



# MARGINAL REVOLUTION

- It took place in the later half of the 19th century
- Stanley Jevons in England, Carl Menger in Austria and Leon walras at Lausanne, are generally regarded as the founders of marginalist school
- Hermann Heinrich Gossen of Germany is considered to be the anticipator of the marginalist school
- The term 'Marginal Revolution' is applied to the writings of the above economists because they made fundamental changes in the apparatus of economic analysis
- They started looking at some of the important economic problems from an altogether new angle different from that of classical economists
- Marginal economists has been used to analyse the single firm and its behavior, the market for a single product and the formation of individual prices
- Marginalism dominated Western economic thought for nearly a century until it was challenged by Keynesian attack in 1936

(keynesian economics shifted the sphere of enquiry from micro economics to macro economics where the problems of the economy as a whole are analysed)

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- The provocation for the emergence of marginalist school was provided by the interpretation of classical doctrines especially the labour theory of value and ricardian theory of rent by the socialists
  - Socialists made use of classical theories to say things which were not the intention of the creators of those theories
  - So the leading early marginalists felt the need for thoroughly revising the classical doctrines especially the theory of value
  - They thought by rejecting the labour theory of value and by advocating the marginal utility theory of value, they could strike at the theoretical basis of socialism

# Economic Ideas of Marginalist School

- This school concentrated on the 'margin' to explain economic phenomena. Acc. To this school all economic discussions are made at the point of margin. They extended the marginal principle to all economic theories
- The approach of marginalist school is micro economic rather than macro economic
- The marginal school has adopted the abstract and deductive method of classical economists
- The marginal utility analysis is based on the assumptions of competition. There will be large number of buyers and sellers and no buyer or seller can influence the market decisions by his actions
- While the classical school considered cost of production, that is ,supply as the determinant of value, the maginalist school considered demand to be important element in the determination of value

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- The analysis of the marginalist school is based on the subjective and the psychological approach
  - The marginalist approach is based on the assumption of rational behavior on the part of individuals
  - The marginal school believes that economic forces generally tend towards equilibrium
  - Lastly, The marginalists supported the laissez-faire policy of the classical economists. They thought maximum social welfare could be attained by market forces such as competition and there should not be any governmental interference with natural economic laws

# GOSSEN(1810-1858)



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- Herman Heinrich Gossen is one of the most tragic figures in the history of economics
  - He was an anticipator of the marginal utility theory
  - He published his book “Development of the Laws of Exchange Among Men” in 1854
  - He hoped that his book revolutionised the science of Economics
  - He claimed that he was doing to economics what Copernicus did for astronomy
  - His analysis of economic system is based on Hedonism and utilitarianism
  - According to him everyman tries to maximise his pleasure and minimise his pain
  - Gossen believed that the aim of all human conduct is to maximise enjoyment.

- Gossen believed that the confusion which existed in economic theories before his book was published was due to absence of mathematical representation
- So he held that a comparison of the quantities of satisfaction might be made with the help of mathematical formula
- Based on the above assumption he wrote in the first para of his book.”man wants to enjoy life and makes it his chief aim to maximise happiness”
- In this connection he gave 3 laws of human conduct. these 3 laws exhibit 3 main features

1.utilitarianism(**Utilitarianism** is a theory in holding that the best moral action is the one that maximizes utility. the doctrine that actions are right if they are useful or for the benefit of a majority.)

2.consumption approach

3.mathematical method

# **GOSSEN'S FIRST LAW**

- It states that “the amount of one and the same enjoyment diminishes continuously as we proceed with that enjoyment without interruption, until satisfaction is reached”.
- In modern times, this law is known as the Law of Diminishing Marginal Utility.
- In other words, the law tells that the marginal utility of good for a person diminishes with every increase in the stock that he already has.

# **GOSSEN'S SECOND LAW**

- The second law tells that each man will spend his money on different commodities in such a way that the amounts of all enjoyments are equal.
- Thus Gossen explained that maximum enjoyment will result from a uniform level of satisfaction
- In modern terms Gossen's second law is known as the law of equi-marginal utility
- "A person can get maximum utility with his given income when it is spent on different commodities in such a way that the marginal utility of money spent on each item is equal"

# GOSSEN'S THIRD LAW

- **Gossen's Third Law** is that scarcity is a precondition for economic value
- good has value only when the demand for it exceeds supply (i.e. subjective scarcity is source of value). Or, to use Gossen's logic, since marginal utility declines with consumption, a good can only have positive marginal utility (i.e. "value") if the available supply is less than what is needed for satiation. Otherwise, desire for it will be satiated and the marginal utility (and thus value) will be zero.

