Summary History of Economic Thought: complete,

History of Economic Thought (Erasmus Universiteit Rotterdam)

The Mercantilist School (1500 – 1776)

Major tenets:

Gold and silver was the most desirable form of wealth.
Mercantilists tended to equate the wealth of a nation with the amount of gold and silver bullion it possessed. A surplus of export was necessary to generate payments in hard money.
Nationalism.
All countries could not simultaneously export more than they imported. Therefore one's own country should promote export and gain wealth at the expense of its neighbors. Mercantilist nationalism quite naturally led to militarism. Strong navies and merchant fleets were an absolute requirement.
Duty-free importation of raw materials that could not be produced domestically, protection for manufactured goods and raw materials that could be produced domestically and export restriction on raw materials. This was called "the fear of goods". Law against export of sheep and wool.
Colonization and monopolization of colonial trade.
Merchant capitalists favored colonization and wanted to keep the colonies eternally dependent upon and subservient to the mother country.
Opposition to internal tolls, taxes and other restrictions on the movement of goods.
They thought it could increase prices on export. However, they did not favor free internal trade, they preferred monopoly grants and exclusive trading privileges whenever they could acquire them.
A strong central government was needed to promote mercantilist goals.
A strong national government was required to ensure uniform regulation. Central governments were also necessary to achieve the following goals: nationalism, protectionism, colonialism, and internal trade unhampered by tolls and excessive taxes.
Importance of a large, hard-working population. Would keep labor supply high and wages low, also provide an abundance of soldiers if needed for war. Low wages would enable lower prices on export and increase inflow of gold and reduce idleness and promote greater participation in the labor force. Idleness, thievery and begging was dealt with mercilessly.

Who did they seek to benefit?

The merchant capitalists, the kings and government officials. Especially those who were most powerful and entrenched and had the most favored monopoles and privileges. Mercantilist can be understood as an example of rent seeking behavior.

Which tenets of the mercantilist school became lasting contributions?

Made a lasting contribution to economics by emphasizing the importance of international trade. They developed the economic and accounting notion of what today is termed the balance of payments. Indirectly contributed to economics and economic development.

Thomas Mun: (1571-1641). Published "A discourse of trade from England into the east indes, in which he argued that as long as total exports exceeded total imports, the drain of species from a country in any one trade area did not matter. Most important for a country's wealth was surplus of exports.

Gerard Malynes (died 1641). Considered trade to be too low for the aristocracy. He also advanced the idea that regulation of goods, He developed the notion that more money in a country would raise prices and stimulate business.

Charles Davenant (1656-1714). Dealt with taxes, imports and exports, was a member of parliament. Foreshadowed more of the argument of laissez-faire than any other influential mercantilist. In “An essay on the probably means of making the people gainers in the balance of trade” he argues that a kingdom can reap the benefits of the entire value of an exported product if it is made from domestic raw materials. He thought the wealth of a country was that it produces, not its gold or silver.

Jean Baptiste Colbert (1619-4683). He was a bullionist who believed that the strength of a state depends on its finances which rest on its collection of taxes, which is greatest if money were abundant. He favored expanded exports, reduced imports and laws preventing the outflow of bullion from the country. He thought agriculture, trade, war on land and from the sea was the most important professions.

Sir William Petty (1623-1687.) He offered some new ideas that foreshadowed classical economics. Petty favored freer foreign trade than many of the mercantilists, partly because he felt it would circumvent the widespread smuggling that was occurring. He wanted imported goods taxed so that they “may be somewhat dearer than the same things grown or made at home, and imports of raw materials should be lightly taxed. Petty opposed laws prohibiting the export of money. Petty favored large populations for increasing returns to the government, which would reduce unit costs of governing a larger population. In *A treatise of taxes and contributions* Petty expressed his enthusiasm for the mercantilist vision of “full employment” Children should be put to employment at their first capacity. He thought thieves shouldn’t be hanged but instead to be slaves and add to the commonwealth. Everyone out of work should be hired by the state to work on roads and planting trees.
Petty recognized the velocity of circulation, the rate at which money changes hand can be as important as the quantity of money.
Division of labor. He did not develop this idea in detail but recognized the economics of specialization and division of tasks.
other things he thought of: Rent theory, Importance of labor, labour theory of value.

