursor to the modern academic discipline of economics. In this and other works, he expounded upon how rational self-interest and competition can lead to economic prosperity. *The Wealth of Nations* was named among the 100 Best Scottish Books of all time.

His believes;

- Laissez-faire**,** (French: "allow to do"), policy of minimum governmental interference in the economic affairs of individuals and society. The origin of the term is uncertain. Laissez-faire was a political as well as an economic doctrine.
  The pervading theory of the 19th century was that the individual, pursuing his own desired ends, would thereby achieve the best results for the society of which he was a part. The function of the state was to maintain order and security and to avoid interference with the initiative of the individual in pursuit of his own desired goals.
  But laissez-faire advocates nonetheless argued that government had an essential role in enforcing contracts as well as ensuring civil order. The philosophy's popularity reached its peak around 1870. In the late 19th century the acute changes caused by industrial growth and the adoption of mass-production techniques proved the laissez-faire doctrine insufficient as a guiding philosophy. Although the original concept yielded to new theories that attracted wider support, the general philosophy still has its advocates.

- **Invisible hand of the market** is a metaphor used by Adam Smith to describe the self-regulating behavior of the marketplace. Individuals can make profit, and maximize it without the need for government intervention.

The exact phrase is used just three times in Smith's writings, but has come to capture his important claim that individuals' efforts to maximize their own gains in a free market may benefit society, even if the ambitious have no benevolent intentions.

Smith came up with the two meanings of the phrase from Richard Cantillon who developed both economic applications in his model of the isolated estate. Smith assumed that individuals try to maximize their own good (and become wealthier), and by doing so, through trade and entrepreneurship, society as a whole is better off.
Furthermore, any government intervention in the economy isn't needed because the invisible hand is the best guide for the economy. As a result, he is responsible for popularizing many of the ideas that underpin the school of thought that became known as classical economics.

Other economists built on Smith's work to solidify classical economic theory, which would become the dominant school of economic thought through the Great Depression.

- Market Mechanisms; this is basically an analysis of price formation and resource allocation. His assumptions claims that in the competitive market in the long run, prices and cost of production are identical. He said that short time prices are market prices. High prices will bring in more resources into that sector.
  He also offered the idea of optimum allocation of resources. Smith also offered the other of demand and supply, though he objected to government interferences/intervention.
  Adam Smith favoured;
  a) Protection of infant industries
  b) Regulation of economy for National Defence
  c) Welfare and Justice.
- Capital and Capitalist; wealth depend on capital accumulation, capital accumulation allows division of labour and division of employment and economic development.
- Adam Smith also stressed on productive and unproductive labour:
  The two things Smith was concerned with are;

a. Level of production and
b. How much of the labour that is engaged in production.

- **Smith Theory of Value;**
  Adam Smith assumed that price and value were identical. The problems he was concerned with are:
  a. The measurement of Value
  b. What determines value
  c. What determines price level

To Adam Smith the wealth of a nation depended on **exchange**, we exchange goods based on price or value so if you cannot have a theory of price and value then you cannot say anything about exchange.

His two definitions of value are (a) Use value and (b) Exchange value

Exchange value implies that price is exchanged value as expressed in the market.

While:

Used value is a social thing having social or ethical value.

In his discussion of relative prices he identified three areas to consider namely

I. Cost of production theory
II. Labour cost theory and
III. Labour demand theory of relative prices.

Also among his theories is welfare theory.

Thomas Robert Malthus:

The Reverend **Thomas Robert Malthus** FRS (1766 –1834) was an English cleric and scholar, influential in the fields of political economy, demography and macroeconomics. Malthus himself used only his middle name, Robert. He was born February 13, 1766 at Westcott, United Kingdom and died December 29, 1834 at Bath, United Kingdom. Robert was greatly influenced by Adam Smith, David Ricardo, and other scholars. Malthus is widely regarded as the founder of modern demography. In essence, Malthus was an economic pessimist.

His Essay on the Principle of Population observed that sooner or later population will be checked by famine and disease, leading to what is known as a Malthusian catastrophe

Malthusian Theory of Population

Thomas Robert Malthus was the first economist to propose a systematic theory of population. He articulated his views regarding population in his famous book, *Essay on the Principle of Population* (1798), for which he collected empirical data to support his thesis. Malthus had the second edition of his book published in 1803, in which he modified some of his views from the first edition, but essentially his original thesis did not change.

In *Essay on the Principle of Population,* Malthus proposes the principle that human populations grow exponentially (i.e., doubling with each cycle) while food production grows at an arithmetic rate (i.e. by the repeated addition of a uniform increment in each uniform interval of time). Thus, while food output was likely to increase in a series of twenty-five year intervals in the arithmetic progression 1, 2, 3, 4, 5, 6, 7, 8, 9, and so on, population was capable of increasing in the geometric progression 1, 2, 4, 8, 16, 32, 64, 128, 256, and so forth. This scenario of arithmetic food growth with simultaneous geometric human population growth predicted a future when humans would have no resources to survive on. He argued that population multiplies geometrically and food arithmetically; therefore, the population will eventually outstrip the food supply.

To avoid such a catastrophe, Malthus urged controls on population growth.

On the basis of a hypothetical world population of one billion in the early nineteenth century and an adequate means of subsistence at that time, Malthus suggested that there was a potential for a population increase to 256 billion within 200 years but that the means of subsistence were only capable of being increased enough for nine billion to be fed at the level prevailing at the beginning of the period. He therefore considered that the population increase should be kept down to the level at which it could be supported by the operation of various checks on population growth, which he categorized as "preventive" and "positive" checks.

The chief preventive check envisaged by Malthus was that of "moral restraint", which was seen as a deliberate decision by men to refrain "from pursuing the dictate of nature in an early attachment to one woman", i.e. to marry later in life than had been usual and only at a stage when fully capable of supporting a family.

This, it was anticipated, would give rise to smaller families and probably to fewer families, but Malthus was strongly opposed to birth control within marriage and did not suggest that parents should try to restrict the number of children born to them after their marriage. Malthus was clearly aware that problems might arise from the postponement of marriage to a later date, such as an increase in the number of illegitimate births, but considered that these problems were likely to be less serious than those caused by a continuation of rapid population increase.

He saw positive checks to population growth as being any causes that contributed to the shortening of human lifespans. He included in this category poor living and working conditions which might give rise to low resistance to disease, as well as more obvious factors such as disease itself, war, and famine. Some of the conclusions that can be drawn from Malthus's ideas thus have obvious political connotations and this partly accounts for the interest in his writings and possibly also the misrepresentation of some of his ideas by authors such as Cobbett, the famous early English radical.

Some later writers modified his ideas, suggesting, for example, strong government action to ensure later marriages. Others did not accept the view that birth control should be forbidden after marriage, and one group in particular, called the Malthusian League, strongly argued the case for birth control, though this was contrary to the principles of conduct which Malthus himself advocated.

Between 1798 and 1826 he published six editions of *An Essay on the Principle of Population*, updating each edition to incorporate new material, to address criticism, and to convey changes in his own perspectives on the subject

Malthus was a political economist who was concerned about, what he saw as, the decline of living conditions in nineteenth century England. He blamed this decline on three elements: The overproduction of young; the inability of resources to keep up with the rising human population; and the irresponsibility of the lower classes.

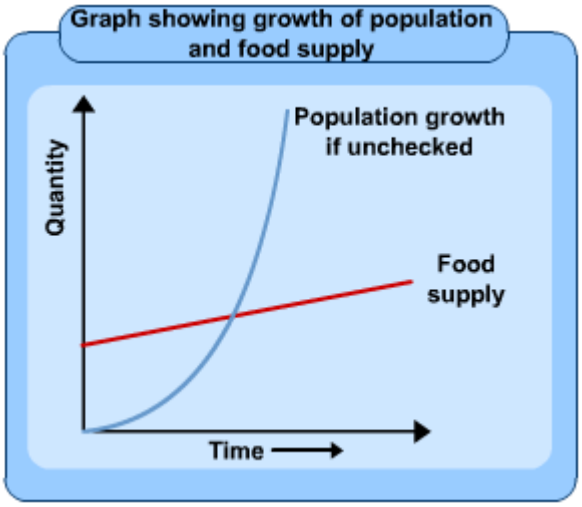
To combat this, Malthus suggested the family size of the lower class ought to be regulated such that poor families do not produce more children than they can support. Does this sound familiar? China has implemented a policy of one child per family (though this applies to *all families*, not just those of the lower class).

Robert Malthus Population Model:

It is possible you will be asked about the consequences of **Population growth**. Firstly, it is important that you appreciate two contrasting viewpoints.

The first is from Malthus, who was writing at the end of the 18th century. He believed that only bad could come from population growth. Population he said grows faster than food supply. This he said was because food supply can only grow arithmetically, for example, 1 then 2 then 3-4-5-6-7-8 but, population grows geometrically 2-4-8-16-32-64.

Consequently, there is no way food supply can keep up with population growth.



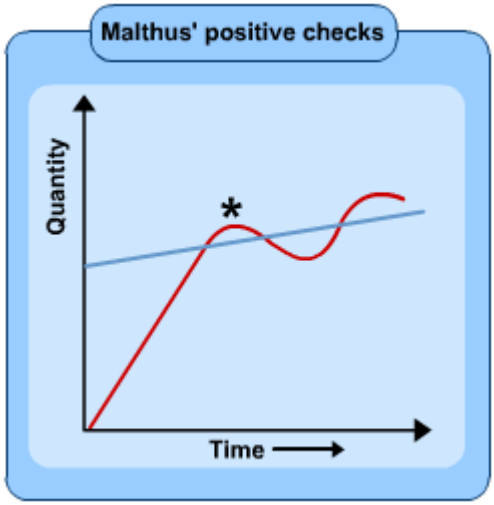
Population grows exponentially, for example, 1-2-4-8-16-32-64.

Food supply grows arithmetically, for example, 1-2-3-4-5-6.

Therefore, population will inevitably exceed food supply.

He then went on two say that there are two possible outcomes.