- Gossen's views on value are based on the above 2 laws
- Acc.to him value of a thing depends upon the enjoyment which it can give.
- Acc.to him value was a relative term. It depended upon the relation between the object and the subject
- With an increase in the quantity the value of each added unit decreases until it becomes zero
- On this basis he classified goods possessing value into 3 classes

1.commodities which have all the properties for yielding satisfaction, i.e., consumer goods. They satisfy our wants immediately

2.commodities which do not possess all properties required for yielding satisfaction. They are jointly necessary for enjoyment. In modern times we call these goods complementary goods.(eg ; toothbrush and toothpaste , car and petrol)

3.commodities which are used in the productin of other commodities

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- With regard to the cost Gossen stated that different amount of exertion for their production.
  - So the value or cost of the commodity is determined by the degree of exertion spent for the production of the commodity
  - The value of the commodities would be diminished in the same degree in which the estimation of the difficulty diminishes.
  - Thus, the value of the commodity will go on increasing up to a point where the difficulty and the value are equal.
  - In short, the man will go on procuring satisfaction until amount of satisfaction equals the difficulty.
  - He has also discussed the concept of want and distinguished between needs and luxury

## Conclusion

- His book contains the essential elements of the marginal utility school
- He was a great original thinker who believed that mathematical methods were absolutely essential to explain economic phenomena.
- Gossen had anticipated most of the modern theories but he could not attract much attention chiefly owing to lack of clarity in expression and failure to make his treatment more systematic.

# WILLIAM STANLEY JEVONS (1835-1882)

- Jevons was one of the founders of marginal utility school
- He was born in Liverpool, England in 1835
- His main contribution to economic theory is to be found in his “theory of public economy”(1871).his other important works are “investigations in currency and finance”, “the serious fall in the value of gold” and “the coal question”

# HIS ECONOMIC IDEAS

## I. UTILITY

- He laid emphasis on human wants and their satisfaction by utilities
- Acc.to him utility was the abstract quality of a commodity to satisfy human want
- It was a relative term related to wants
- It diminished with an increase in the quantity of stock
- He used a new term final degree of utility for marginal utility

## 2.VALUE

- His basic assumption was that the value stemmed from marginal utility
- Acc.to him cost of production determined the supply ; supply determined the final degree of utility ; the final degree of utility determined value.
- He criticized the labour theory of value and remarked that labour once spent had no influence on the future value of any commodity. It was lost forever

### 3.SUN-SPOT THEORY

- Among the several non-monetary theories of trade cycle there is one known as climatic theory
- Acc.to which a bad climate cause crop failure and creates depressing conditions in other parts of the inter-dependent economy
- The best known theory of this type is the sun spot theory of Jevons
- Acc to this theory periodic appearance of spots on the face of sun affected solar radiation which adversely affected the quantity and quality of crops
- The sun spots reappear after an interval of 10 or 11 years and create cyclical fluctuations in the agricultural economy of a country

## 4.THEORY OF RENT

- Jevon's own contribution to the theory of rent is nil.
- He completely agreed with the ricardian theory of rent
- But he adopted the geometrical methods to restate the classical theory of rent
- For him, rent was the excess secured by the more fertile lands by the application of intra-marginal of labour and capital
- It was the share of the landlord

## 5.THEORY OF CAPITAL

- He admitted that capital enabled people to provide tools,machines etc. which helped in production
- The main function of capital according to Jevons was to support a given number of workers during the time it took them to complete a particular work
- He anticipated the concept of a capital fund
- He laid emphasis on the time element in capital because there was a gap between the beginning of an undertaking and the time when it yielded services

## CONCLUSION

- He was the forerunner of neo-classical economics and the English representative of the marginal school
- His mode of presentation was mathematical
- He aimed at creating scientific economics
- He was both inductive and deductive in his studies
- He was right in claiming that his theory of value based on utility would bring about a revolution in economic analysis
- The term 'Jevonian revolution' may be rightly applied to his work
- He was as much a logician as he was an economist