The Physiocratic School (1756 – 1776)

<u>Major tenets</u>

Natural order

Physiocrat = rule of nature. Laws of nature govern human societies just as those discovered by Newton govern the physical world.

Laissez-faire, laissez-passer

'Let people do as they please without government interference'. The physiocrats were opposed to almost all feudal, mercantilist and government restrictions, favoring freedom of business enterprise at home and free trade abroad. They thought that government should never extend their interference in economic affairs beyond the minimum absolutely essential to protect life and property and to maintain freedom of contract.

Emphasis on agriculture

The physiocrats thought that industry, trade, and professions were useful but sterile, simply reproducing the value consumed in the form of raw materials and subsistence for the workers. Only agriculture was productive, because it produced a surplus, a net product above the value of the resourced used in production.

Taxation of the landowner

Physiocrats thought that because only agriculture produced a surplus, which the landowner received in the form of rent, only the landowner should be taxed.

Interrelatedness of the economy

Quesnay, in particular, and the physiocrats in general, analyzed the circular flow of goods and money within the economy.

Whom did the Physiocratic School benefit?

The peasants/farmers would ultimately gain.

Francois Quesnay (1694 – 1774) was the founder and leader of the Physiocratic school. He believed that laws made by people should be in harmony with natural laws. His famous Tableau Economique depicted the circular flow of goods and money in an ideal, freely competitive economy. Although Quesnay called nonagricultural production 'sterile', he did not question the right of the proprietors to receive rent. Nature, not the worker, produces the surplus, he said.

Anne Robert Jacques Turgot (1727 – 1781)

Turgot's greatest contribution in the realm of economic theory was in correctly presenting the law of diminishing returns.

The Classical School (1776 – 1871)

Major Tenets

Minimal government intervention

Forces of the free competitive market would guide production, exchange and distribution. Government activity should be confined to enforcing property rights, providing for the national defense and, and providing public education

Self-interested economic behavior

All economic activity is based on self-interest, producers and merchants provide goods out of a desire to make products, workers offered their labor services to obtain wages and consumers purchased products as a way to satisfy their wants.

Harmony of interests

Natural harmony of interest in a market economy. By pursuing their own individual interests, people served the best interests of society.

Importance of all economic resources and activities

All economic resources and activities contribute to a nation's wealth.

Economic laws

The classical school made tremendous contributions to economics by focusing analysis upon explicit economic theories or 'laws'. The classicists believes that the laws of economics are universal and immutable.

Whom did the Classical School benefit?

In the long run classical economics served all society because the application of its theories promoted capital accumulation and economic growth. In the short run however it was the wage earners that bore the heaviest burden.

Which tenets of the Classical School became lasting contributions?

The classical economists gave the best analysis of the economic world up to their time, far surpassing the analyses of the mercantilists and physiocrats. They laid the foundation of modern economics as a social science, and generations who followed built upon their insights and achievements. Tenets that became lasting contributions include the following; (1) the law of diminishing returns, (2) the law of comparative advantage, (3) the notion of consumer sovereignty, (4) the importance of capital accumulation to economic growth, and (5) the market as a mechanism for reconciling the interests of individuals with those of society.

Forerunners

Sir Dudley North (1641 – 1691)

Sir Dudley North, living during the height of the mercantilist period, struck hard at the heart of mercantilist doctrine. He emphasized that trade is not a one-sided benefit to whichever country realizes a surplus of exports but rather is an act of mutual advantage to both sides. Also he argued for laissez-faire as the way to achieve maximum gains from both intra- and international trade. He believed that free trade would help both traders and the country.