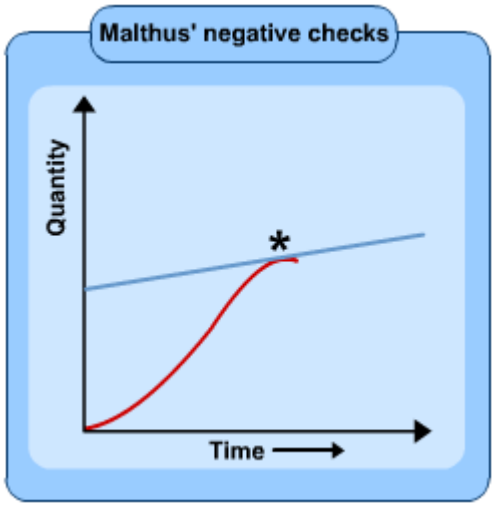
Firstly, he said population could exceed food supply only to be positively "checked" (reduced) by famine, war, and disease.



*** Population exceeds food supply and is kept in check by war, famine, or disease. It then drops below the food supply. As the population recovers, so the cycle continues.**

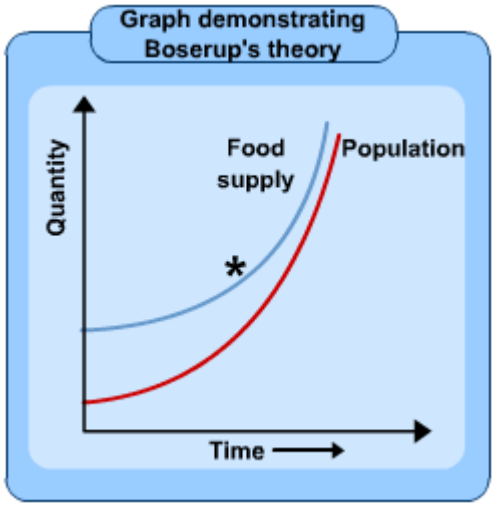
Alternatively, the population could pre-empt the food shortages and so slow their population growth keeping it within the limits of the food supply. Malthus called these negative checks. These negative checks would

include later marriages and abstinence from sex (Remember Malthus was writing before wide spread contraception!). People would make these decisions sub-consciously as food prices increased and standard of living fell.



*** Here, as population starts to approach the limits of the food supply, so growth slows. Malthus says this slowing is caused by delayed marriage.**

Boserup, on the other hand, said that food supply would increase to accommodate population growth. As a population found that they were approaching food shortages they would identify ways of increasing supply whether through new technology, better seeds, new farming methods. **In the graph you can see that food supply will increase with population:**



*** Boserup argues that as the population approaches the limits of the food supply, that food supply increases as new technology improves yeilds.**

So who is correct? The following table lists arguments for both sides:

Evidence for Malthus:

Famines are frequently happening in less developed world countries. These are also often in countries that have a fast growing population.

Whilst a very old theory Malthus can be adapted for today if we say that increasing population cannot be sustained by the environment. The 'Club of Rome' applies Malthusian ideas to the modern world and says that if population continues to grow our attempts to cater for it will lead to great environmental disasters. This would include global warming, oil spillage, ozone depletion, and desertification.

Malthusian supporters argue that everything at the moment may appear ok but this doesn't mean we won't face future disasters.

A lot of people believe that future conflicts could be fought over water supplies. Is Malthus' idea correct except that he should have replaced food with water?

Evidence for Boserup:

There is enough food to feed the world - this is an indisputable fact. The problem lies with distribution - it is not always where it is needed.

Famine is more likely to be the result of a natural disaster, war or the country growing too many cash crops. Cash crops are grown to sell overseas - such as cotton or tea. In times of famine the countries are often producing large cash crop harvests. They need the money to try and pay off foreign debts.

New farming machinery and re-organisation has greatly increased the efficiency of farms and consequently the yields.

The green revolution produced seeds that could increase yields by up to eight times.

Criticism of Thomas Robert Malthus Population Model:

Many theoretical and political critiques of Malthus and Malthusian thinking emerged soon after the publication of the first *Essay on Population,* most notably in the work of the reformist industrialist Robert Owen, the essayist William Hazlitt, and economists John Stuart Mill and Nassau William Senior, and moralist William Cobbett.

The highpoint of opposition to Malthus' ideas came in the middle of the nineteenth century with the writings of Karl Marx (*Capital,* 1867) and Friedrich Engels (*Outlines of a Critique of Political Economy,* 1844), who argued that what Malthus saw as the problem of the pressure of population on the means of production was actually that of the pressure of the means of production on population. In other words, the seeming excess of population that Malthus attributed to the seemingly innate disposition of the poor to reproduce beyond their means was actually a product of the very dynamic of capitalist economy—its "reserve army of the unemployed."

Evolutionists John Maynard Smith and Ronald Fisher were both critical of Malthus' hypothesis, though it was Fisher who referred to the growth rate **r** (used in equations such as the logistic function) as the Malthusian parameter. Fisher referred to "a relic of creationist philosophy" in observing the fecundity of nature and deducing (as Charles Darwin did) that this therefore drove natural selection. Smith doubted that famine was the great leveler that Malthus insisted it was.

Many twentieth century economists, such as Julian Lincoln Simon, also criticized Malthus' conclusions. They note that despite the predictions of Malthus and the Neo-Malthusians, massive geometric population growth in the twentieth century has not resulted in a Malthusian catastrophe, largely due to the influence of

technological advances and the expansion of the market economy, division of labor, and stock of capital goods.

Malthus argued that as wages increase within a country, the birthrate increases while the death rate decreases. His reasoning was that high incomes allowed people to have sufficient means to raise their children, such as feeding and clothing them, thus resulting in greater desire to have more children, which increases the population. In addition, high incomes also allowed people to be able to afford proper medication to fight off potentially harmful diseases, thus decreasing the death rate.

As a result, wage increases caused population to grow as the birthrate increases and the death rate decreases. He further argued that as the supply of labor increases with the increased population growth at a constant labor demand, the wages earned would decrease eventually to subsistence where the birthrate is equal to the death rate, resulting in no population growth.

However, the world generally has experienced quite a different result than the one Malthus predicted. During the late nineteenth and early twentieth centuries, the population increased as did the wages, with the spread of the industrial revolution. Malthus assumed a constant labor demand in his assessment of England and in doing so, he ignored the effects of industrialization.

As the world became more industrialized, the level of technology and production grew, causing an increase in labor demand. Thus, even though labor supply increased so did the demand for labor. In fact, the labor demand arguably increased *more* than the supply, as measured by the historically observed increase in real wages globally with population growth. Equally, technological advances in agriculture dramatically increased food production, allowing it to meet and even exceed population growth. The incidence of famine has consequently decreased, with famines in the modern era generally caused by war or government policies rather than actual lack of food.

JEAN-BAPTISTE SAY:

Jean-Baptiste Say (1767–1832) was a French economist and businessman. He had classically liberal views and argued in favor of competition, free trade, and lifting restraints on business. He is best known due to Say's Law, which is named after him and at times credited to him, but while he discussed and popularized it, he did not originate it. He was born January 5, 1767 in Lyon, France to the family of Francoise Brun de Castanet Say and Jean-Etienne Say. He died November15, 1832 at Paris, France. He had two children, Horace Say and Octavie Say. He was influenced by Richard Cantillon, Adam Smith and other scholars.

Say's Law:

He is well known for Say's Law (or Say's Law of Markets), often summarised as

- "Aggregate supply creates its own aggregate demand",
- "Supply creates its own demand",
- "Supply constitutes its own demand",

Say's law says “the supply (sale) of X creates the demand (purchase) of Y.” This law can be shown by business-cycle statistics. When downturns start, production is always first to decline, ahead of demand. When the economy recovers, production recovers ahead of demand.

From Say's Law it can be understood that if inventory doesn't sell, then prices will be cut until it does. Or, if a manufacturer wants to sell to a mass market, he knows that he cannot wait until everyone can afford something expensive; he knows that he has to market his product at a low enough price that it will begin to sell. When industrial production increases and more goods become available, some old goods will go unsold as money moves over to the new goods, and prices will have to fall right across the board.

That is called "deflation," and it is what happened in the United States from the end of the Civil War until 1896, while the United States grew to have the largest economy in the world. Money became more valuable, and wages continued to buy as much as was desired of total production. Hence, the reason why there has been no deflation since World War II, even though the U.S. economy has grown vastly since then, was that deflation will only happen if the money supply does not grow fast enough as production increases. Prices will remain stable or even increase (inflation) if the money supply grows as fast or faster than production.

If the money supply does not increase, the "wage and price spiral" runs out of money. If a business raises prices to offset wage increases, less of its production will be sold. If enough is sold that revenue actually increases, as desired, this will have two effects:

(1) people are getting less for their money from this business, which decreases the value going to consumers.

(2) money is drawn from elsewhere in the economy, which means that there is less money left to buy the production of other businesses. Somebody gets the short end of the stick. Somebody has to cut prices. Then there is this “real wages” vs. “nominal wages” paradox.

The reason why real wages would rise as nominal wages fell may be sketched by a simple consideration. Expanded production will always mean expanded demand for labor. Drawing off labor to produce new goods bids up the value of labor, which would offset the downward tendency of deflation. This all lead to the following conclusion:

Wages that are not allowed to naturally seek a market clearing level will produce the same results as any other kind of price fixing scheme: when wages (prices) are too low, a shortage results; and when wages (prices) are too high, a surplus results. A surplus in the labor market is called "unemployment." Hoover and Roosevelt thus engineered, not greater demand and prosperity, but greater unemployment and unchecked depression (Sowel 1972).

Another way to understand the concept of “real wages” is to note that what wages will buy depends on the value of money, while the value of money depends on the transactions the money supply must cover, in other words the output of the economy. Thus, what wages will buy depends on what the economy produces, and Say's Law means that the value of money will rise to a market clearing level, that is, until production may be purchased by the money held by consumers.

The magic question here, with cutting prices in the deflation of a growing economy but inability to cut wages to the same degree, is this what is going to restore the profit margin?