# MARIE ESPRIT LEON WALRAS (1834-1910)

- Leon Walras was one of the three founders marginal utility school
- He was a author of several books including “Elements of Pure Economics”(1877),and theory of production(1877)

# MAIN ECONOMIC IDEAS

## I. The doctrine of marginal utility

- Co discoverer of marginal utility
- According to him exchange value of a commodity is based on its utility and supply
- He used the term rarete instead of marginal utility
- He held that exchange value of a commodity was in proportion to rarete or marginal utility

# I.THEORY OF PRODUCTION

- Walras analysed the equilibrium condition of the production of goods
- According to him land ,labour and material capital are supposed to be capital goods and services which may produce either productive services or consuming services
- He holds that the producers retain 3 classes of productive services i.e land,labour and capital from the public and on the other side, people get consumer goods from them.
- To him, there were 2 general markets- resource market and the consumer goods market which undertake entire process through money transactions

## 2.THEORY OF CAPITAL

- Walras said that capital goods were desired by people for the income which yielded
- He allowed 2 deductions to be made from gross revenue-one for depreciation and the other for insurance against the chance of loss
- He recognised 4 types of circulating capital-two types held by consumers(stocks of consumer goods and a cash balance) and two similar type held by producers( stocks of raw materials and finished goods and cash balances)

### 3.THEORY OF MONEY

- Walras advocated the cash balance theory which broadly explained that the need for cash balances arose because consumers could not wait for commodities
- They wanted to maintain those balances because commodities were immediately available

## 5.STATE INTERVENTION

- He suggested state intervention in the monetary policy of the country, advertisement, security,justice,education,railways and freight charges,speculative activities and labour market

## 6. WALRASIAN GENERAL EQUILIBRIUM ANALYSIS(GEA)

- The concept of general equilibrium was first explained by Leon Walras in his book, “Elements of Pure Economics” published in 1874.
- He attempted to write the general equilibrium in mathematical term by taking into account the interdependence of all the economic variables of the economy
- Walrasian general equilibrium is applicable under static conditions i.e. when the quantity of commodity and the period of time are limited and transactions take place under conditions of perfect competition
- Each consumer spends his income in a manner that yields him the maximum satisfaction
- All firms in an industry are in equilibrium at all prices and output
- The supply and demand for productive resources are equal at equilibrium prices
- Walras stated the general equilibrium in the following manner-the economy is in a state of general equilibrium where the demand for every commodity is equal to the supply of it
- In other words the decisions of the consumers to purchase each commodity must be equal to the decisions of the producers who produce and sell the commodity
- Similarly the decisions of the factors of production must be in perfect harmony with the decisions of their employers

## Conclusion

- He was one of the discoverers of the theory of marginal utility
- His reputation rests on his mathematical presentation of economic theories
- He laid the foundation for the integration of the theories of value and money and developed the details of his general equilibrium in the fields of exchange, production, productive activity and money

# An estimate of marginal utility school

- It rationalize human behavior too much
- Their theories of market prices are based on the assumption of perfect competition, which we do not have in the real world
- They have not taken note of the influence of trade unions on wages
- They have not dealt with the problems affecting the process of economic growth
- They have not developed any theories of trade cycle
- They have said little or nothing on some of the central problems of modern economics, namely the problems of unemployment and depression
- Lastly they believed that marginal utility was quantitatively measurable

# KARL MENGER

- He has been regarded as a founder of the Austrian school
- His important works are ; Principles of Economics(1871),
- Investigations into the methods of Social Sciences, particularly Political Economy(1883), Errors of Historicism in German Political Economy(1884), and On the Theory of Capital(1888)
- Menger's "principles of economics" established his fame as the author of the 'marginal revolution' of the Austrian School

# I.METHOD

- Menger supported deductive method
- He was of the view that economic method must rest on individual foundation
- He held that economic phenomena are the result of the behavior of individuals, so in order to understand the economy it becomes necessary to study the behaviour of the individuals
- Thus like Gossen and Jevons ,Menger made the individual centre of analysis