Richard Cantillon (1680 – 1734)

Cantillon developed a theory of value and price. His emphasis on the role of land and labor, on supply and demand, and on the fluctuations of price around intrinsic value makes him a direct forerunner of

classical economics.

David Hume (1711 – 1776)
Of all the forerunners of classical economics, Hume came closest to the ideas of Smith. His greatest contribution as an economist was in presenting what has since been called the price specie-flow mechanism. He said that international trade is a positive sum game, one in which the payoffs sum to a positive number.

Members
Adam Smith (1723 – 1790)
Both Moral Sentiments and Wealth of Nations reconcile the individual with the social interest through the principle of the invisible hand, or natural harmony, and the principle of natural liberty of the individual, or the right to justice.
The Theory of Moral Sentiments; sympathy and benevolence restrain selfishness
The Wealth of Nations; competition channels economic self-interest towards the social good.
(1) The Division of Labor. The division of labor increases the quantity of output produces for three reasons. First, each worker develops increased dexterity in performing one single task repeatedly. Second, time is saved if the worker need not go from one kind of work to another. Third, machinery can be invented to increase productivity once tasks have been simplified and made routine through the division of labor.
(2) The Harmony of Interests and Limited Government. There is an invisible hand that channels self-interested behavior in such a way that the social good emerges. The pursuit of self-interest, restrained by competition, thus tends to produce Smith's social good – maximum output and economic growth. This harmony of interests implies that intrusion by government into the economy is unneeded and undesirable. Smith did see a significant albeit limited role for the state: (1) to protect society from foreign attack, (2) to establish the administration of justice, and (3) to erect and maintain the public works and institutions that private entrepreneurs cannot undertake profitable.

Economic Development
Smith viewed the economy as a whole and emphasized growth and economic development. The division of labor and the accumulation of capital as the primary factors that promote a growing stock of the nation's wealth. The division of labor together with an enlargement of the capital stock increases productivity, which in turn increases national output. Greater national output enables higher levels of consumption within the society, and the latter, according to Smith, constitutes a rise in the true wealth of the nation.

Robert Malthus (1766 – 1834)
Mathus' Population Theory
Population, when unchecked, increases geometrically; subsistence increases at best only arithmetically. According to Malthus, poverty and misery are the natural punishment for the failure by the "lower classes" to restrain their reproduction. Some of his ideas were adopted in the harsh Poor Law Amendment of 1834, where all relief for able-bodied people outside workhouses was abolished.
The Theory of Market Gluts
This state of disequilibrium and resulting crises would occur, held Malthus, because there would always be problems of having insufficient effective aggregate demand for all the commodities to be

sold. Insufficient effective aggregate demand, in turn, would have the effect of leaving inventories piled high. This, of course, would result in a decrease in producer profit, an increase in the unemployment rate (as many workers would need to be layed off), poverty to worsen, and general social unrest to be aroused.

David Ricardo (1772 – 1823) was a leading figure in further developing the ideas of the classical school. Ricardo was an outstanding example of a deductive thinker. He began with basic premises and used logic to deduce generalizations. Ricardo called his broad generalizations economic laws, and he considered their operation to be as valid in economics as are the laws of physics in the natural sciences.
(1) The Theory of Diminishing Returns and Rent. First, the extensive margin of cultivation states that the grade of land partly determines the rent, and that extensive use of the land, will yield diminishing returns of rent. Second, the intensive margin of cultivation states that if successive units of labor and capital are added to a piece of land while technology remains constant, each added unit of investment will add less to the output than previous units.
(2) The Theory of Exchange Value and Relative Prices. Ricardo wrote that, for a commodity to have exchange value, it must have use value. Utility is not the measure of exchangeable value, although it is essential to it. Possessing utility, or use value, commodities derive their exchange value from two sources: (1) their scarcity and (2) the quantity of labor required to obtain them.
(3) The Distribution of Income.
-Wages. The natural price of labor is that price that, given the habits and customs of the people, enables workers to subsist and to perpetuate themselves without a change in their numbers. Ricardo's idea that in the long-run the worker gets only a minimum wage came to be known as "iron law of wages".
-Profits. Ricardo felt that the rates of profit in different fields on enterprise within a country tend to equalize. The free, competitive market and the actions of individuals tent to produce rates of profit that are equal or equally advantageous, on balance, for all types of businesses. Furthermore, Ricardo emphasized that profits and wages vary inversely; one increases at the expense of the other.