The answer according to Say is “greater productivity.” If the workers with higher real wages produce proportionally more for those wages, then the balance of revenue and expenses will be restored (Say 1803).

Therefore, once Say's Law is understood, it is obvious that growth in production takes care of demand, as long as wages are allowed to maintain market-clearing levels. What happens to the money supply is secondary, though it helps to avoid falling wages, since people are not going to like that, whether it really makes any difference or not (and it will increase the value of debt). Price deflation is acceptable as long as wages do not also fall, but that is a tough target to hit. Growth in productivity, not just growth in production, is ultimately what makes life better and increases wealth for everyone.

Jean-Baptiste Say supported the *laissez-faire* position of Adam Smith, stating that overproduction in one market will naturally return to balance without government interference as the producer will either adjust production to different items or adjust prices until the goods sell. Say did not, however, agree with Smith's labor theory of value that the value of a commodity depends on the labor involved in its production, arguing instead that value derives from its ability to satisfy the desires or needs of the consumer.

Say's work in macro-economics:

In 1803, Say published his most famous work, *Treatise on Political Economy*. His distinctive approach to economics was the outcome of a muddled marriage of Condillac's utility theory of demand and Adam Smith's cost theory of supply.

Value, Say claimed, was the outcome of the interaction of these two. In this respect, he departs considerably from the Classical Ricardian School, where value is determined purely from the cost side. Say's approach was taken up by French Liberal School and he can be considered a precursor of the Marginalist Revolution. Like Richard Cantillon before him and the Austrian School after him, Say also placed great emphasis on the risk-taking entrepreneur and even tried to include him as the "fourth" factor of production in his analysis.

Say brought the entrepreneur to life and to the center of the stage. But what do these entrepreneurs do? They use their "industry" (a term Say prefered to "labor") to organize and direct the factors of production so as to achieve the "satisfaction of human wants." But they are not merely managers. They are forecasters, project appraisers, and risk-takers as well. Out of their own financial capital, or that borrowed from someone else, they advance funds to the owners of labor, natural resources ("land"), and machinery ("tools") (Say 1803).

For Say, the foundation of value is utility, or the capacity of a good or service to satisfy some human desire. Those desires and the preferences, expectations, and customs that lie behind them must be taken as givens, as data, by the analyst. The task is to reason from those data. Say is most emphatic in denying the claims of Adam Smith, David Ricardo, and others that the basis for value is labor, or "productive agency" (Say 1803). In this, he anticipated the Austrian School's subjective theory of value.

Nowhere is Say's radicalism more evident than in his critique of government intervention into the economy. Most succinctly stated, he declared that self-interest and the search for profits will push entrepreneurs toward satisfying consumer demand:

DAVID RICARDO (1772 –1823):

He was a British political economist. He was one of the most influential of the classical economists, along with Thomas Malthus, Adam Smith, and James Mill. He was born April 18, 1772, in London, United Kingdom. He died September 11, 1823, at Gloucestershire, United Kingdom.

David Ricardo was the third of 17 children in a Sephardic Jewish family (from Portugal) that emigrated from the Netherlands to England just prior to his birth. At age 14, Ricardo joined his father at the London Stock Exchange, where he began to learn about the workings of finance. This beginning set the stage for Ricardo's later success in the stock market and real estate.

Ricardo rejected the orthodox Jewish beliefs of his family and eloped with a Quakeress, Priscilla Anne Wilkinson, when he was 21. He later became a Unitarian, and was disinherited by his family. It is likely that his mother never spoke to him again.

He was married to Priscilla Anne Wilkinson in 1793. He began his professional life as a broker and financial market speculator. He was influenced by Adam Smith, Jeremy Bentham and James Mill.

The scope of Economics to Ricardo;

He was concerned with the functional distribution of income. He wanted to know the laws which regulate the distribution of income among capitalists, landlords and labour. He emphasized on the theory of Distributions of income. He also deliberated on theory of rent, wages and profit.

Law of Rent:

Ricardo formulate the "law of rent" around 1809. It was the first clear exposition of the source and magnitude of land rents, and is among the most important and firmly established principles of economics. The Law of Rent states that the rent of a land site is equal to the economic advantage obtained by using the site in its most productive use, relative to the advantage obtained by using marginal (the best rent-free) land for the same purpose, given the same inputs of labor and capital.

To see how competition generates rent and, therefore, determines the magnitudes of the two remaining shares, we follow Ricardo's original logic. He began by noting that if land is not scarce, then it generates no rent.

But, of course, land is scarce and of differing qualities. As population increases, it becomes necessary to cultivate less quality land. Given competition among farmers, and assuming, for example, that there is a difference of ten units of corn in profits between the highest quality land and a low quality land, the farmer on the lower quality land would bid up to ten units in order to farm on the highest quality land. As Ricardo tells the story, the landowner of the higher quality land would insist on a ten unit rent

With this simple model, Ricardo could explain how the two remaining shares, rent and profits, were determined. The logic is crystal clear:

1. A given population requires a certain amount of food.
2. The lowest quality land called into cultivation generates some profit (total revenue—wages).
3. This profit becomes the prevailing profit through competition among farmers—any difference between the profit generated by higher quality land and the profit generated by the lowest quality land accrues to the landowner as rent.

This law has a number of important implications, perhaps the most important being its implication for wages. The law of rent implies that wages bear no systematic relationship to the productivity of labor, and are instead determined solely by its productivity "on marginal land," as all production in excess of that amount will be appropriated by landowners in rent.

The law of rent makes it clear that the landowner has no role in setting land rents: he simply appropriates the additional production his more advantageous site makes possible, compared to marginal sites. The law also implies that the landowner cannot pass on the burden of any cost such as land taxes to his tenants, as long as such costs do not affect the relative productivity of his land and marginal land.

Ricardian Models:

Comparative Advantage

"Comparative advantage" Ricardo argued in favour of industry specialisation and free trade. He attempted to prove, using simple mathematics, that industry specialization combined with free international trade always produces positive results. This theory expanded on the concept of absolute advantage.

Ricardo argued that there is mutual national benefit from trade even if one country is more competitive in every area than its trading counterpart and that a nation should concentrate resources only on industries where it had a comparative advantage that is in those industries in which it has the greatest competitive edge.

Theory of Comparative Advantage

In his 1815 work, *Essay on the Influence of a Low Price of Corn on the Profits of Stock*, Ricardo articulated what came to be known as the "law of diminishing returns." One of the most famous laws of economics, it holds that as more and more resources are combined in production with a fixed resource—for example, as more labor and machinery are used on a fixed amount of land—the additions to output will diminish.

Ricardo also opposed the protectionist Corn Laws, which restricted imports of wheat. In arguing for free trade, Ricardo formulated the idea of comparative costs, today called "comparative advantage." Comparative advantage, a very subtle idea, is the main basis for most economists' belief in free trade today. The idea is this: A country that trades for products that it can get at lower cost from another country is better off than if it had made the products at home.

Ricardo illustrated this by means of a comparison of the productivity of two imaginary countries, "Richland" and "Poorland." The gains in foreign trade for both of his imaginary countries come, Ricardo observed, because each country specializes in producing the goods for which its comparative cost is lower (Ricardo 1815). In his example, both countries produce wine and bread, but "Richland's" workers are more productive, requiring fewer hours of labor to produce each item:

Analyzing this in more detail, the following table considers England and Portugal as producers of wheat and wine.

Table 1.

COUNTRY	WHEAT	WINE
	Cost per Unit in Man Hours	Cost per Unit in Man Hours
England	15	30
Portugal	10	15

It can be seen that Portugal can produce both wheat and wine more cheaply than England (it has an absolute advantage in both commodities). What David Ricardo saw was that it could still be mutually beneficial for both countries to specialize and trade. In Table 1, a unit of wine in England costs the same amount to produce as two units of wheat. Production of an extra unit of wine means foregoing production of two units of wheat—thus, the "opportunity cost" of a unit of wine is two units of wheat. In Portugal, a unit of wine costs one and a half units of wheat to produce—thus, the "opportunity cost" of a unit of wine is 1.5 units of wheat in Portugal. Because relative or comparative costs differ, it will still be mutually advantageous for both countries to trade, even though Portugal has an absolute advantage in both commodities. Portugal is relatively better at producing wine than wheat: so Portugal is said to have a comparative advantage in the production of wine. England is relatively better at producing wheat than wine: so England is said to have a comparative advantage in the production of wheat.

When both countries specialize and trade their products, both countries gain. These gains come, Ricardo observed, because each country specializes in producing the goods for which its comparative cost is lower.

Writing a century before Paul Samuelson and other modern economists popularized the use of equations, Ricardo is still esteemed for his uncanny ability to arrive at complex conclusions without any of the mathematical tools now deemed essential. As economist David Friedman (1992) put it in his textbook, *Price Theory*, "The modern economist reading Ricardo's *Principles* feels rather as a member of one of the Mount Everest expeditions would feel if, arriving at the top of the mountain, he encountered a hiker clad in T-shirt and tennis shoes."

Principles of Political Economy and Taxation

The fundamental doctrine of Ricardo's work *Principles of Political Economy and Taxation* is that, on the hypothesis of free competition, exchange value is determined by the labor expended in production. Ricardo's theory of distribution can been briefly enunciated as follows:

1. The demand for food determines the margin of cultivation;
2. this margin determines rent;
3. the amount necessary to maintain the laborer determines wages;
4. the difference between the amount produced by a given quantity of labor at the margin and the wages of that labor determines profit.

A considerable portion of the work is devoted to a study of taxation, which requires to be considered as a part of the problem of distribution. A tax is not always paid by those on whom it is imposed; it is

therefore necessary to determine the ultimate, as distinguished from the immediate, incidence of every form of taxation. Adam Smith had already dealt with this question; Ricardo criticized and developed his results:

The conclusions at which he arrived can be summarized as follows:

- a tax on raw produce falls on the consumer, but will also diminish profits;
- a tax on rents falls on the landlord;
- taxes on houses will be divided between the occupier and the ground landlord;
- taxes on profits will be paid by the consumer, and taxes on wages by the capitalist.