## 2.NEEDS

- In his book “foundations of Economic Theory” Menger dealt with some of the important concepts and doctrines of economics
- Acc.to him human needs ,goods, and the law of cause and effect are the basic elements in economic science
- Satisfaction of human needs is the ultimate goal of the economy and welfare of the society depends mainly upon an increase and maintenance of the satisfaction of human needs
- Needs represent the conscious effort on the part of a man to live a harmonious life
- It also imply thought and reasoning
- These needs may be the result of human nature itself or of the social environment
- In addition to individual needs, there are social needs
- The satisfaction of social needs is the goal of social economics which is totally different from individual economics

### 3.THEORY OF GOODS

- Menger has established a relation between a commodity and satisfaction on the basis of law of cause and effect
- A thing if it were to be called as a good should have the following qualities
  - 1)there should be human want
  - 2)it must possess the power to satisfy the human want
  - 3)man must recognise the quality possessed by the commodity namely the want satisfying power
  - 4)man must have command over the thing
- On technical grounds, Menger classified goods into first order, second ,third and fourth order goods
- Goods of the 1<sup>st</sup> order are those which can be used for the immediate satisfaction of human wants(e.g.bread)
- Goods of the second order are used for the production of the 1<sup>st</sup> order goods(e.g.Wheat flour)
- Goods of third order are used for the production of second order goods(e.g.wheat)
- Fourth order goods are used for the production of third order goods(e.g.; land, instruments necessary for cultivation and services of farmers)

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- He emphasised the importance of consumer goods on which the demand for other goods depended

(eg ; dd for bread creates the dd for flour,wheat,land,machinery etc.)

- Further he classified goods into economic and non-economic goods

*ECONOMIC GOODS* are those which are relatively less in supply in relation to wants

*NON-ECONOMIC GOODS* are those for which the supply exceed their needs and there is no need to economise them

- He also pointed out that the classification of goods into economic and non-economic is not a permanent one

## 4.WEALTH

- He defined wealth as the sum total of “economic goods at the command of an economising individual”
- He differentiated between individual wealth and public wealth
- Just an individual possess wealth to satisfy his wants, the state, provinces, communities, and associations also have large quantities of economic goods to satisfy their needs which is called public wealth
- Today it is called in different names- government wealth, provincial wealth, municipal wealth, corporate weath etc.

## 5.THEORY OF VALUE

- Acc. To him, supply determines the value of a commodity, changes in supply, alter the value of a commodity
- He considered the measure of value as a subjective one
- He believed that it was the magnitude of importance attached to a good which determined its value
- Value has nothing to do with cost of production or labour
- A commodity may have great value to one individual, little or no value to another
- Its value depends on the requirements of different individuals and the amounts available to each of them
- He differentiated between use value and exchange value
- He defined use value or utility as the power possessed by the commodity to satisfy the human wants directly
- Exchange value on the other hand satisfies human want indirectly
- Menger held that the utility of the good changes, in different stages of life
- When a good loses its use value, its exchange value becomes prominent
- All such goods are sold out
- Thus economising individual sells commodities which are not useful for his immediate consumption

## 6.THEORY OF MONEY

- Money was considered as the result of a gradual process of evolution
- He considered money as a medium of exchange
- He recognised the role of money as standard of measure
- As a standard of value it has two types of value-external and internal
- The value of good can be expressed in terms of money

## 7.THEORY OF EXCHANGE

- Mengers idea of exchange resembles that of a barter system of exchange
- He believed that through an act of exchange, the needs of both economising individuals could be satisfied
- Both parties gained in the mutual transfer
- He pointed out that this theory of exchange holds good for the nations also( for eg , a country mainly engaged in agriculture and other in industry would satisfy their needs by exchanging certain portion of their produce)
- He also tried to show that in isolated exchange, price would be within limits set by the buyer and seller.
- He held that under monopoly, price would be set by the offer of the strongest
- The monopolist may discriminate between one buyer and another
- In competition discrimination is impossible

## 8.THEORY OF IMPUTATION

- Menger while analysing different categories of goods, developed the theory of imputation
- Imputation theory tells us that the value of a good of a high order is derived from the value of a lower order good to which it contributes

(eg ; value of flour depends on the value of bread)

In this way, rent of land is the value which is imputed to the service of land in the production of agricultural goods

## 9.THEORY OF FUNCTIONAL DISTRIBUTION

- He explained the distribution of income among the factors of production
- He analysed the problem of factor pricing on the basis of marginal productivity