Contemporary representation
As population and the labor force increase, diminishing marginal returns within agriculture mean that total product increases at a diminishing rate. Thus total rent received by landlords rises with population. Because wages remain at the subsistence level while profits are squeezed out, the landlords are the sole beneficiaries of the long-run expansion process. Their numbers remain constant, and their rents grow.

The Theory of Comparative Costs
Ricardo made a brilliant and lasting contribution to economic thought, by showing that even if one country is more efficient than another in producing all commodities, trade between the two nevertheless can be of mutual benefit. His theory of comparative costs is now known as the law of comparative advantage.

Jeremy Bentham (1748 – 1832) was an enthusiastic adherent of the classical school.
Jean-Baptiste Say (1767 – 1832) was a Frenchman who popularized Adam Smith's ideas on the Continent.
Nassau William Senior (1790 – 1864)

John Stuart Mill (1806 – 1873) was the last great economist of the classical school, undoubtedly the greatest since Ricardo's death in 1823.

Socialism

-Socialists repudiated the classicist notion of the harmony of interests and instead viewed society as being composed of distinct classes whose interests were often opposed to one another.
-They opposed the concept of laissez-faire. With the exception of the anarchists, socialists viewed government as being potentially a progressive representative of the interests of the working class.
-Socialists rejected Say's law of markets, claiming instead that capitalism is given to either periodic crisis or to general stagnation.
-Socialists denied the concept of humanity upon which classical thought was erected, instead believing in the perfectibility of people. Capitalists produced self-interest behavior and they thought that with the proper environment, the nobler human virtues such as sharing with other would emerge.
-Each of the various socialist ideologies advocated collective action and public ownership of enterprise to ameliorate conditions of the masses. This ownership could be undertaken by the central government, local governments, or cooperative enterprises.

Whom did Socialism benefit?
The moderate groups claimed to represent everybody's interests, with primary emphasis on the needs and interests of workers.
The more extreme socialist groups proclaimed class warfare against the rich. Their sole aim was to promote the interests of the working class

Simonde de Sismondi (1773 – 1842) was a Swiss economist and historian of French descent. Sismondi, raising the possibility of overproduction and crises, was one of the early contributors to business-cycle theory. Also, he stated that only state intervention would ensure the worker a living wage and a minimum social security.

Robert Owen (1771 – 1858) was the most spectacular and most famous of the utopian socialists. His central thesis was that the environment molds human character for better or worse. Human beings cannot form their own characters; their characters are without exception formed for them. All of Owen's theories, dreams and programs were based on the belief that providing better working conditions would produce better people.

Marxian Socialism

Marx's Law of Motion of Capitalism

Labor Theory of Value

Marx stated that the (exchange) value of a commodity is determined by the socially necessary labor time embodied in the commodity. Marx's labor theory of value differed from Ricardo's in an important way: To Marx, labor time determines the absolute value of goods and services; Ricardo believed that the relative values of different commodities are proportional to the labor time embodies within each.

The Theory of Exploitation

The capitalist pays labor the value of its labor power. This amount is less that the value of the output, the difference being surplus value expropriated by the capitalist in the form of property income.

Capital Accumulation and the Falling Rate of Profit

Surplus value is the source of capital accumulation. As capitalists invest relatively more in machinery and less in labor power, which causes the surplus value, or profits, to decrease.

Summary Law of motion of Capitalist Development.