Ricardo also developed a theory of foreign trade, which has been embodied in the two propositions:

1. International values are not determined in the same way as domestic values;
2. the medium of exchange is distributed so as to bring trade to the condition it would be in if it were conducted by barter.

Value theory:

Ricardo's most famous work is his *Principles of Political Economy and Taxation* (1817). Ricardo opens the first chapter with a statement of the labour theory of value. His labour theory of value required several assumptions:

1. Both sectors have the same wage rate and the same profit rate;
2. The capital employed in production is made up of wages only;
3. The period of production has the same length for both goods.

Ricardo himself realized that the second and third assumptions were quite unrealistic and hence admitted two exceptions to his labour theory of value:

1. Production periods may differ;
2. The two production processes may employ instruments and equipment as capital and not just wages, and in very different proportions.

Ricardo continued to work on his value theory to the end of his life.

Ricardo's theories of wages and profits:

Several authorities consider that Ricardo is the source of the concepts behind the so-called Iron Law of Wages, according to which wages naturally tend to a subsistence level. Others dispute the assignment to Ricardo of this idea.

In his *Theory of Profit*, Ricardo stated that as real wages increase, real profits decrease because the revenue from the sale of manufactured goods is split between profits and wages. He said in his *Essay on Profits*,

"Profits depend on high or low wages, wages on the price of necessaries, and the price of necessaries chiefly on the price of food."

Ricardo first gained notice among economists over the "bullion controversy." In 1809 he wrote that England's INFLATION was the result of the Bank of England's propensity to issue excess banknotes. In short, Ricardo was an early believer in the quantity theory of money, or what is known today as MONETARISM.

In his *Essay on the Influence of a Low Price of Corn on the Profits of Stock* (1815), Ricardo articulated what came to be known as the law of diminishing marginal returns. One of the most famous laws of economics, it holds that as more and more resources are combined in production with a fixed resource—for example, as more labor and machinery are used on a fixed amount of land—the additions to output will diminish.

Ricardo also opposed the protectionist Corn Laws, which restricted imports of wheat. In arguing for FREE TRADE, Ricardo formulated the idea of comparative costs, today called COMPARATIVE ADVANTAGE—a very subtle idea that is the main basis for most economists' belief in free trade today. The idea is this: a country that trades for products it can get at lower cost from another country is better off than if it had made the products at home.

Say, for example, Poorland can produce one bottle of wine with five hours of labor and one loaf of bread with ten hours. Richland's workers, on the other hand, are more productive. They produce a bottle of wine with three hours of labor and a loaf of bread with one hour. One might think at first that because Richland requires fewer labor hours to produce either good, it has nothing to gain from trade.

Think again. Poorland's cost of producing wine, although higher than Richland's in terms of hours of labor, is lower in terms of bread. For every bottle produced, Poorland gives up half of a loaf, while Richland has to give up three loaves to make a bottle of wine. Therefore, Poorland has a comparative advantage in producing wine. Similarly, for every loaf of bread it produces, Poorland gives up two bottles of wine, but Richland gives up only a third of a bottle. Therefore, Richland has a comparative advantage in producing bread.

If they exchange wine and bread one for one, Poorland can specialize in producing wine and trading some of it to Richland, and Richland can specialize in producing bread. Both Richland and Poorland will be better off than if they had not traded. By shifting, say, ten hours of labor out of producing bread, Poorland gives up the one loaf that this labor could have produced.

But the reallocated labor produces two bottles of wine, which will trade for two loaves of bread. Result: trade nets Poorland one additional loaf of bread. Nor does Poorland's gain come at Richland's expense. Richland gains also, or else it would not trade. By shifting three hours out of producing wine, Richland cuts wine production by one bottle but increases bread production by three loaves. It trades two of these loaves for Poorland's two bottles of wine. Richland has one more bottle of wine than it had before, and an extra loaf of bread.

These gains come, Ricardo observed, because each country specializes in producing the good for which its comparative cost is lower.

Writing a century before PAUL SAMUELSON and other modern economists popularized the use of equations, Ricardo is still esteemed for his uncanny ability to arrive at complex conclusions without any of the mathematical tools now deemed essential. As economist David Friedman put it in his 1990 textbook, *Price Theory,* "The modern economist reading Ricardo's *Principles* feels rather as a member of one of the Mount Everest expeditions would feel if, arriving at the top of the mountain, he encountered a hiker clad in T-shirt and tennis shoes."1

One of Ricardo's chief contributions, arrived at without mathematical tools, is his theory of rents. Borrowing from THOMAS MALTHUS, with whom Ricardo was closely associated but often diametrically opposed, Ricardo explained that as more land was cultivated, farmers would have to start using less productive land. But because a bushel of corn from less productive land sells for the same price as a bushel from highly productive land, tenant farmers would be willing to pay more to rent the highly productive land.

Result: the landowners, not the tenant farmers, are the ones who gain from productive land. This finding has withstood the test of time. Economists use Ricardian reasoning today to explain why agricultural price supports do not help farmers per se but do make owners of farmland wealthier. Economists use similar reasoning to explain why the beneficiaries of laws that restrict the number of taxicabs are not cab drivers per se but rather those who owned the limited number of taxi medallions (licenses) when the restriction was first imposed.

Other Contributors of the Classical School of thought:

John Stuart Mill:

John Stuart Mill was an English philosopher, political economist and civil servant. He was born on May 20, 1806, Pentonville, London, United Kingdom and died May 8, 1873, Avignon, France. He was married to Harriet Taylor Mill between 1851 – 1858. John Stuart Mill was educated at University College London.

One of the most influential thinkers in the history of liberalism, he contributed widely to social theory, political theory and political economy.

Under the tutelage of his imposing father, himself a historian and economist, John Stuart Mill began his intellectual journey at an early age, starting his study of Greek at the age of three and Latin at eight. Mill's father was a proponent of Jeremy Bentham's philosophy of utilitarianism, and John Stuart Mill began embracing it himself in his middle teens. Later, he started to believe that his rigorous analytical training had weakened his capacity for emotion, that his intellect had been nurtured but his feelings had not. This perhaps led to his expansion of Bentham's utilitarian thought, his development of the "harm theory," and his writings in the defense of the rights of women, all of which cemented his reputation as a major thinker of his day.

He was among the many lesser contributors to classical economic theory, His *Principles of Political Economy*, although intended by him merely to bring together the works of others, offered some fresh insights into increasing returns to scale and their consequences for the development of monopolies, and anticipated (though not in these terms) the neoclassical concepts of elasticity and the determination of price by the interaction of supply and demand.

In 1832, Jeremy Bentham died, followed closely by James Mill in 1836. With the deaths of his two mentors, Mill discovered that he had even more intellectual freedom. He used that freedom to create a new philosophic radicalism incorporating the ideas of thinkers such as Coleridge and Thomas Carlyle. He also acknowledged that while he was breaking away from Bentham, there were aspects of his mentor's philosophy that he intended to preserve.

The major works started to appear in 1843 with *A System of Logic*, Mill's most comprehensive and systematic philosophical work, which presented Mills' thoughts on inductive logic and the shortcomings of the use of syllogisms (arguments derived from general principles, in which two premises are used to deduce a conclusion) to advance deductive logic.

The year 1859 marked the publication of *On Liberty*, Mills' landmark work on supporting individuals' moral and economic freedom from the government and society at large. In his autobiography, Mill wrote of "the importance, to man and society, of giving full freedom to human nature to expand itself in innumerable and conflicting directions," an idea fully fleshed out in *On Liberty*. In the work, Mill asserts that individuals' opinions and behavior should enjoy free rein, whether in the face of the law or social pressure. Perhaps as a segue into Mill's *Utilitarianism*, which would follow four years later, Mill makes one concession: If a person's behavior harms other people, that behavior should be constrained. The essay has been criticized for various vagaries in its arguments, but it provides an impassioned defense of nonconformity, diversity and individuality.

In 1861, *Utilitarianism* first began appearing in serialized form in *Fraser's Magazine*. The work comes from Mill's association with, and partial break from, the moral philosophy of Jeremy Bentham and would go on to be Mill's most famous work. It bolsters support for Bentham's philosophy and refutes certain misconceptions about it. In sum, utilitarianism as a moral philosophy rests on a single sentence: "Actions are right in proportion as they tend to promote happiness, wrong as they tend to produce the reverse of happiness." In his book, Mill argues that utilitarianism stems from "natural" sentiments that exist organically within human beings' social nature.

Therefore, if society were simply to embrace acts that minimize pain and maximize happiness, the standards created would form an easily and naturally internalized code of ethics. In his exploration of this issue, Mill transcends discussions of good and evil, and humanity's fascination with concepts of them, and posits a single criterion for a universal morality.

In his *Principles of Political Economy,* which became the leading economics textbook for forty years after it was written, **John Stuart Mill** elaborated on the ideas of DAVID RICARDO and ADAM SMITH. He helped develop the ideas of economies of scale, OPPORTUNITY COST, and COMPARATIVE ADVANTAGE in trade.

Mill was a strong believer in freedom, especially of speech and of thought. He defended freedom on two grounds. First, he argued, society's utility would be maximized if each person was free to make his or her own choices. Second, Mill believed that freedom was required for each person's development as a whole person. In his famous essay *On Liberty,* Mill enunciated the principle that "the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection." He wrote that we should be "without impediment from our fellow-creatures, so long as what we do does not harm them, even though they should think our conduct foolish, perverse, or wrong."

Surprisingly, though, Mill was not a consistent advocate of laissez-faire. His biographer, Alan Ryan, conjectures that Mill did not think of contract and PROPERTY RIGHTS as being part of freedom. Mill favored inheritance TAXATION, trade PROTECTIONISM, and REGULATION of employees' hours of work. Interestingly, although Mill favored mandatory EDUCATION, he did not advocate mandatory schooling. Instead, he advocated a voucher system for schools and a state system of exams to ensure that people had reached a minimum level of learning.

Although Mill advocated universal suffrage, he suggested that the better-educated voters be given more votes. He emphatically defended this proposal from the charge that it was intended to let the middle class

dominate. He argued that it would protect against class legislation and that anyone who was educated, including poor people, would have more votes.

Mill spent most of his working life with the East India Company. He joined it at age sixteen and worked there for thirty-eight years. He had little effect on policy, but his experience did affect his views on self-government.

Legacy of John Stuart Mill:

Although Mill was influenced by utilitarianism, he nevertheless wrote again and again in defense of the importance of the rights of individuals—notably in defense of both suffrage for women and their equal rights in education. (His essay called "The Subjection of Women" [1869] is an early, and at the time quite controversial, defense of gender equality, and because of it he is often considered a proto-feminist.)

Mill's belief that the majority often denies individual liberties drove his interest in social reform, and he was a strident activist on behalf of political reforms, labor unions and farm cooperatives. He has been called "the most influential English-speaking philosopher of the 19th century" and is remembered as one of history's great thinkers in regard to social and political theory.

ALFRED MARSHALL:

Alfred Marshall (26 July 1842 – 13 July 1924) was one of the most influential economists of his time. Alfred Marshall was an English economist and the true founder of the *neoclassical school of economics*, which combined the study of wealth distribution of the *classical school* with the *marginalism* of the *Austrian School* and the *Lausanne School*. Professor at Cambridge, he was the author of "Principles of Economics", 1890 His book, *Principles of Economics* (1890), was the dominant economic textbook in England for many years. It brings the ideas of supply and demand, marginal utility, and costs of production into a coherent whole. He is known as one of the founders of neoclassical economics. Although Marshall took economics to a more mathematically rigorous level, he did not want mathematics to overshadow economics and thus make economics irrelevant to the layman.

Marshall was born in London. His father was a bank cashier and a devout Evangelical. Marshall grew up in Clapham and was educated at the Merchant Taylors' School and St John's College, Cambridge, where he demonstrated an aptitude in mathematics, achieving the rank of Second Wrangler in the 1865 Cambridge Mathematical Tripos. Marshall experienced a mental crisis that led him to abandon physics and switch to philosophy. He began with metaphysics, specifically "the philosophical foundation of knowledge, especially in relation to theology". Metaphysics led Marshall to ethics, specifically a Sidgwickian version of utilitarianism; ethics, in turn, led him to economics, because economics played an essential role in providing the preconditions for the improvement of the working class.

He saw that the duty of economics was to improve material conditions, but such improvement would occur, Marshall believed, only in connection with social and political forces. His interest in Georgism, liberalism, socialism, trade unions, women's education, poverty and progress reflect the influence of his early social philosophy on his later activities and writings.

Marshall was elected in 1865 to a fellowship at St John's College at Cambridge, and became lecturer in the moral sciences in 1868. In 1885 he became professor of political economy at Cambridge, where he remained until his retirement in 1908. Over the years he interacted with many British thinkers including Henry Sidgwick, W.K. Clifford, Benjamin Jowett, William Stanley Jevons, Francis Ysidro Edgeworth, John Neville

Keynes and John Maynard Keynes. Marshall founded the "Cambridge School" which paid special attention to increasing returns, the theory of the firm, and welfare economics; after his retirement leaderships passed to Arthur Cecil Pigou and John Maynard Keynes.

ALFRED MARSHALL CONTRIBUTIONS TO ECONOMICS:

Marshall desired to improve the mathematical rigour of economics and transform it into a more scientific profession. In the 1870s he wrote a small number of tracts on international trade and the problems of protectionism. In 1879, many of these works were compiled into a work entitled *The Theory of Foreign Trade: The Pure Theory of Domestic Values*. In the same year (1879) he published *The Economics of Industry* with his wife Mary Paley.

Although Marshall took economics to a more mathematically rigorous level, he did not want mathematics to overshadow economics and thus make economics irrelevant to the layman. Accordingly, Marshall tailored the text of his books to laymen and put the mathematical content in the footnotes and appendices for the professionals. In a letter to A. L. Bowley, he laid out the following system:

(1) Use mathematics as shorthand language, rather than as an engine of inquiry.

(2) Keep to them till you have done.

(3) Translate into English.

(4) Then illustrate by examples that are important in real life

(5) Burn the mathematics.

(6) If you can't succeed in 4, burn 3. This I do often".

Marshall had been Mary Paley's professor of political economy at Cambridge and the two were married in 1877, forcing Marshall to leave his position as a Fellow of St John's College, Cambridge to comply with celibacy rules at the university. He became the first principal at University College, Bristol, which was the institution that later became the University of Bristol, again lecturing on political economy and economics.

He perfected his *Economics of Industry* while at Bristol, and published it more widely in England as an economic curriculum; its simple form stood upon sophisticated theoretical foundations. Marshall achieved a measure of fame from this work, and upon the death of William Jevons in 1882, Marshall became the leading British economist of the scientific school of his time.

Marshall returned to Cambridge, via a brief period at Balliol College, Oxford during 1883–4, to take the seat as Professor of Political Economy in 1884 on the death of Henry Fawcett. At Cambridge he endeavoured to create a new tripos for economics, a goal which he would only achieve in 1903. Until that time, economics was taught under the Historical and Moral Sciences Triposes which failed to provide Marshall the kind of energetic and specialised students he desired.

***Principles of Economics* (1890)**

Marshall began his economic work, the *Principles of Economics*, in 1881, and spent much of the next decade at work on the treatise. His plan for the work gradually extended to a two-volume compilation on the whole

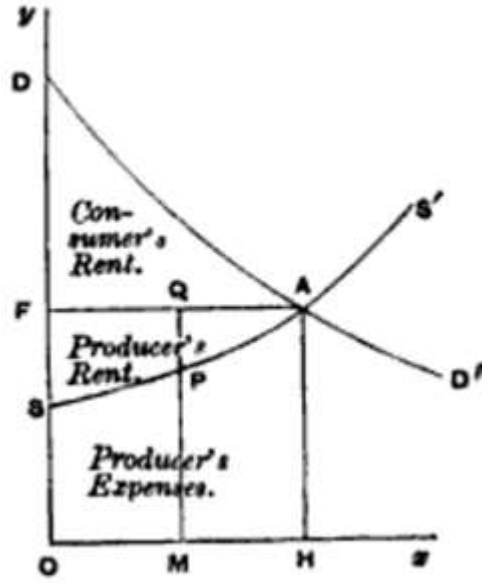
of economic thought. The first volume was published in 1890 to worldwide acclaim, establishing him as one of the leading economists of his time. The second volume, which was to address foreign trade, money, trade fluctuations, taxation, and collectivism, was never published.

Principles of Economics established his worldwide reputation. It appeared in 8 editions, starting at 750 pages and growing to 870 pages. It decisively shaped the teaching of economics in English-speaking countries. Its main technical contribution was a masterful analysis of the issues of elasticity, consumer surplus, increasing and diminishing returns, short and long terms, and marginal utility. Many of the ideas were original with Marshall; others were improved versions of the ideas by W. S. Jevons and others.

In a broader sense Marshall hoped to reconcile the classical and modern theories of value. John Stuart Mill had examined the relationship between the value of commodities and their production costs, on the theory that value depends on the effort expended in manufacture. Jevons and the Marginal Utility theorists had elaborated a theory of value based on the idea of maximising utility, holding that value depends on demand.

Marshall's work used both these approaches, but he focused more on costs. He noted that, in the short run, supply cannot be changed and market value depends mainly on demand. In an intermediate time period, production can be expanded by existing facilities, such as buildings and machinery, but, since these do not require renewal within this intermediate period, their costs (called fixed, overhead, or supplementary costs) have little influence on the sale price of the product.

Marshall pointed out that it is the prime or variable costs, which constantly recur, that influence the sale price most in this period. In a still longer period, machines and buildings wear out and have to be replaced, so that the sale price of the product must be high enough to cover such replacement costs. This classification of costs into fixed and variable and the emphasis given to the element of time probably represent one of Marshall's chief contributions to economic theory. He was committed to partial equilibrium models over general equilibrium on the grounds that the inherently dynamical nature of economics made the former more practically useful.



Alfred Marshall's supply and demand graph

Much of the success of Marshall's teaching and *Principles* book derived from his effective use of diagrams, which were soon emulated by other teachers worldwide.

Alfred Marshall was the first to develop the standard supply and demand graph demonstrating a number of fundamentals regarding supply and demand including the supply and demand curves, market equilibrium, the relationship between quantity and price in regards to supply and demand, the law of marginal utility, the law of diminishing returns, and the ideas of consumer and producer surpluses.

This model is now used by economists in various forms using different variables to demonstrate several other economic principles. Marshall's model allowed a visual representation of complex economic fundamentals where before all the ideas and theories were only capable of being explained through words. These models are now critical throughout the study of economics because they allow a clear and concise representation of the fundamentals or theories being explained.

Alfred Marshall Theoretical Contributions

Marshall is considered to be one of the most influential economists of his time, largely shaping mainstream economic thought for the next fifty years, and being one of the founders of the school of neoclassical economics. Although his economics was advertised as extensions and refinements of the work of Adam Smith, David Ricardo, Thomas Robert Malthus and John Stuart Mill, he extended economics away from its classical focus on the market economy and instead popularised it as a study of human behaviour. He downplayed the contributions of certain other economists to his work, such as Léon Walras, Vilfredo Pareto and Jules Dupuit, and only grudgingly acknowledged the influence of Stanley Jevons himself.

Marshall was one of those who used utility analysis, but not as a theory of value. He used it as a part of the theory to explain demand curves and the principle of substitution. Marshall's scissors analysis – which combined demand and supply,that is utility and cost of production, as if in the two blades of a pair of scissors – effectively removed the theory of value from the center of analysis and replaced it with the theory of price. While the term "value" continued to be used, for most people it was a synonym for "price". Prices no longer were thought to gravitate toward some ultimate and absolute basis of price; prices were existential, between the relationship of demand and supply.