The labor theory of value is the starting point for the entire theory. Workers are the source of all value, but do not receive all the value. Instead, the capitalist pays labor the value of its labor power. This amount is less than the value of the output, the difference being surplus value expropriated by the capitalist in the form of property income. Surplus value is the source of capital accumulation, which in turn produces a falling rate of profit, worsening business crises, and technological unemployment. All three bolster the size of the industrial reserve army of the unemployed and either directly or indirectly add to the immiserization of the proletariat. The declining rate of profit and worsening business crises also cause a centralization of capital and concentration of wealth. The eventual result of the process is class conflict. (Figure 10-2)

The German Historical School (1840 – 1917)

Major Tenets

Evolutionary approach to economics

The historical school applied a dynamic, evolutionary perspective in its study of society. It concentrated on cumulative development and growth. As society is constantly changing, what is relevant economic doctrine for one country at a particular time may be irrelevant for another country or another age.

Emphasis on the positive role of government

The historical school was nationalistic, whereas classical economics was individualistic and cosmopolitan. They gave great prominence to the need for state intervention in economic affairs and emphasized that the community has interests of its own that are quite distinct from those of the individual.

Inductive/historical approach

The economists of the historical school emphasized the importance of studying the economy historically, as part of an integrated whole. Because economic and other social phenomena are interdependent, political economy cannot be treated adequately except in combination with other branches of social science.

Advocacy of conservative reform

Political economy must not merely analyze motives that prompt economic activity but must weigh and compare the moral merit of these actions and their outcomes. It must determine a standard of the proper production and distribution of wealth so that the demands of justice and morality are satisfied.

Whom did the Historical School benefit?

First, the member of the German historical school benefited themselves and also the German imperial government by defending its role in a nationalistic state. Second, the historical economists served the dominant business, financial, and landowning groups by promoting moderate reforms that frustrated the drive for a more radical democratization of society.

Which tenets of the Historical School became lasting contributions?

The historical inductive method has become generally accepted as complementary to the abstract deductive approach. Economists of various persuasions agreed that historical empirical studies are required to explain the present, to test old theories, and to develop new ones.

Another lasting contribution of the school was its attack on laissez-faire. The members of the historical school recognized that unrestricted free enterprise does not necessarily produce the best possible results for society as a whole.

(Note the link between the historical economists and their ideas to the climate in Germany which led to World Wars I and II. Ideas presented in their doctrine could be interpreted as detrimental to society's progress.

Wilhelm Roscher (1817 – 1894) was one of the founders of the "older historical school". This group wanted to supplement classical theory, whereas the younger school wished to supersede it entirely with historical studies and policy considerations. Instead of disdaining abstract theory, he sought to discover its historical basis. He asserted that the study of contemporary facts and opinions is an essential adjunct to the classical deductive method.

Gustav Schmoller (1838 – 1917), the leading figure of the "younger historical school", was a professor of political science at Halle, Strasbourg, and Berlin. Schmoller wanted to develop economics exclusively on the basis of historical monographs. He believed that ethical value judgements are to be encouraged. Justice in the economic system is to be realized through a paternalistic policy of social reform furthered by the state and all social groups.
Late in life Schmoller changed his views on protectionism. In his younger years he had been an ardent advocate of free trade, but by 1901 he favored a protective tariff for Germany by justifying it on the basis of List's infant industry argument and that tariffs were international weapons that might benefit a country if used skillfully.

The Marginalist School (1871 – present)

Major Tenets

Focus on the margin

This school focused its attention on the point of change where decisions are made; in other words, on the margin. The marginalists extended to all economic theory the marginal principle that Ricardo developed in his theory of rent.

Rational economic behavior

The marginalists assumed that people act rationally in balancing pleasures and pains, in measuring marginal utilities of different goods, and in balancing present against future needs. They assumed that the dominant drive of human action is to seek utility and avoid disutility (Jeremy Bentham).

Microeconomic emphasis

The individual person and firm take center stage in the marginalist drama. Instead of considering the aggregate economy, or macroeconomics, the marginalists considered individual decision making, market conditions for a single type of good, the output of specific firms, and so forth.

The use of the abstract, deductive method.

The marginalists rejected the historical method in favor of the analytical, abstract approach pioneered by Ricardo and other classicists.

The pure competition emphasis

The marginalists normally based their analysis on the assumption of pure competition.

Demand-oriented price theory

Demand became the primary force in price determination as opposed to the classical school's interpretation that cost of production (supply) was the significant determinant of exchange value.

Emphasis on subjective utility

According to marginalists, demand depends on marginal utility, which is a subjective, psychological phenomenon.

Equilibrium approach

The marginalists believed that economic forces generally tend toward equilibrium – a balancing of opposing forces. Whenever disturbances cause dislocations, new movements toward equilibrium occur.

Merger of land with capital goods

The marginalists lumped land and capital resourced together in their analysis and spoke of interest, rent, and profits as being the return on property resources.

Minimal government intervention

In most cases, no interference with natural economic laws was in order if maximum social benefits were to be realized.

Whom did the marginalists benefit?

The marginalists sought to advance the interest of all of humankind through promoting a better understanding of how a market system efficiently allocated resources and promotes economic liberty.

William Stanley Jevons (1835 – 1882) equated exchange value with marginal utility.

Carl Menger (1840 – 1921) equated exchange value with total utility.

Friedrich von Wieser (1851 – 1926) introduced the concept of natural value versus exchange value, where the distinction between the two lies in exchange value also being determined by the purchasing power of consumers. He also formulated the opportunity cost-principle.

Eugen von Böhm-Bawerk (1851 – 1914) contributed to economics with his analysis to the element of time.

John Bates Clark (1847 – 1938) earned a worldwide reputation and represented America's great contribution to marginalist economics

Marginal versus Average Product

Francis Y. Edgeworth (1845 – 1926) was one of the 'second generation' marginalists who developed ideas that expanded and advanced the microeconomic theories. A significant idea added by Edgeworth was his distinction between marginal and average product. When total product is rising at an increasing rate , marginal product is rising and is above the average product. Because MP>AP, average product is also rising. Whenever a number that is greater than the average is added to a total, the average must also rise. But once the total product rises at a decreasing rate, marginal product falls; that is, diminishing marginal returns occur. Eventually marginal product falls below the average product, thus pulling the average down.

The Neoclassical School

Alfred Marshall (1842 – 1924) was the greatest figure in the neoclassical school .He was the great synthesizer, seeking to combine the best of classical economics with marginalist thinking, hence producing “neoclassical” economics.

Utility and Demand
-Marginal

John Gustav Knut Wicksell (1851 – 1926)

Irving Fisher (1867 – 1947)

Mathematical Economics

Léon Walras (1834 – 1910) is considered to be one of the three originators of marginalism, the other being Jevons and Menger. Walras developed and advocated general equilibrium analysis, which considers the interrelationshops among many variables in the economy. His general equilibrium theory presents a framework consisting of the basic price and output interrelationships for the economy as a whole, including both commodities and factors of production. Its purpose is to demonstrate mathematically that all prices and quantities produced can adjust to mutually consistent levels.

The Institutionalist School (1900 – Present)

Major Tenets

Holistic, broad perspective

The economy must be examined as a whole, rather than as small parts of separate entities isolated from the whole. Institutional economics deals with social processes, social relationships, and society in all its facets.

Focus on institutions

This school emphasized the role of institutions in economic life. An institution is not merely an organization or establishment for the promotion of a particular objective, but also an organized pattern of group behavior, well-established and accepted as a fundamental part of the culture. Economic life, said the institutionalists, is regulated by economic institutions, not by economic laws.

Darwinian, evolutionary approach

The evolutionary approach should be used in economic analysis, because society and its institutions are constantly changing. They disagreed with the static viewpoint that sought to discover eternal economic truths without regard for differences of time and place, without concern for changes that were occurring instantly. The evolution and functioning of economic institutions should be the central theme in economics.