Marshall's influence on codifying economic thought is difficult to deny. He popularised the use of supply and demand functions as tools of price determination (previously discovered independently by Cournot); modern economists owe the linkage between price shifts and curve shifts to Marshall. Marshall was an important part of the "marginalist revolution;" the idea that consumers attempt to adjust consumption until marginal utility equals the price was another of his contributions.

The price elasticity of demand was presented by Marshall as an extension of these ideas. Economic welfare, divided into producer surplus and consumer surplus, was contributed by Marshall, and indeed, the two are sometimes described eponymously as 'Marshallian surplus.' He used this idea of surplus to rigorously analyse the effect of taxes and price shifts on market welfare. Marshall also identified quasi-rents.

Marshall's brief references to the social and cultural relations in the "industrial districts" of England were used as a starting point for late twentieth-century work in economic geography and institutional economics on clustering and learning organisations.

Gary Becker (1930-2014), the 1992 Nobel prize winner in economics, has mentioned that Milton Friedman and Alfred Marshall were the two greatest influences on his work.

Another contribution that Marshall made was differentiating concepts of internal and external economies of scale. That is that when costs of input factors of production go down, it is a positive externality for all the firms in the market place, outside the control of any of the firms.

The Marshallian industrial district:

A concept based on a pattern of organisation that was common in late nineteenth century Britain in which firms concentrating on the manufacture of certain products were geographically clustered. Comments made by Marshall in Book 4, Chapter 10 of *Principles of Economics* have been used by economists and economic geographers to discuss this phenomenon.

The two dominant characteristics of a Marshallian industrial district are high degrees of vertical and horizontal specialisation and a very heavy reliance on market mechanism for exchange. Firms tend to be small and to focus on a single function in the production chain. Firms located in industrial districts are highly competitive in the neoclassical sense, and in many cases there is little product differentiation.

The major advantages of Marshallian industrial districts arise from simple propinquity of firms, which allows easier recruitment of skilled labour and rapid exchanges of commercial and technical information through informal channels. They illustrate competitive capitalism at its most efficient, with transaction costs reduced to a practical minimum, but they are feasible only when economies of scale are limited.

The works of Alfred Marshall:

- 1879 – *The Economics of Industry* (with Mary Paley Marshall)
- 1879 – *The Pure Theory of Foreign Trade: The Pure Theory of Domestic Values*
- 1890 – *Principles of Economics*
- 1919 – *Industry and Trade*
- 1923 - *Money, Credit and Commerce*.

NEOCLASSICAL ECONOMICS:

Neoclassical economics is an approach to economics focusing on the determination of goods, outputs, and income distributions in markets through supply and demand. This determination is often mediated through a hypothesized maximization of utility by income-constrained individuals and of profits by firms facing production costs and employing available information and factors of production, in accordance with rational choice theory.

Neoclassical economics dominates microeconomics, and together with Keynesian economics forms the neoclassical synthesis which dominates mainstream economics today. Although neoclassical economics has gained widespread acceptance by contemporary economists, there have been many critiques of neoclassical economics, often incorporated into newer versions of neoclassical theory.

The term was originally introduced by Thorstein Veblen in his 1900 article 'Preconceptions of Economic Science', in which he related marginalists in the tradition of Alfred Marshall et al. to those in the Austrian School.

No attempt will here be made even to pass a verdict on the relative claims of the recognized two or three main "schools" of theory, beyond the somewhat obvious finding that, for the purpose in hand, the so-called Austrian school is scarcely distinguishable from the neo-classical, unless it be in the different distribution of emphasis.

The divergence between the modernized classical views, on the one hand, and the historical and Marxist schools, on the other hand, is wider, so much so, indeed, as to bar out a consideration of the postulates of the latter under the same head of inquiry with the former. – Veblen.

It was later used by John Hicks, George Stigler, and others to include the work of Carl Menger, William Stanley Jevons, Léon Walras, John Bates Clark, and many others. Today it is usually used to refer to mainstream economics, although it has also been used as an umbrella term encompassing a number of other schools of thought, notably excluding institutional economics, various historical schools of economics, and Marxian economics, in addition to various other heterodox approaches to economics.

Neoclassical economics is characterized by several assumptions common to many schools of economic thought. There is not a complete agreement on what is meant by neoclassical economics, and the result is a wide range of neoclassical approaches to various problem areas and domains—ranging from neoclassical theories of labor to neoclassical theories of demographic changes.

Three central assumptions of the Neoclassical Theory:

It was expressed by E. Roy Weintraub that neoclassical economics rests on three assumptions, although certain branches of neoclassical theory may have different approaches;

1. People have rational preferences between outcomes that can be identified and associated with values.
2. Individuals maximize utility and firms maximize profits.
3. People act independently on the basis of full and relevant information.

From these three assumptions, neoclassical economists have built a structure to understand the allocation of scarce resources among alternative ends—in fact understanding such allocation is often considered the definition of economics to neoclassical theorists. Here's how William Stanley Jevons presented "the problem of Economics".

Given, a certain population, with various needs and powers of production, in possession of certain lands and other sources of material: required, the mode of employing their labour which will maximize the utility of their produce.

From the basic assumptions of neoclassical economics comes a wide range of theories about various areas of economic activity. For example, profit maximization lies behind the neoclassical theory of the firm, while the derivation of demand curves leads to an understanding of consumer goods, and the supply curve allows an analysis of the factors of production. Utility maximization is the source for the neoclassical theory of consumption, the derivation of demand curves for consumer goods, and the derivation of labor supply curves and reservation demand.

Market supply and demand are aggregated across firms and individuals. Their interactions determine equilibrium output and price. The market supply and demand for each factor of production is derived analogously to those for market final output to determine equilibrium income and the income distribution. Factor demand incorporates the marginal-productivity relationship of that factor in the output market.

Neoclassical economics emphasizes equilibria, where equilibria are the solutions of agent maximization problems. Regularities in economies are explained by methodological individualism, the position that economic phenomena can be explained by aggregating over the behavior of agents. The emphasis is on

microeconomics. Institutions, which might be considered as prior to and conditioning individual behavior, are de-emphasized. Economic subjectivism accompanies these emphases.

Criticisms of Neoclassical economics:

Neoclassical economics is sometimes criticized for having a normative bias. In this view, it does not focus on explaining actual economies, but instead on describing a theoretical world in which Pareto optimality applies. Perhaps the strongest criticism lies in its disregard for the physical limits of the Earth and its ecosphere which are the physical container of all human economies. This disregard becomes hot denial by Neoclassical economists when limits are asserted, since to accept such limits creates fundamental contradictions with the foundational presumptions that growth in scale of the human economy forever is both possible and desirable. The disregard/denial of limits includes both resources and 'waste sinks,' the capacity to absorb human waste products and man-made toxins.

The assumption that individuals act rationally may be viewed as ignoring important aspects of human behavior. Many see the "economic man" as being quite different from real people. Many economists, even contemporaries, have criticized this model of economic man. Thorstein Veblen put it most sardonically. Neoclassical economics assumes a person to be,

[A] lightning calculator of pleasures and pains, who oscillates like a homogeneous globule of desire of happiness under the impulse of stimuli that shift about the area, but leave him intact. Large corporations might perhaps come closer to the neoclassical ideal of profit maximization, but this is not necessarily viewed as desirable if this comes at the expense of neglect of wider social issues.

Problems exist with making the neoclassical general equilibrium theory compatible with an economy that develops over time and includes capital goods. This was explored in a major debate in the 1960s—the "Cambridge capital controversy"—about the validity of neoclassical economics, with an emphasis on economic growth, capital, aggregate theory, and the marginal productivity theory of distribution.

There were also internal attempts by neoclassical economists to extend the Arrow-Debreu model to disequilibrium investigations of stability and uniqueness. However a result known as the Sonnenschein–Mantel–Debreu theorem suggests that the assumptions that must be made to ensure that equilibrium is stable and unique are quite restrictive.

Neoclassical economics is also often seen as relying too heavily on complex mathematical models, such as those used in general equilibrium theory, without enough regard to whether these actually describe the real economy. Many see an attempt to model a system as complex as a modern economy by a mathematical model as unrealistic and doomed to failure. A famous answer to this criticism is Milton Friedman's claim that theories should be judged by their ability to predict events rather than by the realism of their assumptions. Mathematical models also include those in game theory, linear programming, and econometrics.

Some see mathematical models used in contemporary research in mainstream economics as having transcended neoclassical economics, while others disagree. Critics of neoclassical economics are divided into those who think that highly mathematical method is inherently wrong and those who think that mathematical method is potentially good even if contemporary methods have problems.

In general, allegedly overly unrealistic assumptions are one of the most common criticisms towards neoclassical economics. It is fair to say that many (but not all) of these criticisms can only be directed towards a subset of the neoclassical models (for example, there are many neoclassical models where unregulated markets fail to achieve Pareto-optimality and there has recently been an increased interest in

modeling non-rational decision making). Its disregard for social reality and its alleged role in aiding the elites to widen the wealth gap and social inequality is also frequently criticized.

What are the assumptions behind Neo-Classical Economics?

How can the economy allocate resources most efficiently?

Through markets, assuming economic agents are *rational* and *have perfect knowledge*. In a market, an equilibrium will occur which maximizes the benefits to economic agents given the *law of diminishing returns*, *many agents buying and selling*, and *freedom to enter and leave* the market. This is called a "freely competitive market", and a system of such markets is called a **market economy**. The basic message of neo-classical economics is that economic efficiency and economic progress are maximized by ensuring that markets work freely and competitively.

How is this achieved?

Through giving individuals as much economic freedom as possible. The individual is left to decide what to buy, what to produce, and what to sell. Finally, if markets work badly, the *government has a duty to individuals to correct this*. In the jargon, governments must intervene to correct market failure, but then and only then.

Lets look at each assumption required to produce a freely competitive (or 'perfectly' competitive) market within neo-classical economics:

- **1) Rationality**: The first assumption made is that people are rational and prefer more valuable goods and services or leisure to less. Remind yourself of what Boulding said about economic man the clod as against heroic man. Well, rationality means we assume all economic agents are clods! (A clod, in case your dictionary does not say, is a lump of grass and soil!)