Rejection of the idea of normal equilibrium

Rather than the idea of equilibrium, institutionalists emphasized the principle of circular causation, or cumulative changes that may be either salutary or harmful in seeking economic and social goals. The institutionalists are convinced that collective controls through government are necessary to continually correct and overcome deficiencies and maladjustments in economic life.

Clashes of interest

Instead of the harmony of interests that most of their contemporaries and predecessors deduced from their theories, the institutionalists recognized serious differences of interest.

Liberal, democratic reform

The institutionalists espoused reforms in order to bring about the more equitable distribution of wealth and income. They, invariably, condemned laissez-faire and favored a larger role for government in economic and social affairs.

Rejection of the pleasure-pain psychology

They repudiated the Benthamite underpinnings of economic analysis. They reached out instead for a better psychology, and some of them incorporated Freudian and behaviorist ideas into their thinking.

Thorstein Bunde Veblen(1857 – 1929): 'the leisure class'
Wesley Clair Mitchell (1874 – 1948): the importance of empirical investigation
John Kenneth Galbraith (1908 – present): 'the dependence effect and Galbraith's theory of the firm'

Welfare Economics

Welfare economics is the branch of economic analysis concerned with discovering principles for maximizing social well-being. Important contributors to welfare economics have focused specifically on the following: (1) defining welfare optimality and analyzing how maximum welfare can be achieved; (2) identifying factors that impede the achievement of maximum well-being and suggesting ways that the impediments might be removed.

Vilfredo Pareto (1848 – 1923) is the originator of the 'new' welfare economics, which is rooted in Walras' principles of general equilibrium.

Pareto Optimality

-Optimal distribution of goods: MRS(a) = MRS(b)

-Optimal technical allocation of resources: MRTS(a) = MRTS(b)

-Optimal quantities of output: MRS = MRT

Evaluation

First, some economists argue that it fails to address the important issue of distributive justice, or the fair distribution of income in society. Second, many public policies that increase national output and overall welfare also redistribute income as a by-product of the policy. Third, the Pareto criteria is based on a static view of efficiency. Lastly, the moral judgments that the Pareto criteria purposely exclude are often legitimate and dominant factors in policy formulation.

Arthus Cecil Pigou (1877 – 1959) was the leading neoclassical economist after the death of his predecessor, and like Marshall, he expressed humanitarian impulses toward the poor, hoping that economic science would lead to social improvement.

(1) Income Redistribution. Pigou asserted that greater equality of incomes under certain conditions could increase economic welfare, as the marginal utility of money diminishes as more is acquired.

(2) Divergence between Private and Social Costs and Benefits. Pigou's most significant deviation from orthodox theory lay in his focus on the divergence between social and private marginal costs and benefits. The private marginal cost of a commodity or service is the expense the produces incurs in making one more units; the social marginal cost is the expense or damage to society as the consequence of producing that unit of product.

Other contributions

-Stress on the desirability of increasing savings in the economy.

-Pigou concluded that economic welfare is diminished by government intervention that strengthens the tendency of people to devote too much of their resources to present use and too little to future use.

-Pigou's desire to increase national saving to promote economic growth rested on his orthodox idea that economies tend toward full employment.

-Pigou's discussion of price discrimination. It was he who classified price discrimination into three types: first degree, second degree and third degree.

Ludwig von Mises (1881 – 1973) was an important member of the Austrian school of economic thought. Von Mises contented that the same types of economic calculations that guide resources to their highest valued use under capitalism must be made by the socialist planner who desires to maximize consumer welfare. Without the private ownership of resources, free markets, and entrepreneurs, such calculations are impossible to make. According to von Mises, entrepeneurship is a central aspect in achieving dynamic economic welfare.

Oscar Lange (1904 – 1965) was a significant figure in the broader history of welfare economics. He set forth a model of market socialism. If administered according to a fixed set of rules, said Lange, this form of socialism would result in economic efficiency and maximum social welfare.

The Keynesian School (1963 – Present)

John Maynard Keynes (1883 – 1946) began the Keynesian School of thought with the publication of The General Theory of Employment, Interest and Money in 1936.