Does this sound reasonable? The answer is surely, yes. If you try to invent an economic theory based on mankind the hero, you will have a hard job. It is a short step from wanting more rather than less of the good things to wanting to maximize the amount of good things (literally 'goods') you can get. Rational economic man has objectives and attempts to maximize them. In neo-classical economics, that tends to get narrowed down to maximizing one thing:
- *consumers allocate their incomes in order to maximize their satisfaction (or utility)*
- *producers allocate resources in order to maximize their profits*

Does this still sound reasonable? It is at this stage that doubt creeps in, especially with regard to profit maximization. After all, most producer decisions are taken by managers, not by owners. However, if we put profit maximization another way, it may seem more plausible. If managers create more value at lower cost than competitors, their business will prosper, its profits will rise and the managers will be rewarded. *If one has difficulty accepting this version of profit maximization as a reasonable assumption – s/he will not like the rest of the assumptions very much!*

- **2) Perfect Knowledge**: More contentious is the second assumption of the neo-classical model, that economic agents act in the light of perfect knowledge. Buyers and sellers know all the prices of all the goods in the market, know everything they need to know about the quality of goods, the character of the other economic agents, what the government is going to do next, and so on. No doubt, no uncertainty. Like a computer with perfect knowledge, rational economic man can compare prices with what they have or want, and set out to maximize their objective function, be it consumer satisfaction or business profits.

How credible does this sound, for example in the agricultural context?

It could apply to world commodity markets, where a large number of participants bring information to bear on their actions. However, in local and regional agricultural markets, there are a lot of uncertain factors such as:

- timing and volume of supplies
- quality and storage potential of crops harvested
- consumer demand when that is weather specific
- the extent of international trade, partly related to exchange rate movements

So this assumption is often unrealistic in agricultural markets. Does this mean the neo-classical model is no use? Well no – the users of this model handle it by starting with the assumption of perfect knowledge, then relaxing it and trying to think through what happens then. In this way neo-classical model is used as the basis for a comparison with the real world.

- **3) Diminishing Returns**: The third neo-classical assumption is more properly called a behavioural hypothesis, because it can be tested. Since hardly anyone bothers to test it, it is often called an assumption. The hypothesis is known as the Law of Diminishing Returns. It is essential because it means that on the buyer's side, the more and more they buy, the smaller and smaller the increment in satisfaction becomes.

  What do you think it means on the seller's side of the market? The more and more that is sold, the smaller the increment in extra profits. Put together this gives the likelihood of an equilibrium position. That is, a stable position, from which the market has no reason to depart, other things remaining the same. Without the law, consumers could happily keep buying forever, and suppliers happily supplying forever!

- **4) Equality of Sales and Purchases**: We must assume that whatever is bought equals whatever is sold. If goods are put into store, we must count them as either being part of what is bought, or exclude them from the market calculation all together. Otherwise an equilibrium will never be discovered.

- **5) Unique Equilibrium**: Equilibrium is reached when all economic agents are content with their actions and feel no reason to change them. In the neo-classical model, price changes until sellers are happy to sell what they sell, and buyers are happy to buy what they buy. It is this concept of equilibrium which distinguishes the neo-classical approach.

Why could this be useful? Because it allows to forecast where a market will be in the future, after specified changes. Without equilibrium, there is virtually no point in using neo-classical analysis. Therefore, neo-classical economists interested in markets under disequilibrium conditions construct their model to include an eventual, long run equilibrium position towards which the market is moving, even if it never actually arrives!

- **6) Many participants, Freedom of Entry and Exit**: These assumptions ensure that a market is freely competitive. If a few buyers or seller dominate, this means the outcome may be equilibrium, but it may not be the best, or optimal, outcome for the economy as a whole. It is an inefficient equilibrium. Similarly with freedom of entry and exit.

  If a market is to be truly competitive, there must be scope for new buyers and sellers to enter a market, and for old participants to leave and find other markets. This of course applies to markets for resources like labour as well as markets for goods and services. If the wages of plumbers are high compared to the wages of water engineers, the latter will leave their job and look for jobs as plumbers. We speak of 'resource mobility' in this respect.

- **7) Independence of Demand and Supply**: The last assumption could be relaxed but seldom is. We assume that buyers are quite distinct from sellers, so that the act of buying does not affect selling, and selling does not affect buying, except through the mechanism of the market. The time when it does get relaxed is in the analysis of peasant farms which are partially self-sufficient. In this case the farm is responsible for supplying the household and the market, so the household is both a buyer (from its farm and from the market) and a seller.

From the assumptions listed above and other blogs in this category, it is clear that neo-classical economical model is not the only way of looking at economic problems. Hence it is important to remember the limitations of economics as well as the power of its analysis.

NEW CLASSICAL ECONOMICS:

New Classical Economics, is a school of thought in macroeconomics that builds its analysis entirely on a neoclassical framework. Specifically, it emphasizes the importance of rigorous foundations based on microeconomics, especially rational expectations.

New classical macroeconomics strives to provide neoclassical microeconomic foundations for macroeconomic analysis. This is in contrast with its rival new Keynesian school that uses microfoundations such as price stickiness and imperfect competition to generate macroeconomic models similar to earlier, Keynesian ones.

The New Classical school emerged in the 1970s as a response to the failure of Keynesian economics to explain stagflation.

New classical economics is based on Walrasian **assumptions**. All agents are assumed to maximize utility on the basis of rational expectations. At any one time, the economy is assumed to have a unique equilibrium at full employment or potential output achieved through price and wage adjustment.

New Classical and monetarist criticisms led by Robert Lucas, Jr. and Milton Friedman respectively forced the rethinking of Keynesian economics. In particular, Lucas made the Lucas critique that cast doubt on the Keynesian model. This strengthened the case for macro models to be based on microeconomics.

After the 1970s and the apparent failure of Keynesian economics, the New Classical school for a while became the dominant school in Macroeconomics.

The new classical perspective takes root in three diagnostic sources of fluctuations in growth: the productivity wedge, the capital wedge, and the labor wedge.

- A **productivity**/efficiency wedge is a simple measure of aggregate production efficiency. In relation to the Great Depression, a productivity wedge means the economy is less productive given the capital and labor resources available in the economy.
- A **capital** wedge is a gap between the intertemporal marginal rate of substitution in consumption and the marginal product of capital. In this wedge, there's a "deadweight" loss that affects capital accumulation and savings decisions acting as a distortionary capital (savings) tax.
- A **labor** wedge is the ratio between the marginal rate of substitution of consumption for leisure and the marginal product of labor and acts as a distortionary labor tax, making hiring workers less profitable (i.e. labor market frictions).

New classical economics is based on Walrasian assumptions. All agents are assumed to maximize utility on the basis of rational expectations. At any one time, the economy is assumed to have a unique equilibrium at full employment or potential output achieved through price and wage adjustment. In other words, the market clears at all times.

New classical economics has also pioneered the use of representative agent models. Such models have received severe neoclassical criticism, pointing to the disjuncture between microeconomic behavior and macroeconomic results, as indicated by Alan Kirman.

The concept of rational expectations was originally used by John Muth, and was popularized by Lucas. One of the most famous new classical models is the real business cycle model, developed by Edward C. Prescott and Finn E. Kydland.

It turned out that pure new classical models had low explanatory and predictive power. The models could not simultaneously explain both the duration and magnitude of actual cycles. Additionally, the model's key result that only unexpected changes in money can affect the business cycle and unemployment did not stand empirical tests.

The mainstream turned to the new neoclassical synthesis. Most economists, even most new classical economists, accepted the new Keynesian notion that for several reasons wages and prices do not move quickly and smoothly to the values needed for long-run equilibrium between quantities supplied and demanded. Therefore, they also accept the monetarist and new Keynesian view that monetary policy can have a considerable effect in the short run. The new classical macroeconomics contributed the rational expectations hypothesis and the idea of intertemporal optimisation to new Keynesian economics and the new neoclassical synthesis.

Peter Galbács thinks that critics have a superficial and incomplete understanding of the new classical macroeconomics. He argues that one should not forget the conditional character of the new classical doctrines. If prices are completely flexible and if public expectations are completely rational and if real economic shocks are white noises, monetary policy cannot affect unemployment or production and any intention to control the real economy ends up only in a change in the rate of inflation. However, and this is the point, if any of these conditions does not hold, monetary policy can be effective again.

So, if any of the conditions necessary for the equivalence does not hold, countercyclical fiscal policy can be effective. Controlling the real economy is possible perhaps in a Keynesian style if government regains its potential to exert this control. Therefore, actually, new classical macroeconomics highlights the conditions under which economic policy can be effective and not the predestined inefficiency of economic policy. Countercyclical aspirations need not to be abandoned, only the playing-field of economic policy got narrowed by new classicals.

While Keynes urged active countercyclical efforts of fiscal policy, these efforts are not predestined to fail not even in the new classical theory, only the conditions necessary for the efficiency of countercyclical efforts were specified by new classicals.

Real business cycle theorist Bernd Lucke calls the new classical macroeconomics model the ”caricature of an economy" because its underlying assumptions exclude any non-rational behaviour or the possibility of market failure, prices are always fully flexible, and the market is always in economic equilibrium. The current mission of the new classical macroeconomics is to find out to which extent this caricature of an economy already has enough predictive power to explain business cycles.

The Monetarist Theory:

The monetarist theory is an economic concept which contends that changes in the money supply are the most significant determinants of the rate of economic growth and the behavior of the business cycle. It can be attributed largely to the work of well-known economist Milton Friedman who wrote about his beliefs in the book "A Monetary History of The United States, 1867 - 1960." In the book he, along with Anna Schwartz, argue in favor of monetarism as a combat to the economic impacts of inflation. Other monetarists include former Federal Reserve Chairman, Alan Greenspan, and former U.K. Prime Minister, Margaret Thatcher.

Monetarism is a set of views based on the belief that inflation depends on how much money the government prints. Milton Friedman, who argued, based on the quantity theory of money, that the government should keep the money supply fairly steady, expanding it slightly each year mainly to allow for the natural growth of the economy.