Major Tenets

Macroeconomic emphasis. Keynes and his followers concerned themselves with the determinants of the total or aggregate amounts of consumption, saving, income, output, and employment.

Demand orientation. Keynesian economists stressed the importance of effective demand (now called aggregate expenditures) as the immediate determinant of national income, output, and employment. Aggregate expenditures consist of the sum of consumption, investment, government, and net export spending.

Instability in the economy. According to Keynesians, the economy is given to recurring booms and busts because the level of planned investment spending is erratic. Changes in investment plans cause national income and output to change by amounts greater than the initial changes in investment.

Wage and price rigidity. Keynesians pointed out that wages tend to be inflexible downward because of such institutional factors as union contracts, minimum wage laws, and implicit contracts. Prices are also sticky downward; declines in effective demand initially cause reductions in output and employment rather than declines in the price level. Deflation occurs only under conditions of extremely severe depression.

Active fiscal and monetary policies. Keynesian economists advocated that the government should intervene actively through appropriate fiscal and monetary policies to promote full employment, price stability, and economic growth.

Criticism of Keynes

Keynes' short-run static thinking led him to exaggerate the trend toward secular stagnation. He underestimated the possibilities of technological change and the new capital investments it would stimulate. Keynes can also be criticized for his too-ready acceptance of wasteful government spending. Wasteful spending was preferable to serviceable projects and much better than doing nothing at all.

Joseph Alois Schumpeter (1883 – 1950)

Schumpeter constructed a theoretical system to explain both business cycles and the theory of economic development. The key process in economic change is the introduction of innovations, and the central innovator is the entrepreneur.

Schumpeter's overall contribution to economics thus lies less with his views on the long-run fate of capitalism than with his emphasis on the importance of entrepreneurs and innovation in achieving economic growth. New and improved technology, much of it commercialized by entrepreneurs, explains a large portion of the economic growth of the advanced industrial nations.

The Chicago School (1946 – Present)

Major tenets

Optimizing behavior. Members of the Chicago school stress the neoclassical principle that people attempt to maximize their well-being; that is, they engage in optimizing behavior at the time of their decisions.

Observed prices and wages in general tend to be good approximations of their long-run competitive ones. Prices and wages reflect opportunity costs to society at the margin. Divergences between actual and competitive prices caused by monopoly or monopsony are in general inconsequential.

Mathematical orientation. The Chicago school relies heavily on mathematical theorizing, using both the Marshallian partial equilibrium method and the Walrasian general equilibrium approach.

Rejection of Keynesianism. The economy is self-adjusting and regulating, with minor fluctuations being self-limiting. Severe recessions and depressions result from inappropriate monetary policy, not from autonomous changes in spending.

Limited government. Government is inherently inefficient as an agent for achieving objectives that can be satisfied through private exchange.

Milton Friedman (1912 – Present) is the leading figure of the Chicago School of thought.

(1) Consumption function. According to Friedman, a household's consumption is determined by permanent income rather than current income, where permanent income is defined as the average income that people expect to receive over a period of years. He stated that consumption does not respond to every change in income caused by changes in investment or government spending; it responds only to changes in income that people view to be permanent and long-lasting. The implication is that the marginal propensity to consume out of changes in current income is smaller than the Keynesian theory would suggest. This means that the investment multiplier is small, which in turn implies that the alleged internal instability in the economy is overstated.

(2) Monetary Theory.

-Demand for money. Friedman says that the amount of money demanded varies directly with permanent real income and the price level, inversely with the expected rate of inflation, and insignificantly with the changes in the rate of interest.

-The modern quantity theory of money.

-The cause of the Great Depression.

-The long run vertical Phillips curve.

-The monetary rule: increase the money supply annually at a steady rate roughly corresponding to the long run rate of growth and capacity.

(3) Economic Liberalism. Over the years he has advocated a series of reforms that would place less reliance on government and more reliance on the market. The market system protects not only economic freedom, said Friedma, but also political freedom.