Monetarism had its heyday in the early 1980s, when economists, governments and investors eagerly jumped at every new money supply statistic. In the years that followed, however, monetarism fell out of favor with economists, and the link between different measures of money supply and inflation proved to be less clear than most monetarist theories had suggested. Many central banks today have stopped setting monetary targets and instead have adopted strict inflation targets.

A monetarist is an economist who holds the strong belief that the economy's performance is determined almost entirely by changes in the money supply. Monetarists postulate that the economic health of an economy can be best controlled by changes on monetary supply, or money, by a governing body. The key driver behind this belief is the impact of inflation on an economy's growth or health and the belief that by controlling the money supply one can control the inflation rate.

Monetarism is an economic school of thought that stresses the primary importance of the money supply in determining nominal GDP and the price level. The "Founding Father" of Monetarism is economist Milton Friedman. Monetarism is a theoretical challenge to Keynesian economics that increased in importance and popularity in the late 1960s and 1970s. In fact, the tide was so strong that in 1979 the Federal Reserve switched its operating strategy more in line with Monetarist theory, though they subsequently abandoned the strategy in 1982 for a number of reasons.

The challenge to the traditional Keynesian theory strengthened during the years of stagflation following the 1973 and 1979 oil shocks. Keynesian theory had no appropriate policy responses to the supply shocks. Inflation was high and rising through the 1970s and Friedman argued convincingly that the high rates of inflation were due to rapid increases in the money supply. He argued that the economy may be complicated, but stabilization policy does not have to be. The key to good policy was to control the supply of money.

Monetarism is a school of thought in monetary economics that emphasizes the role of governments in controlling the amount of money in circulation. Monetarist theory asserts that variations in the money supply have major influences on national output in the short run and on price levels over longer periods. Monetarists assert that the objectives of monetary policy are best met by targeting the growth rate of the money supply rather than by engaging in discretionary monetary policy. Monetarism today is mainly associated with the work of Milton Friedman, who was among the generation of economists to accept Keynesian economics and then criticise Keynes's theory of gluts using fiscal policy (government spending). Friedman and Anna Schwartz wrote an influential book, *A Monetary History of the United States, 1867–1960*, and argued "inflation is always and everywhere a monetary phenomenon." Though he opposed the existence of the Federal Reserve, Friedman advocated, given its existence, a central bank policy aimed at keeping the supply and demand for money at equilibrium, as measured by growth in productivity and demand.

Characteristics of Monetarism:

Monetarism is a mixture of theoretical ideas, philosophical beliefs, and policy prescriptions. Here we list the most important ideas and policy implications and explain them below.

1. The theoretical foundation is the Quantity Theory of Money.
2. The economy is inherently stable. Markets work well when left to themselves. Government intervention can often times destabilize things more than they help. *Laissez faire* is often the best advice.
3. The Fed should be bound to fixed rules in conducting monetary policy. They should not have discretion in conducting policy because they could make the economy worse off.
4. Fiscal Policy is often bad policy. A small role for government is good.

The Quantity Theory of Money: The Short-Run

We begin with the *equation of exchange*. This is the building block for monetarist theory. It says that;

$M \times V = P \times Y$

where M is the quantity of M1, V is velocity of M1, or the average number of times that the dollar turns over in a given year on the purchase of final goods and services, P is the price level, and Y is real output.

As defined, the equation of exchange is always true. Keynesians, Monetarists and all other economists accept this equation as valid. The controversy arises because Monetarists make a seemingly innocuous assumption that velocity is stable in the short run. Let us take that assumption to its extreme and assume that velocity is fixed in the short run.

Where V implies that velocity is fixed in the short run. By making this simple assumption, we have transformed the equation of exchange into the Quantity Theory of Money. This equation tells us that any change in M1 will impact $P \times Y$. Changes in the money supply are the dominant forces that change nominal GDP ($P \times Y$). It is not surprising, therefore, that monetarists view control of the money supply as the key variable in stabilizing the economy.

The Quantity Theory of Money: The Long-Run

Because monetarists believe that markets are stable and work well, they believe that the economy is always near or quickly approaching full employment. Even if the economy is not at full employment, the danger of GDP deviating substantially from its potential level is small. So in the long-run, the economy will be at Y_P.

Notice that 'M' and 'P' are the only variables in this equation that change in the long run. The implication is that changes in the money supply will only impact the price level, P. *In the long run, changes in the money supply only cause inflation.* This conclusion explains Friedman's famous quote "Inflation is always and everywhere a monetary phenomenon." Another implication is that the rate of growth of the money supply will equal the rate of growth of the price level (or inflation) in the long-run. If the money supply grows by five percent per year, the inflation rate will be about five percent per year.

The Rules vs. Discretion Debate

Because monetarists believe that the money supply is the primary determinant of nominal GDP in the short run, and of the price level in the long run, they think that control of the money supply should not be left to the discretion of central bankers. Monetarists believe in a set of "rules" that the Federal Reserve must follow. In particular, Monetarists prefer the *Money growth rule*: The Fed should be required to target the growth rate of money such that it equals the growth rate of real GDP, leaving the price level unchanged. If the economy is expected to grow at 2 percent in a given year, the Fed should allow the money supply to increase by 2 percent. Monetarists wish to take much of the discretionary power out of the hands of the Fed so they cannot destabilize the economy.

Keynesians balk at this proposed money growth rule. Keynesians believe that velocity is inherently unstable and they do not believe that markets adjust quickly to return to potential output. Therefore, Keynesians attach little or no significance to the Quantity Theory of Money. Because the economy is subject to deep swings and periodic instability, it is dangerous to take discretionary power away from the Fed. The Fed should have some leeway or "discretion" in conducting policy. So far, Keynesians have won this debate. There has not been serious talk in some time of tying the Fed to a fixed money growth rule.

Fiscal Policy

Because Monetarist dislike big government and tend to trust free markets, they do not like government intervention and believe that fiscal policy is not helpful. Where it could be beneficial, monetary policy could do the job better. Excessive government intervention only interferes in the workings of free markets and can lead to bloated bureaucracies, unnecessary social programs, and large deficits. Automatic stabilizers are sufficient to stabilize the economy.

Empirical Evidence of Monetarism:

Which school of thought is right, Keynesians or Monetarists? The answer hinges on the two assumptions described above: the stability of velocity and the efficiency of markets. We address the first of these two assumptions here. The figure titled "Velocity" plots velocity of M1 from 1970 to 2003. In the 1970s velocity was not stable, but at least it was increasing at a fairly constant rate.

Monetarism relies on the *predictability* of velocity rather than absolute stability, so in the 1970s one could make a case for the short-run quantity theory. However, the 1980s and 1990s have not been kind to Monetarist assumptions. Velocity was highly unstable with unpredictable periods of increases and declines. In such an environment, the link between the money supply and nominal GDP broke down and the usefulness of the quantity theory of money came into question. Many economists who were convinced by Friedman and Monetarism in the 1970s abandoned this approach in the mid- to late-1980s. The empirical relationship had simply broken down. Why?

Most economists think the breakdown was primarily the result of changes in banking rules and other financial innovations. In the 1980s banks were allowed to offer interest-earning checking accounts and many people chose to hold their wealth in the form of M1. In short, the distinction between checking and savings accounts partially eroded. Moreover, many people found that money markets, mutual funds and other assets were better alternatives to traditional bank deposits.

Hence, the relationship between money and economic performance changed. The figure titled "Growth of M1 and Nominal GDP" illustrates the lack of correlation between money growth and nominal GDP growth since the mid-1980s. Monetarists and Keynesians alike closely watch the behavior of velocity. If velocity should

become more stable in the future, there is no reason that monetarism could not make a resurgence. The Federal Reserve would be thrilled to have an indicator that predicts economic activity so accurately

Keynesians vs. Monetarists:

Keynesians and Monetarists fought head-to-head in the 1970s. Most economists conclude that Keynesians won the war, but Monetarists won many battles. Because of the healthy debate, Keynesians are more convinced of the importance of the money supply and monetary policy, especially over the long run. They are more acutely aware of the long-term threat to price stability that rapid money growth can bring. Keynesians are also now more likely to prefer monetary policy to fiscal policy.

Despite the convergence, substantial differences remain between the two bodies of thought. We summarize the more important differences here and in Table 1.

- Keynesians argue that the Fed should use discretion in conducting monetary policy, while Monetarists advocate a long-run money growth rule.
- Keynesians still view fiscal policy as potentially important. Monetarists are less convinced of the usefulness of fiscal policy.
- As a general rule, Keynesians believe that the Aggregate Supply curve is more horizontal than vertical in the short run so stabilization policy can have big impacts on output and employment. Because Monetarists believe that the economy is inherently stable, they tend to view the Aggregate Supply curve as more vertical so discretionary stabilization policy is not as important.

Although differences remain, the debate between Keynesians and Monetarists cooled considerably in the 1990s. Monetarists could no longer defend a simple relationship between M1 and nominal GDP. Many Monetarists now emphasize the longer-run relationship between M2 growth and nominal GDP growth. Although Keynesians do not stress the importance of money growth as much as Monetarists, the focus on the long run is much less controversial.

TABLE 1

Monetarists	Keynesians
Tie monetary policy to rules	Give policymakers discretion.
Fiscal policy is not useful.	Fiscal policy may be useful.
AS curve has a steep slope.	Economy can be unstable.
Economy is inherently stable.	AS curve can be flat.

The Chicago School Of Economic Thought:

An economic school of thought that originated at the University of Chicago in the 1940s. The main tenets of the Chicago school are that free markets best allocate resources in an economy, and that minimal government intervention is best. The Chicago school includes monetarist beliefs about the economy, and contends that the money supply should be kept in equilibrium with the demand for money. To this end, macroeconomic variables like output and wages are viewed in aggregate for the entire economy.

The Chicago school traces its roots back to Nobel laureate Milton Friedman, whose theories were drastically different from Keynesian economics, the prevailing school at the time. The Chicago school focuses on reducing regulations on business and believes in a laissez-faire approach to competition.